

**ICAR-KRISHI VIGYAN KENDRA, GANGAVATHI (KOPPAL DISTRICT)**

**ANNUAL REPORT- 2022**

**(FOR THE PERIOD FROM 01 January, 2022 TO 31 December, 2022 along with good action oriented photographs in jpeg format for all activities of KVK with size of more than 2 MB need to be sent separately with caption in the file name)**

## **KVK Address with QR Code, web site, E-mail, Tel and Host Organization details**

### **GENERAL INSTRUCTIONS**

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

- Annual report is the most important document for the KVK and it directly reflects the overall achievements pertaining to the reported period. Hence due care needs to be given by each KVK while preparing the report.
- Period of Report is from 01 January, 2022 to 31 December, 2022.
- Action photographs with relevant captions covering all OFTS/FLDS/TRAINING/EXTENSION activities of the KVK in High resolution should be submitted separately in a CD/DVD along with this report. A part from this, soft copy of the activity wise photos may be submitted in JPEG format.
- Prepare Summary tables carefully tallying with the relevant portions of the main report on all aspects.
- Retain the blank column and rows as such and do not merge the cells. Please specify NIL, wherever not applicable or details are not available.
- Check the names of varieties and hybrids and specify in the report.
- Check the units and totals of each data table.
- Extension activity under celebrations for each important day, please insert separate rows and give appropriate data separately. Clubbing of data should be avoided.
- Success stories/case studies should be supported with data tables and graphs. Without photos success stories will not be considered for inclusion in Annual Report of ATARI.

**PART I – GENERAL INFORMATION 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		
ICAR-Krishi Vigyan Kendra, Gangavathi (Koppal) ARS Campus, Kanakagiri Road, Gangavathi-583 227 Koppal District	-	-	kvk.koppal@icar.gov.in pckvkkoppal@uasraichur.edu.in	www.kvkgangavathi.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 Raichur UAS Campus, Lingasugur Road, Raichur-584102	08532-221444	08532-220444	vc@uasraichur.edu.in	www.uasraichur.edu.in

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Raghavendra Yaligar Senior Scientist & Head	-	9480696316	pckvkkoppal@uasraichur.edu.in

**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. Raghendra Yaligar	Sr. Scientist & Head	M	Agril. Entomology	Ph.D (Agril. Entomology)	1,31,400–2,17,100	98,200	15.09.2017	Permanent	ST
2	Scientist/SMS	Mrs. Kavitha Ullikashi	Scientist (Home Science)	F	Home Science	Ph.D (Food Science & Nutrition)	1,31,400–2,17,100	98,200	22.06.2017	Permanent	SC
3	Scientist/SMS	Dr. Jyothi, R.	Scientist (Horticulture)	F	Horticulture	Ph.D (Horticulture)	1,31,400–2,17,100	1,01,100	25.07.2011	Permanent	ST
4	Scientist/SMS	Dr. Mahanthesh, M.T.	Scientist (Animal Science)	M	Animal Science	M.V. Sc (Animal Bio Technology)	57,700–1,82,800	82,300	19.08.2011	Permanent	OBC
5	Scientist/SMS	Mrs. J. Radha	Scientist (Seed Science & Technology)	F	Seed Science & Technology	M.Sc (Seed science and Technology)	57,700–1,82,800	82,300	31.10.2022	Permanent	ST
6	<b>Scientist/SMS</b>	<b>VACANT</b>	Scientist (Agronomy)	-	-	-	-	-	-	-	-
7	<b>Scientist/SMS</b>	<b>VACANT</b>	Scientist (Soil Science)	-	-	-	-	-	-	-	-
8	Technical Officer (Soil Science.)	Mrs. Shruti K.	Technical Officer (Soil Science)	F	Seed Science & Technology	M.Sc (Seed Science & Technology)	35,400–1,12,600	41,100	<b>04.01.2023</b>	Permanent	OBC
9	<b>Technical Officer (Computer)</b>	<b>VACANT</b>	-	-	-	-	-	-	-	-	-
10	Technical Officer (Farm Management)	Mr. Narappa, G.	Senior Technical Officer	M	Agronomy	M.Sc (Agronomy), MBA	44,900–1,42,400	63,100	16.07.2009	Permanent	ST

			(Farm Mgmt.)								
11	Assistant	Manjula Badiger	Assistant	F			30,350–58,250	38,850	26.12.2022	Permanent	
12	Jr. Stenographer	Mr. Ravi S	Stenographer	M	Arts	MA	37900-70850	42,000	17.06.2019	Permanent	OBC
13	Driver - 1	Mr. Khadarbasha	Driver (HV)	M	-	SSLC	27650-52650	34,300	03.01.2012	Permanent	OBC
<b>14</b>	<b>Driver - 2</b>	<b>VACANT</b>	Driver (Light Vehicle)								
15	SS-1	Mrs. Renukamma	Cook-cum-caretaker	F	-	SSLC	21400-42000	24,050	04.06.2019	Permanent	ST
16	SS-2	Mr. Basappa, K.	Attender	M	-	SSLC	21400-42000	30,350	19.02.2016	Permanent	ST

### 1.6. Total land with KVK (in ha): 19.9 ha

S. No.	Item	Area (ha)
1	Under Buildings	01.60
2.	Under Demonstration Units	-
3.	Under Crops	16.70
4.	Orchard/Agro-forestry	01.60
5.	Others	-
		<b>19.9 ha.</b>

### 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, New Delhi	October, 2006	500	25,65,000	-	-	Established
2.	Farmers Hostel	ICAR, New Delhi	July, 2008	350	36,00,000	-	-	Established
3.	Staff Quarters	ICAR, New Delhi	June, 2007	400	36,92,000	-	-	Established
	1					-	-	
	2					-	-	
	3					-	-	
	4					-	-	
	5					-	-	
	6					-	-	
4.	Demonstration Units							
	1. Vermicompost Units	ICAR, New Delhi	Aug. 2013	6 Units	15,000	-	-	Established
	2. Horticulture Nursery	NHM, Bangalore	Aug. 2013	1 Unit	6,32,007	-	-	Established
	3. Fodder Bank	ICAR, New Delhi	Oct.2013	2 acre	20,000	-	-	Established
	4. Chaff Cutter Cum Grinder	ICAR, New Delhi	Jan. 2013	1 Unit	40,000	-	-	Present
	5. Nutrition Garden	ICAR, New Delhi	Sep. 2013	1 Unit	5,000			Established
	6. Azolla Unit	ICAR, New Delhi	Oct.2013	2 Units	3,000	-	-	Established

7.	Millet Processing Unit	UAS, Raichur & KSDA, Bangalore	Nov. 2013	1 Unit	8,00,000	-	-	Established
8.	Dairy Unit	ICAR, New Delhi	Jan 2015	53	2,25,000	-	-	Established
9.	Vermicompost units	ICAR, New Delhi	Mar 2014	20 units (0.25 acre)	1,00,000	-	-	Established
10.	Compost Unit	ICAR, New Delhi	July 2015	02 unit	57670	-	-	Established
11.	Vegetable special unit	ICAR, New Delhi	Feb 2014	01 unit	300000	-	-	Established
12.	Honey bee unit	ATMA	2014	02 No.	-	-	-	Established
13.	Fodder Hydroponic unit	ICAR	2022	01	-	-	-	Established
14.	Poultry unit	ICAR	2023	01	12,000	-	-	Established
15.	Fodder bank	ICAR	2023	01	5,000	-	-	Established
5	Fencing	-	-	-	-	-	-	-
6	Rain Water harvesting system	-	-	-	-	-	-	-
7	Threshing floor	-	-	-	-	-	-	-
8	Farm godown	-	-	-	-	-	-	-
9	Fish Pond	ICAR, New Delhi	-	1Unit	70,000	-	-	Established

#### B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Mahindra Bolero	2016-17	6,63,495	15573	Good
New Holland Tractor	2006-07	4,99,502	311.50 hours	Good
Bajaj CT 100	2006-07	32551	-	Under repair
Hero Honda Passion Plus	2008-09	50,000	-	Good
John Deer Tractor	2014-15	6,66,705	559.60 hours	Good

#### C) Lab equipment & AV aids

Name of the equipment	Year of purchase	Quantity (No.)	Cost (Rs.)	Present status
Details Crew Augar head sign obtaining soil suppres complete with lemmelie long + peces& Handle	24.02.2021	1	3835	Good
Details post hold Augush Z for obtaining undreshedule soil samples with one mlie long pipe & thrithhandel	24.02.2021	1	3835	Good
Details soil Agustube 1nd decton long with 50 cm verticle soil completewith hand	24.02.2021	1	6300	Good
Alminiummoster cum roundshape with lid size 75mm dier SD MMH	24.02.2021	1	13970	Good

Aluminium moisture cancrowd shape with lid size 75mm dicrdiax 50mm ht	24.02.2021	1	7050	Good
SE mg Rotary shaker-2 model 22/99 450x450mm, 252 mlx16No	24.02.2021	1	41800	Good
Deioniser, CA model consists of inbuiHprefilter, contion& anion resincolumn, conductivesmetere all housed in trolley mounted method stand, deionized water will how the conductivity of less than 10m/cm	09.03.2021	1	22770	Good
Wooden stool	09.03.2021			
Specificatives Single solid door with lods&hore four wheels	01.01.2021	1	94000	Good
Soiltlydrometere	01.01.2021	1	19750	Good
Double ring infitrometer With point gaege double ring inifiltrometere made from mild steel shed rolled	01.01.2021	1	31450	Good
Details high speed stress	01.01.2021	1	18800	Good

#### D) Farm equipment and implements :

Name of the equipment/implement	Year of purchase	Quantity (No.)	Cost (Rs.)	Present status
Seed cum fertilizer drill	2022	01	82,000	Good
11 Tyne ridge cultivator	2022	01	48,000	Good
Tractor drawn rotovator	2022	01	1,22,000	Good
Single cage wheel with disc puddler	2022	01	48,000	Good
Chaff cutter multi purpose dairy aid	2022	01	48,013	Good

#### 1.8. Details of SAC meeting organized

Date	Number of Participants	Salient Recommendations	Action taken	Remarks, if any
• 04.01.2022	<ul style="list-style-type: none"> <li>Physically presented-16</li> <li>Virtually presented -8</li> </ul>	<ul style="list-style-type: none"> <li>Encourage integrated farming system, and less use of inorganic fertilizer and pesticides.</li> <li>Importance to value addition to agriculture and horticulture produce.</li> <li>Awareness about smart agriculture on the base of climate change during the recent years and conduct OFTs and FLDs of</li> </ul>	<ul style="list-style-type: none"> <li>50 farmers under RKVY project provided inputs and encouraged IFS programme.</li> <li>The farmers are encouraged to adopt IFS Model during Capacity building programme</li> <li>On 21.05.2022 in collaboration with NABARD capacity building programme on Smart Agriculture was organized, totally 2535 farmers are getting benefit through Meghdoot</li> </ul>	-

		<p>University released technologies</p> <ul style="list-style-type: none"> <li>• Effective use of online plot farm to conduct capacity building during Covid-19 situation programmes.</li> <li>• Strengthen the existing Farmer Producer Organization provide the technical suggestion and proper marketing</li> <li>• Encourage farmers to use the organic inputs available at the University to reduce the use of inorganic inputs in the farming.</li> </ul>	<p>and Damini App.</p> <ul style="list-style-type: none"> <li>• During on campus and off campus training programmes organized by KVK, Farmers were informed about the use and availability of organic inputs at UAS, Raichur Technology released from UAS, Raichur taken as FLD</li> </ul> <table border="1" data-bbox="1241 511 1766 1279"> <thead> <tr> <th>Sl. No.</th> <th>Technology</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Organic farming in transplanted paddy</td> </tr> <tr> <td>2</td> <td>Paddy var. GNV 1801</td> </tr> <tr> <td>3</td> <td>Direct seeded rice</td> </tr> <tr> <td>4</td> <td>Salt tolerant Paddy Var. GNV-1109</td> </tr> <tr> <td>5</td> <td>Weed management in Paddy</td> </tr> <tr> <td>6</td> <td>Site specific nutrient management</td> </tr> <tr> <td>7</td> <td>Integrated management of yellow stem borer in summer paddy</td> </tr> <tr> <td>8</td> <td>Drudgery reduction through solar operated nipping machine in Bengal gram</td> </tr> <tr> <td>9</td> <td>Shelf life enhancing and low cast grain storage bags</td> </tr> </tbody> </table> <p>Capacity building programmes on value addition of Agriculture and Horticulture crops</p> <table border="1" data-bbox="1241 1398 1787 1437"> <thead> <tr> <th>Date</th> <th>Title</th> <th>Place</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Sl. No.	Technology	1	Organic farming in transplanted paddy	2	Paddy var. GNV 1801	3	Direct seeded rice	4	Salt tolerant Paddy Var. GNV-1109	5	Weed management in Paddy	6	Site specific nutrient management	7	Integrated management of yellow stem borer in summer paddy	8	Drudgery reduction through solar operated nipping machine in Bengal gram	9	Shelf life enhancing and low cast grain storage bags	Date	Title	Place				
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			02.02.2022	Processing and value addition of Sugandhi banana	Aunegundi
			30.04.2022	Processing and value addition in Guava	KVK, Gangavathi
			20.05.2022	Processing and value addition in Honey	KVK, Gangavathi
			24.06.2022	Milk and milk products	KVK, Gangavathi
			23.08.2022	Oyster mushroom cultivation and value addition	KVK, Gangavathi
			14.09.2022	Millet processing and value addition	Lakshmicamp
			21.09.2022	Foxtail millet processing and value addition	BApireddy camp

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		<ul style="list-style-type: none"> <li>• KVK should work with Agriculture Department in Collaboration to increase the soil and water testing numbers in Hobali and village level.</li> <li>• Formation of FPO of Guava farmers under ODOP programme</li> <li>• Use of YouTube platform to disseminate the technologies to farming community.</li> </ul>	<ul style="list-style-type: none"> <li>• Under one Scientist one RSK programme, 53 visits were made by KVK Scientists to Kanakagiri, Venkatagiri, Sanduru, Hulugi, Kamalapura and Telagi RSK's and encouraged and awareness created about the soil and water testing</li> <li>• On 30.04.2022 KVK has organized capacity development programme on production and value addition of Guava for Amruta Varshini</li> </ul>													

			<p>FPO, which was established under One District One Crop, in collaboration with IIMR-Hyderabad. FLD demonstration of Guava was also conducted to the farmers present under Amruta Varshini FPO.</p> <ul style="list-style-type: none"> <li>Videos related to Integrated Crop Management, Pest and disease management, Vermicomposting, Mushroom cultivation and Bee keeping are available in the youtubeplatform. Along with this in facebook platform also agriculture related informations are made available.</li> </ul>							
		<ul style="list-style-type: none"> <li>Soil sampling in salinity effected area where paddy is cultivated</li> </ul>	<ul style="list-style-type: none"> <li>Awareness created about soil testing in salt affected areas of Gangavathi, Hosalli, Siddapura, Yaradona, Budugumpa and Karatagi. In these area 50 farmers field soil samples has been collected and analysed. The result was given through soil health card during World Soil Day 05.12.2022</li> </ul>							
		<ul style="list-style-type: none"> <li>Organize capacity building programmes along with farm women's in the area of organic paddy cultivation</li> <li>Conduct environmental friendly programmes to reduce the plastic consumption by livestock animals.</li> <li>Organize programmes related to nutritional security in collaboration with department</li> </ul>	<ul style="list-style-type: none"> <li>Farm women in areas of organic paddy cultivation were introduced with vermicomposting capacity building programmes.</li> <li>Information related to reduced consumption of plastics by livestock animals was given during capacity development programmes of animal husbandary</li> </ul> <table border="1"> <thead> <tr> <th>Date</th> <th>Title</th> <th>Place</th> </tr> </thead> <tbody> <tr> <td>15.06.2022</td> <td>Integrated farming system</td> <td>KVK, Gangavathi</td> </tr> </tbody> </table>	Date	Title	Place	15.06.2022	Integrated farming system	KVK, Gangavathi	
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			17.09.2022	Poshan Abhiyan	KVK, Gangavathi
			27.09.2022	Role millets in balanced diet and reduction of mal nutrition	KVK, Gangavathi
			16.10.2022	World foods day	Hosalli
			16.11.2022	Balanced diet for nutritional management of school children	KVK, Gangavathi
		<ul style="list-style-type: none"> <li>• Conduct research to develop the fish food with lower cost.</li> <li>• simplification of weed removal machines.</li> </ul>		<ul style="list-style-type: none"> <li>• Rice bran + GNC (2% of body weight)</li> <li>• Fish food + Tapioca powder + Vitamins + Mineral mixture</li> <li>• Natural food – Dung/dropings (Cow, Buffalo, Poultry birds)</li> <li>• Wet azolla</li> <li>• Above mention low cost fish food information was given to fish rearing farmers</li> <li>• Cycle weeders were provided to 50 IFS farmers under RKVY project and information related to cycle weeder was provided during</li> </ul>	

			different capacity building programmes																						
		<ul style="list-style-type: none"> <li>• Production and sale of bio insecticides in the Gangavathi campus</li> <li>• Importance should be given to organic farming.</li> <li>• Conduct programmes related to nutrition among women and children's.</li> <li>• Provide information related to suitable flower crops for honeybee rearing.</li> </ul>	<ul style="list-style-type: none"> <li>• Biopesticide- Metarhizium unit was established in ARS campus. Tilla date 50 farmers got benefitted with this. Along with unit establishment, availability of biopesticide Beauveria and Verticellium also informed to the farmers.</li> <li>• Programmes related to Nutritional security</li> </ul> <table border="1"> <thead> <tr> <th>Date</th> <th>Title</th> <th>Place</th> </tr> </thead> <tbody> <tr> <td>19.01.2022</td> <td>Nutritional security for adolescent girls</td> <td>Chikkadankanakal</td> </tr> <tr> <td>19.03.2022</td> <td>Immunity building foods</td> <td>KVK, Gangavathi</td> </tr> <tr> <td>21.03.2022</td> <td>Immunity building foods</td> <td>KVK, Gangavathi</td> </tr> <tr> <td>25.08.2022</td> <td>Immunity building foods</td> <td>KVK, Gangavathi</td> </tr> <tr> <td>05.09.2022</td> <td>Poshan Abhiyan</td> <td>Yaradona</td> </tr> <tr> <td>15.09.2022</td> <td>Role millets in balanced diet and reduction of mal</td> <td>KVK, Gangavathi</td> </tr> </tbody> </table>	Date	Title	Place	19.01.2022	Nutritional security for adolescent girls	Chikkadankanakal	19.03.2022	Immunity building foods	KVK, Gangavathi	21.03.2022	Immunity building foods	KVK, Gangavathi	25.08.2022	Immunity building foods	KVK, Gangavathi	05.09.2022	Poshan Abhiyan	Yaradona	15.09.2022	Role millets in balanced diet and reduction of mal	KVK, Gangavathi	
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		<p>farmers</p> <ul style="list-style-type: none"> <li>Conduct capacity building programmes related to vermicomposting and method demonstration on silage preparation</li> </ul>	<p>cuttings, 85 kg of multicut sorghum. CoFS-29/31, 12,000 seedlings of Guinea grass from MARS, Raichur, KVK-Kawadimatti and Krishi Agro Seeds, Gadag</p> <ul style="list-style-type: none"> <li>10 capacity building programmes on Silage making were organized</li> <li>Participated in the Animal health camps (4 No.) organized by Department of Animal Husbandary</li> <li>Programmes related to vermicompost</li> </ul> <table border="1" data-bbox="1241 634 1787 1398"> <thead> <tr> <th>Date</th> <th>Title</th> <th>Place</th> </tr> </thead> <tbody> <tr> <td>23.05.2022</td> <td>Vermicompost preparation</td> <td>KVK, Gangavathi</td> </tr> <tr> <td>15.06.2022</td> <td>Integrated farming system</td> <td>KVK, Gangavathi</td> </tr> <tr> <td>17.10.2022</td> <td>Integrated farming system</td> <td>KVK, Gangavathi</td> </tr> <tr> <td>12.11.2022</td> <td rowspan="3">Income generating activities for SHG's</td> <td>KVK, Gangavathi</td> </tr> <tr> <td>25.11.2022</td> <td>KVK, Gangavathi</td> </tr> <tr> <td>16.11.2022</td> <td>KVK, Gangavathi</td> </tr> <tr> <td>16.12.2022</td> <td>Organic farming</td> <td>KVK, Gangavathi</td> </tr> <tr> <td>26.12.2022</td> <td>Farmers day</td> <td>KVK, Gangavathi</td> </tr> </tbody> </table>	Date	Title	Place	23.05.2022	Vermicompost preparation	KVK, Gangavathi	15.06.2022	Integrated farming system	KVK, Gangavathi	17.10.2022	Integrated farming system	KVK, Gangavathi	12.11.2022	Income generating activities for SHG's	KVK, Gangavathi	25.11.2022	KVK, Gangavathi	16.11.2022	KVK, Gangavathi	16.12.2022	Organic farming	KVK, Gangavathi	26.12.2022	Farmers day	KVK, Gangavathi	
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		<ul style="list-style-type: none"> <li>Include activities related to value</li> </ul>	<ul style="list-style-type: none"> <li>On 03.04.2022 KVK in collaboration with</li> </ul>																										

		addition in guava in KVK action plan.	<p>Department of Horticulture organized programme on processing and value addition of guava</p> <ul style="list-style-type: none"> <li>Demonstration related to value added products of guava will be taken up during 2023-24 action plan</li> </ul>																						
		<ul style="list-style-type: none"> <li>Create awareness about use of chickpea magic and pulse magic among farming community</li> </ul>	<ul style="list-style-type: none"> <li>Under NFSM programme, pulse and chick pea magic micronutrient mixture were distributed to 100 hectares of Redgram, Bengal gram and Black gram beneficiaries.</li> <li>From Gulbarga 5.5 q of pulse and chick pea magic micronutrient mixture were made available to the Koppal district farmers.</li> </ul> <table border="1"> <thead> <tr> <th>Date</th> <th>Title</th> <th>Place</th> </tr> </thead> <tbody> <tr> <td>17.01.2022</td> <td>ICM in Black gram</td> <td>KVK, Gangavathi</td> </tr> <tr> <td>17.06.2022</td> <td>ICM in Red gram</td> <td>KVK, Gangavathi</td> </tr> <tr> <td>22.06.2022</td> <td>ICM in Red gram</td> <td>Kuduremoti</td> </tr> <tr> <td>12.10.2022</td> <td>ICM in Bengal gram</td> <td>KVK, Gangavathi</td> </tr> <tr> <td>01.12.2022</td> <td>Field day on Red gram</td> <td>Kamanoor</td> </tr> <tr> <td>28.12.2022</td> <td>ICM in Black gram</td> <td>KVK, Gangavathi</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li></li> </ul>	Date	Title	Place	17.01.2022	ICM in Black gram	KVK, Gangavathi	17.06.2022	ICM in Red gram	KVK, Gangavathi	22.06.2022	ICM in Red gram	Kuduremoti	12.10.2022	ICM in Bengal gram	KVK, Gangavathi	01.12.2022	Field day on Red gram	Kamanoor	28.12.2022	ICM in Black gram	KVK, Gangavathi	
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		<ul style="list-style-type: none"> <li>KVK scientists to work with horticulture department activity like nutritional garden establishment in</li> </ul>	<ul style="list-style-type: none"> <li>Total 30 nutrition garden unit were established in Murudi and Nelgeri Villages</li> <li>Programmes related to Nutrition garden</li> </ul>																						

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		<ul style="list-style-type: none"> <li data-bbox="646 646 1209 760">• Information about use of Nano Fertilizers and bio fertilizer/pesticides during the capacity building programmes</li> <li data-bbox="646 768 1209 954">• Provide the information about different varieties of agriculture and horticulture crops released from UAS, Raichur, other Universities and National Institutes which are suitable to Koppal region.</li> <li data-bbox="646 963 1209 1036">• Provide more awareness about natural farming among farming community</li> <li data-bbox="646 1044 1209 1157">• Provide information related to ShramaJeevi TV channel and its App among farming community.</li> </ul>	<ul style="list-style-type: none"> <li data-bbox="1241 646 1839 792">• Information related to Nano fertilizer, bio-fertilizer and bio-pesticides were given to farmers during 25 capacity building programmes organized by KVK.</li> <li data-bbox="1241 800 1839 914">• On 21.06.2022 KVK in collaboration with IFFCO company organized on campus training programme on Nano fertilizers.</li> <li data-bbox="1241 922 1839 1036">• Technologies from other Agriculture Universities and National institutes included in action plan</li> </ul> <table border="1"> <thead> <tr> <th data-bbox="1241 1044 1444 1125">Technology</th> <th data-bbox="1444 1044 1654 1125">Source of Technology</th> </tr> </thead> <tbody> <tr> <td data-bbox="1241 1125 1444 1287">Groundnut var. Kadarilepakshi 1812</td> <td data-bbox="1444 1125 1654 1287">ANGRAU, AP</td> </tr> <tr> <td data-bbox="1241 1287 1444 1440">Good management practices in Mango</td> <td data-bbox="1444 1287 1654 1440">IIHR, Bengaluru</td> </tr> </tbody> </table>	Technology	Source of Technology	Groundnut var. Kadarilepakshi 1812	ANGRAU, AP	Good management practices in Mango	IIHR, Bengaluru										
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			Nutritional and wilt management with new micro-organism Penicillium pinophelum	NRCP, Solapur		
			Eco-friendly wilt management in Guava	IIHR, Bengaluru		
			Integrated crop management in Banana	IIHR, Bengaluru		
			Cultivation of macro propagated plants of banana	NRC Banana		
			Demonstration of high yielding hybrid Arkakyati and black thrips management in chilli	IIHR, Bengaluru		
			Management	IIHR,		

			of fruit borer, pin worm and blight in Tomato	Bengaluru			
			Nutritional rich Ridgegourd var Ark Prasan	IIHR, Bengaluru			
			New high yielding rose var ArkaSavi	IIHR, Bengaluru			
			Biofortified pearl millet hybrid VPMH-14	UAS. Dharwad			
			Demonstration of <i>masti guard</i> for mastitis management in cross bred dairy cows	TANUVAS, Chennai			
			Demonstration of 10 cent model fodder plot for dairy farming	TANUVAS, Chennai			
			Prevention & control of milk fever in cross breed Cows	GADVASU, Ludiana			
			<ul style="list-style-type: none"> <li>Awareness programme on Natural farming</li> </ul>				

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**PART II - DETAILS OF DISTRICT**

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

Sl. No	Farming system/ enterprise
<b>Rainfed Situation</b>	
1	Greengram – Rabi Sorghum
2	Sunflower – Chickpea
3	Greengram – Wheat
4	Cotton – Fallow
5	Fallow – Sorghum
6	Bajra – Bengalgram
7	Foxtail millet
8	Goat, Sheep, Cows and Buffalos rearing
<b>Irrigated Situation</b>	
9	Paddy based cropping system
10	<ul style="list-style-type: none"> <li>• Fruit Crop (Pomegranate, Banana, Mango, Sapota, Citrus &amp; Papaya) based cropping system</li> <li>• Vegetable (Tomato, Chilli &amp; Brinjal) based cropping system</li> </ul>
11	Sunflower – Maize – Groundnut
12	Maize– Sunflower – Groundnut
13	Onion – Chilli – Cotton
14	Dairying

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

Sl. No	Agro-climatic Zone	Characteristics
1	Northern Dry Zone of Karnataka, Zone – 3	<ul style="list-style-type: none"> <li>• Very less rainfall (572 mm) and 30-35 rainy days</li> <li>• Medium Black, Deep Black &amp; Red soils, Partly Irrigated (20%) and July &amp; September are peak rainy months</li> <li>• Includes Agricultural crops (Paddy, Sorghum, Maize, Pearl millet, Foxtail millet, Redgram, Greengram, Groundnut, Sunflower Sesame, Bengalgram&amp; Cotton) &amp; Horticulture crops viz., Pomegranate, Mango, Papaya, Sapota, Banana and Vegetables (Onion, Chilli, Brinjal &amp; Tomato etc.)</li> </ul>

Sl. No	Agro ecological situation	Characteristics
1	Rainfed (80%)	<ul style="list-style-type: none"> <li>➤ Medium Black soil (Yelaburga, Kushtagi, Gangavati and Koppal)</li> <li>➤ Deep black soil (Yelaburga and Koppal)</li> </ul>
2	Irrigated (20%)	<ul style="list-style-type: none"> <li>➤ Red soil (Yelaburga, Kushtagi, Gangavati and Koppal)</li> <li>➤ Source – TBP Canal, Well, Tank and lift irrigation</li> </ul>

### 2.3 Soil type/s

Sl.No	Soil type	Characteristics	Area in ha
1	Black soils	<ul style="list-style-type: none"> <li>• Possess a characteristically dark color, ranging from dark brown to deep black. They are high in clay content, clay mostly belong to montmorillonitic group and are sticky and plastic when wet. They show strong swelling and shrinkage with changes in moisture content and produce deep and wide cracks. Their limitation for crop production is because of their poor tillage and poor drainage. The black colour may be due to presence.</li> <li>• Clay-humus complexes or titaniferous-magnetite compounds. The soils classified as shallow-possessing a depth of 30 cm or less, medium-30 to 100 cm and deep black soils -100 to 200 cm or even more.</li> <li>• According to soil taxonomy, the common orders, sub orders and great groups of black soils are as follows. Order – Vertisol&amp; Sub order – Torrets and Usterts</li> <li>• Great group – Torritorrerts, Usttorrets, Torriusterts&amp;Ustusterts</li> </ul>	40%
2	Red soils	<ul style="list-style-type: none"> <li>• Well-drained soils with clay enriched subsoil developed from granite, genesis of schists under subtropical climate. The normal red soils have a pH around neutrality acidic side. The A-horizon is dark reddish brown while B-horizon may have a dark brown color.</li> <li>• The clay minerals become coated with red hematite of yellow limonite forming a reddish-yellow soil. Impure iron, alumina-silica, concretions and quartz are common constituents of red soil.</li> <li>• According to soil taxonomy the common orders, sub orders and great groups of red soils are as follows. Order – Alfisol and Ultisol Sub order – Ustalfs, Ustults, Aquils</li> <li>• Great group – Haplustalfs, Rhodustalfs, Paleustalfs, Haplustults, Rhodoustults&amp;Ochraqults</li> </ul>	60%

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

#### Irrigated

Sl. No	Crop	Area (ha)	Production (tons)	Productivity (kg /ha)
1	Paddy	95758	632927	13300
2	Maize	21545	89653	12100
3	Bajra	10454	21013	2010
4	Millets	-	-	-
5	Redgram	1235	1297	1050

6	Bengalgram	850	1700	2000
7	Greengram	100	150	1500
8	Horsegram	-	-	-
9	Sunflower	13533	29036	7132
10	Groundnut	25812	50229	3710
11	Cotton	11	2557 bales	2 bales

### Rainfed

Sl. No	Crop	Area (ha)	Production (tons)	Productivity (kg /ha)
1	Paddy	475	1663	3500
2	Maize	85412	140930	1650
3	Bajra	53918	38282	710
4	Millets	5001	3126	625
5	Redgram	17476	11010	630
6	Bengalgram	55500	55500	1000
7	Greengram	15411	11558	750
8	Horsegram	13386	10422	1520
9	Sunflower	4468	2323	520
10	Groundnut	288203	313177	15635
11	Cotton	12186	365 bales	3 bales

\* Source : Karnataka State Department of Agriculture (KSDA), Koppal

### 2.5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
Jan-2022	0	29.97	18.15	77.06
Feb-2022	0	31.68	18.17	79.89
Mar-2022	9	34.09	21.08	72.06
Apr-2022	17.5	37.41	24.27	70.9
May-2022	65.5	36.24	25.07	71
Jun-2022	58.5	34.45	24.27	77.4
Jul-2022	84.5	30.93	23.68	87.33
Aug-2022	146	30.75	23.45	87.83
Sep-2022	122	30.77	22.86	88.76
Oct-2022	109.5	31.09	21.22	89.84
Nov-2022	5.5	30.31	18.27	86.33
Dec-2022	40	30.43	18.21	87.45
<b>Total</b>	<b>658</b>	<b>32.34</b>	<b>21.56</b>	<b>81.52</b>

\* Please provide latest data from authorized sources. Please quote the source

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

Particulars	Population	Production	Productivity
Cows	2,31,413	347797 Lit/day	3 Lit/day
Buffalos	63,467	53037 Lit/day	2.5 Lit/day
Sheep	6,25,367	5636 ton	18 kg / Sheep
Goats	1,72,578	1729 ton	20 kg /Goat
Figs	8651	108 ton	25 kg /Fig
Rabbit	519	1 ton	2 kg / Rabbit
Poultry (Local and improved) Duck, Turkey Hen and others	40,00,09,653	2961 ton	1.5 kg / Animal

Sl.No.	Crop	Area (ha)	Production (Metric Tons)	Productivity (M tons/ha)
1	Fruits	7696.26	150373.8	19.54
2	Vegetables	22976.3	378063	16.54
3	Flowers	931.5	6.471 (Loose flower) 137.7 lakh numbers (Cut flowers)	6.49
4	Spices	1423.95	5005.8	3.52
5	Plantation	420.63	320.45	0.76

\* Please provide latest data from authorized sources. Please quote the source

2.7 District profile maintained in the KVK has been Updated for 2022: Yes / No

2.8 Details of Operational area / Villages

Sl. No.	Taluk	Name of the block	Name of the village	How long the village is covered under operational area of the KVK (specify the years)	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Gangavathi	Karatagi	ChikkaDankanakall, Hanawal, Budugumpa, Yaradona, Bapireddy camp, Karatagi,	Two year	Paddy (2021-22)	<ul style="list-style-type: none"> <li>▪ Increased soil salinity (4 – 10 dS/m) in TBP command area from 20,000 ha to 96,000 ha</li> <li>▪ Yield reduction by 15-20 %</li> </ul>	Crop productivity in saline soils
2.	KustagiYel aburaga	Koppal	Vataparvi, Chikkabommanal, Muddalagundi	Two year	Groundnut (2021-22)	<ul style="list-style-type: none"> <li>▪ Lack of awareness on high yielding, drought tolerant &amp; High oil content varieties</li> </ul>	Crop productivity
3.	Gangavathi	Gangavathi	Sangapura, Bhandrala	One year	Poultry	<ul style="list-style-type: none"> <li>▪ Lower body weight gain, Higher feed cost</li> </ul>	Dietary supplementation of fresh and dried azolla on the performance of backyard poultry

4.	Koppal	Vataparvi	Vataparvi, Chikkabommanala	Two year	Groundnut (2021-22)	<ul style="list-style-type: none"> <li>• Low yield in normal condition (10-15 %)</li> <li>• Less knowledge on BBF for effective soil &amp; moisture conservation</li> <li>• Increased pest and diseases causes low yield</li> <li>▪ Increased COC by excess use of pesticides</li> </ul>	Crop productivity & IPDM
5.	Karatagi	Karatagi	ChikkaDankanakall Budagumpa (Karatagi)	Two year	Paddy	<ul style="list-style-type: none"> <li>▪ Increased CoC (Rs. 32,000 – 35,000/acre) due to high usage of chemical fertilizers/ pesticides</li> <li>▪ Increased demand for organic rice</li> <li>▪ To enhance soil fertility and quality of rice</li> </ul>	Organic paddy cultivation in transplanted rice
6.	Gangavathi/ Karatagi	Gangavathi	Marali/ Hosakera	One year	Paddy	<ul style="list-style-type: none"> <li>▪ Low yield of BPT 5204 (22-23 q/acre)</li> <li>▪ Susceptible to blast &amp; BPH and also salt</li> <li>▪ Long duration of BPT 5204 (150-155 days)</li> </ul>	Crop productivity
7.	Gangavathi	Gangavathi	Basapathna/ Hirejanthakal	Two year	Paddy	<ul style="list-style-type: none"> <li>▪ Scarcity of water for tail end farmers</li> <li>▪ Excess use of fertilizers (2-3 fold as compared to RDF)</li> <li>▪ Indiscriminate use of pesticides</li> <li>▪ Labour problem</li> <li>▪ Less plant population/m<sup>2</sup></li> <li>▪ High CoC (Rs. 32,000 – 35,000/acre)</li> </ul>	Water productivity
8.	Gangavathi	Gangavathi	Mukumpi/ Hosahalli	One year	Paddy	<ul style="list-style-type: none"> <li>▪ Low knowledge on herbicide usage in paddy nursery &amp; main field.</li> <li>▪ Labour problem</li> <li>▪ Difficult to identify the wild type of weeds like echinocloa sp., which is similar to paddy plant</li> </ul>	Weed management

9.	Koppal/ Karatagi	Koppal/ Karatagi	Huligi/ Danapura	One year	Paddy	<ul style="list-style-type: none"> <li>▪ Excess use of N fertilizers (2 to 3 times more than RDF) &amp; high CoC (Rs. 32,000 – 35000/acre)</li> <li>▪ Loss of N to the extent of 50-60 %</li> </ul> <p>Less awareness on nano nitrogen &amp; zinc fertilizers</p>	Nano-nitrogen and nano zinc for enhancing the productivity
10.	Karatagi	Karatagi	Budugumpa/ Karatagi	One year	Paddy	<ul style="list-style-type: none"> <li>▪ Increased soil salinity (4 – 10 dS/m) in TBP command area from 20,000 ha to 96,000 ha</li> <li>▪ Yield reduction by 15-20 % (20-23 q/ha)</li> <li>▪ Existing variety BPT 5204 is long duration (150-155 days) and is less salt tolerant (&lt; 4dS/m)</li> </ul> <p>Susceptible to blast</p>	Enhancing productivity in saline soils
11.	Karatagi	Karatagi	Siddapura/ Bennur	Two year	Paddy	<ul style="list-style-type: none"> <li>▪ Indiscriminate use of chemical fertilizers (2-3 times) more than RDF &amp; deterioration of soil health</li> <li>▪ Increased CoC (Rs. 32000 – 35,000/acre)</li> <li>▪ Spatial and temporal change in nutrient availability</li> </ul> <p>Not considering soil nutrient availability and uptake to produce targeted yield</p>	Site specific nutrient management
12.	Koppal	Koppal	Bandiharlapura/ Gudadacamp	One year	Paddy	<ul style="list-style-type: none"> <li>• Uncertainty in release of water</li> <li>• Use of aged seedlings for transplanting</li> <li>• Excess use of fertilizers</li> <li>• Labour problem (20-25 No.)</li> </ul> <p>High CoC (Rs. 32000 – 35000/acre)</p>	Drum seeder in wet land condition
13.	Gangavathi	Gangavathi	Marali	Two year	Paddy	<ul style="list-style-type: none"> <li>• High incidence during summer season causes 20-25 % yield loss</li> </ul> <p>Most of the farmers depend on chemical pesticides</p>	Integrated management of yellow stem borer in summer paddy

14.	Kanakagiri	Kanakagiri	Benakanaha/ Sulekal/Kalkeri/Mus alapura	Two year	Groundnut	<ul style="list-style-type: none"> <li>▪ Lack of awareness on high yielding</li> <li>▪ Drought tolerant &amp;</li> <li>▪ High oil content</li> <li>▪ Increased pests and diseases incidence resulted in low yield 30-35 % (Leaf spot, spodoptera, leaf miner, rust)</li> </ul> <p>Increased CoC (Rs.7000-12000) due to excess use of pesticides</p>	Higher productivity and IPDM
15.	Gangavathi	Gangavathi	Chikkabenakal/Agoli	One year	Mango	<ul style="list-style-type: none"> <li>▪ Pruning is hardly practiced</li> <li>▪ Not aware of scheduled application of irrigation water during flowering and also micronutrients</li> <li>▪ Flower drop (40%)</li> <li>▪ Decrease in flower emergence (60 %)</li> </ul> <p>Delay in the flower bud initiation (30 days)</p>	ICM
16.	Kushtagi	Kushtagi	Putagamari/ Yaragunti/ Gunnal	Two year	Pomegranate	<ul style="list-style-type: none"> <li>▪ Flower drop (20%-30%)</li> <li>▪ 20-25% incidence of wilt</li> </ul> <p>High cost of inorganic fertilizer (PK) (Rs. 45000 -50000/acre)</p>	Nutrient management
17.	Kushtagi	Kushtagi	Tavaragera	Two year	Guava	<ul style="list-style-type: none"> <li>▪ Emerging crop in Koppal district (696 ha) and suffering from wilt complex</li> <li>▪ There was no effective chemical management</li> <li>▪ Lack of awareness on bio-agents for effective management of wilt complex</li> </ul> <p>High CoC (Rs. 10000 – 15000/acre)</p>	ICM
18.	Gangavathi	Gangavathi	Anegundi,Chikkjantakal	One year	Banana	<ul style="list-style-type: none"> <li>▪ Wilt complex (20-25 %) and sigatoka (25-30 %) is a major problem causes 20-30 % low yield</li> <li>▪ less-awareness on bio-agents utilization</li> </ul> <p>Improper application of pesticides cause increased CoC (Rs. 15,000 – 25,000/acre)</p>	ICM

19.	Gangavathi	Gangavathi	Sangapura/ Mallapura	One year	Banana	<ul style="list-style-type: none"> <li>▪ High price of the TC plants (Rs.25/plant)</li> <li>▪ High CoC to small holding farmers with respect to purchase of TC plant (Rs.14,000 /acre)</li> </ul> Delay in getting the small quantity TC plants	Crop productivity
20.	Koppal	Koppal	Chandragiri/Halahalli i/ Kamanoor/ Gabbur	One year	Chilli	<ul style="list-style-type: none"> <li>▪ New incidence of chilli thrips caused 25 -30 % of yield loss</li> <li>▪ No insecticides is effective against thrips</li> <li>▪ Non-judicious use of insecticides resulted higher CoC</li> <li>▪ Low productivity (14.49 t/ha)</li> </ul> High incidence of chilli mosaic virus (Intensity: 1 – 50 %)	IPM
21.	Gangavathi	Gangavathi	Anegundi,Chikkjant kal	One year	Tomato	<ul style="list-style-type: none"> <li>▪ Increased incidence fruit borer, pin worm and early blight cause 30% loss in yield</li> </ul> Injudicious application of chemicals leads to increased CoC (Rs. 10000-15000/acre)	IPDM
22.	Koppal	Koppal	Halahalli/Kamanoor/ Gabbur	One year	Ridgegaurd	<ul style="list-style-type: none"> <li>▪ Local variety cultivation</li> <li>▪ Low yield (8.4 tonnes/ha)</li> <li>▪ Fruit fly incidence (23-26%)</li> </ul> Not following the training method	Crop productivity
23.	Koppal	Koppal	Hulagi/ Kamanoor/ Sangapura	One year	Rose	<ul style="list-style-type: none"> <li>▪ Low yield (15 t/ha)</li> <li>▪ Thin flower stalk</li> <li>▪ Not suitable for garland making</li> <li>▪ Short shelf life (1-2 days)</li> </ul> Low marker price (Rs. 80/kg)	Crop productivity
24.	Koppal, Karatagi	Koppal, Karatagi	Katraki, Yardona and Gudlanor	One year	solar operated nipping machine	Nipping is not much popular among farmers. Drudgery induced in manual operations. Low yield due to non-branching (10 %)	Drudgery reduction

25.	Gangavathi	Gangavathi	Marali Siddapura	Two year	Cereal & Pulses (2021-22 & 2022-23)	<ul style="list-style-type: none"> <li>• Post-harvest losses account for about 10% of total food grains due to unscientific storage (Gunny bags), insects, rodents, micro-organisms.</li> <li>• Chemical changes in grain content</li> <li>• Contamination of grains with mouth skin and body parts</li> <li>• Less consumer preference</li> <li>• Less nutritional value due to insect damage</li> </ul> Less shelf life (3-4 months)	Storage of seeds
26.	Karatagi, Koppal	Karatagi, Koppal	Yardona Mangalore	One year	Pearl millet	<ul style="list-style-type: none"> <li>• Prevalence of anaemia in women (70%) and children (60.9%)</li> <li>• Lack of information on biofortified hybrid</li> </ul> Low yield in local hybrid (10-15 %)	Nutritional security
27.	Karatagi, Koppal	Karatagi, Koppal	Yardona, halhalli and chikkabenekal	One year	Fertilizer Feeder	<ul style="list-style-type: none"> <li>▪ Lack of awareness on portable fertilizer feeder equipment</li> <li>▪ Traditional method is labour intensive, time consuming &amp; drudgery</li> <li>▪ Wastage of fertilizer in broadcasting &amp; less fertilizer use efficiency</li> </ul> Increased weed growth	Drudgery reduction
28.	Yelburagi	Vataparvi	Chikkadankankal Vatparvi	Three year	Nutrition Garden (2021-22 & 2022-23)	<ul style="list-style-type: none"> <li>• Prevalence of malnutrition in children in Koppal district (55.7 %)</li> <li>• Prevalence of anaemia in women (70%) and children (60.9%)</li> </ul>	Nutritional security
29.	Gangavathi	Karatagi	Gangavathi, Koppal and Karatagi	One year	terrace garden (2021-22)	<ul style="list-style-type: none"> <li>• Prevalence of malnutrition in children in Koppal district (55.7 %)</li> <li>• Prevalence of anaemia in children (60.9%) and in women (70 %)</li> <li>• High cost of vegetables</li> </ul>	livelihood security

30.	Gangavathi	Gangavathi	Budagumpa, Methegal, Bandiharlapura	One year	Dairy	Subclinical mastitis- Reduction in milk yield, Thelitis, Sour milk	Animal Health
31.	Gangavathi	Gangavathi	J. Kalgudi, Bapireddi camp, Karatagi	One year	Dairy	Non-availability of green fodder, Lack of knowledge on perennial leguminous fodder, low milk yield and fat (%)	Fodder
32.	Gangavathi	Gangavathi	Basapattana, Agoli Hoskera	One year	Dairy	Hypocalcemia, Lack of awareness regarding drying off, Reduced milk yield after parturition	Animal Health
33.	Gangavathi	Karatagi	Budagumpa Chikkadankanakal Gangavathi	One year	Poultry (2021-22)	<ul style="list-style-type: none"> <li>• Decreased reproductive performances (8-10%) in incandescent bulb</li> <li>• High feed intake and mortality in layer birds</li> </ul>	Poultry production
34.	Gangavathi, Koppal	Gangavathi, Koppal	Anegundi and Hulgi	One year	Entrepreneur ship development	<ul style="list-style-type: none"> <li>• Lower price during market glut (60-80 rupees per bunch)</li> <li>• Lower price for small size fruits (10 rupees per bunch)</li> <li>• Banana powder rich in magnesium (27mg/100g) and potassium (358mg/100g)</li> </ul>	Value addition
35.	Karatagi, Gangavathi	Karatagi, Gangavathi	Karatagi and gangavathi	One year	Entrepreneur ship development	<ul style="list-style-type: none"> <li>• Introduction of mushroom cultivation as a home scale enterprise</li> <li>• Low income realization (Rs. 60-80/kg) due to poor knowledge on mushroom cultivation, processing, value addition, labeling, packaging and marketing linkage</li> <li>• Mushroom rich in protein (21.8 g/100 g), vitamin D (18 mg/100 g) and potassium (446 mg/100 g)</li> </ul>	Production technology

36.	Yelburga	Yelburga	Kudremoti and mangalore	One year	Entrepreneurship development	<ul style="list-style-type: none"> <li>• Promotion of millet health products preparation as home scale enterprise</li> <li>• Millets rich in calcium, iron and dietary fiber (Finger millet-350 mg calcium, pearl millet -11.0 mg iron, Foxtail millet -8.0 mg dietary fiber/100g).</li> <li>• Millet consumption decrease the risk of diabetes, heart diseases and cancer</li> <li>• Additional income through value addition</li> </ul>	Value addition
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## 2.9 Priority thrust areas

S. No	Thrust area
1	Integrated Crop Management
2	Integrated Disease management
3	Integrated Pest Management
4	Integrated Nutrient Management
5	Varietal evaluation
6	Variety demonstration
7	Demonstration of disease resistant high yielding hybrid
8	Drudgery reduction
9	Mushroom production
10	Hybrid Evaluation
11	Crop Diversification
12	Processing and value addition
13	Water management
14	Reproductive management
15	Health management
16	Marketing linkage





1	Crop productivity in saline soils	Paddy (2021-22)	<ul style="list-style-type: none"> <li>▪ Increased soil salinity (4 – 10 dS/m) in TBP command area from 20,000 ha to 96,000 ha</li> <li>▪ Yield reduction by 15-20 %</li> </ul>	Assessment of different salt tolerant paddy varieties for enhancing productivity in saline soils	-	01	-	-	01	3.75	-	-	-	-
2	Crop productivity	Groundnut (2021-22)	<ul style="list-style-type: none"> <li>▪ Lack of awareness on high yielding, drought tolerant &amp; High oil content varieties</li> </ul>	Assessment of Groundnut varieties for higher productivity	-	-	-	-	01	4.5	-	-	-	-
3	Dietary supplementation of fresh and dried azolla on the performance of backyard poultry	Poultry	<ul style="list-style-type: none"> <li>▪ Lower body weight gain, Higher feed cost</li> </ul>	Assessment of dietary supplementation of fresh and dried azolla on the performance of backyard poultry	-	-	-	-	1	-	-	-	02	-

4	Crop productivity & IPDM	Groundnut (2021-22)	<ul style="list-style-type: none"> <li>• Low yield in normal condition (10-15 %)</li> <li>• Less knowledge on BBF for effective soil &amp; moisture conservation</li> <li>• Increased pest and diseases causes low yield</li> <li>▪ Increased COC by excess use of pesticides</li> </ul>	-	Demonstration of BBF and IPDM in Groundnut crop for enhancing Yield	-	-	-	1	-	-	-	04 (bio products) 2 (traps)	40 kg  150 No.
5	Organic paddy cultivation in transplanted rice	Paddy	<ul style="list-style-type: none"> <li>▪ Increased CoC (Rs. 32,000 – 35,000/acre) due to high usage of chemical fertilizers/ pesticides</li> <li>▪ Increased demand for organic rice</li> <li>▪ To enhance soil fertility and quality of rice</li> </ul>	-	Demonstration of organic paddy cultivation in transplanted rice	01	-	-	01	-	-	-	08	1245

6	Crop productivity	Paddy	<ul style="list-style-type: none"> <li>▪ Low yield of BPT 5204 (22-23 q/acre)</li> <li>▪ Susceptible to blast &amp; BPH and also salt</li> <li>▪ Long duration of BPT 5204</li> <li>▪ (150-155 days)</li> </ul>	-	Demonstration of Tungabhadra Sona (GNV 1801) to enhance higher productivity	-	-	-	1	2.5	-	-	02	04
7	Water productivity	Paddy	<ul style="list-style-type: none"> <li>▪ Scarcity of water for tail end farmers</li> <li>▪ Excess use of fertilizers (2-3 fold as compared to RDF)</li> <li>▪ Indiscriminate use of pesticides</li> <li>▪ Labour problem</li> <li>▪ Less plant population/m<sup>2</sup></li> <li>▪ High CoC (Rs. 32,000 – 35,000/acre)</li> </ul>	-	Demonstration of Direct Seeded Rice	-	-	-	1	2.5	-	-	-	-

8	Weed management	Paddy	<ul style="list-style-type: none"> <li>▪ Low knowledge on herbicide usage in paddy nursery &amp; main field.</li> <li>▪ Labour problem</li> <li>▪ Difficult to identify the wild type of weeds like echinocloasp, which is similar to paddy plant</li> </ul>	-	Demonstration of weed management in paddy	-	-	-	1	2.5	-	-	-	-
9	Nano-nitrogen and nano zinc for enhancing the productivity	Paddy	<ul style="list-style-type: none"> <li>▪ Excess use of N fertilizers (2 to 3 times more than RDF) &amp; high CoC (Rs. 32,000 – 35000/acre)</li> <li>▪ Loss of N to the extent of 50-60 %</li> <li>▪ Less awareness on nano nitrogen &amp; zinc fertilizers</li> </ul>	-	Demonstration of nano-nitrogen and nano zinc for enhancing the productivity and profitability in Paddy	-	-	-	1	-	-	-	01	02

10	Enhancing productivity in saline soils	Paddy	<ul style="list-style-type: none"> <li>▪ Increased soil salinity (4 – 10 dS/m) in TBP command area from 20,000 ha to 96,000 ha</li> <li>▪ Yield reduction by 15-20 % (20-23 q/ha)</li> <li>▪ Existing variety BPT 5204 is long duration (150-155 days) and is less salt tolerant (&lt; 4dS/m)</li> </ul> Susceptible to blast	-	Demonstration of salt tolerant paddy variety GNV 1109 for enhancing productivity in saline soils	1	-	-	1	2.5	-	-	02	04
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11	Site specific nutrient management	Paddy	<ul style="list-style-type: none"> <li>▪ Indiscriminate use of chemical fertilizers (2-3 times) more than RDF &amp; deterioration of soil health</li> <li>▪ Increased CoC (Rs. 32000 – 35,000/acre)</li> <li>▪ Spatial and temporal change in nutrient availability</li> <li>▪ Not considering soil nutrient availability and uptake to produce targeted yield</li> </ul>	-	Demonstration of site specific nutrient management in paddy	-	-	-	1	2.5	-	-	02	04
12	Drum seeder in wet land condition	Paddy	<ul style="list-style-type: none"> <li>• Uncertainty in release of water</li> <li>• Use of aged seedlings for transplanting</li> <li>• Excess use of fertilizers</li> <li>• Labour problem (20-25 No.)</li> <li>• High CoC (Rs. 32000 – 35000/acre)</li> </ul>	-	Demonstration of drum seeder in wet land condition	<b>01</b>	-	-	1	-	-	-	02	04

13	Integrated management of yellow stem borer in summer paddy	Paddy	<ul style="list-style-type: none"> <li>• High incidence during summer season causes 20-25 % yield loss</li> <li>• Most of the farmers depend on chemical pesticides</li> </ul>	-	Demonstration of integrated management of yellow stem borer in summer paddy	-	-	-	01	-	-	-	-	4
14	Higher productivity and IPDM	Groundnut	<ul style="list-style-type: none"> <li>▪ Lack of awareness on high yielding</li> <li>▪ Drought tolerant &amp;</li> <li>▪ High oil content</li> <li>▪ Increased pests and diseases incidence resulted in low yield 30-35 % (Leaf spot, spodoptera, leaf miner, rust)</li> <li>▪ Increased CoC (Rs.7000-12000) due to excess use of pesticides</li> </ul>	-	Demonstration of groundnut variety – KadariLepakshi 1812 with IPDM practices for higher productivity	-	-	-	01	3.0	-	-	02	20

15	ICM	Mango	<ul style="list-style-type: none"> <li>▪ Pruning is hardly practiced</li> <li>▪ Not aware of scheduled application of irrigation water during flowering and also micronutrients</li> <li>▪ Flower drop (40%)</li> <li>▪ Decrease in flower emergence (60 %)</li> <li>▪ Delay in the flower bud initiation (30 days)</li> </ul>	-	Demonstration of good management practices (GMPs) in mango for higher productivity	-	-	-	01	-	-	-	-	-
16	Nutrient management	Pomegranate	<ul style="list-style-type: none"> <li>▪ Flower drop (20%-30%)</li> <li>▪ 20-25% incidence of wilt</li> <li>▪ High cost of inorganic fertilizer (PK) (Rs. 45000 - 50000/acre)</li> </ul>	-	Demonstration of novel microorganism ( <i>Penicillium pinophilum</i> ) for nutrient management in pomegranate fruit crop to reduce wilt incidence	-	-	-	1	-	-	-	01	30

17	ICM	Guava	<ul style="list-style-type: none"> <li>▪ Emerging crop in Koppal district (696 ha) and suffering from wilt complex</li> <li>▪ There was no effective chemical management</li> <li>▪ Lack of awareness on bio-agents for effective management of wilt complex</li> <li>▪ High CoC (Rs. 10000 – 15000/acre)</li> </ul>	-	Eco friendly management of wilt complex in guava to enhance yield	-	-	-	1	-	-	-	04	70
18	ICM	Banana	<ul style="list-style-type: none"> <li>▪ Wilt complex (20-25 %) and sigatoka (25-30 %) is a major problem causes 20-30 % low yield</li> <li>▪ less-awareness on bio-agents utilization</li> <li>▪ Improper application of pesticides cause increased CoC (Rs. 15,000 – 25,000/acre)</li> </ul>	-	ICM in Banana	-	-	-	1	-	-	-	04	80

19	Crop productivity	Banana	<ul style="list-style-type: none"> <li>▪ High price of the TC plants (Rs.25/plant)</li> <li>▪ High CoC to small holding farmers with respect to purchase of TC plant (Rs.14,000 /acre)</li> <li>▪ Delay in getting the small quantity TC plants</li> </ul>	-	Demonstration of yalakki banana propagated through Macro propagation	-	-	-	01	-	300 No.	-	-	-
20	IPM	Chilli	<ul style="list-style-type: none"> <li>▪ New incidence of chilli thrips caused 25 -30 % of yield loss</li> <li>▪ No insecticides is effective against thrips</li> <li>▪ Non-judicious use of insecticides resulted higher CoC</li> <li>▪ Low productivity (14.49 t/ha)</li> </ul> <p>High incidence of chilli mosaic virus (Intensity: 1 – 50 %)</p>	-	Demonstration of high yielding Chilli hybrid ArkaKyati with Integrated black thrips ( <i>Thrips pervispinus</i> ) management	01	-	-	1	0.01	-	-	2	40

21	IPDM	Tomato	<ul style="list-style-type: none"> <li>▪ Increased incidence fruit borer, pin worm and early blight cause 30% loss in yield</li> <li>▪ Injudicious application of chemicals leads to increased CoC (Rs. 10000-15000/acre)</li> </ul>	-	Management of fruit borer, pin worm and early blight in tomato	-	-	-	1	-	-	-	02 (traps & lures) 01 (Nem oil)	190 No. 8 It
22	Crop productivity	Ridgegaurd	<ul style="list-style-type: none"> <li>▪ Local variety cultivation</li> <li>▪ Low yield (8.4 tonnes/ha)</li> <li>▪ Fruit fly incidence (23-26%)</li> <li>▪ Not following the training method</li> </ul>	-	Demonstration of high yielding nutrient fortified Ridgegaurd hybrid ArkaPrasan	01	-	-	1	0.05	-	-	01 (traps)	25
23	Crop productivity	Rose	<ul style="list-style-type: none"> <li>▪ Low yield (15 t/ha)</li> <li>▪ Thin flower stalk</li> <li>▪ Not suitable for garland making</li> <li>▪ Short shelf life (1-2 days)</li> <li>▪ Low marker price (Rs. 80/kg)</li> </ul>	-	Demonstration of new popular rose variety ArkaSavi for higher productivity	01	-	-	1	-	1000 buded plants	-	-	-

24	livelihood security	terrace garden	<ul style="list-style-type: none"> <li>• Prevalence of malnutrition in children in Koppal district (55.7 %)</li> <li>• Prevalence of anaemia in children (60.9%) and in women (70 %)</li> <li>▪ High cost of vegetables</li> </ul>	-	Demonstration of terrace garden for livelihood security	-	-	-	1	0.09	300	-	-	-
25	Drudgery reduction	solar operated nipping machine	Nipping is not much popular among farmers. Drudgery induced in manual operations. Low yield due to non-branching (10 %)	-	Demonstration of solar operated nipping machine for chickpea for drudgery reduction	01	-	-	1	-	-	-	-	-

26	Storage of seeds	Cereal & Pulses	<ul style="list-style-type: none"> <li>• Post-harvest losses account for about 10% of total food grains due to unscientific storage (Gunny bags), insects, rodents, micro-organisms.</li> <li>• Chemical changes in grain content</li> <li>• Contamination of grains with mouth skin and body parts</li> <li>• Less consumer preference</li> <li>• Less nutritional value due to insect damage</li> </ul> <p>Less shelf life (3-4 months)</p>	-	Demonstration of low cost improved storage bags for food grains to enhance shelf life	01	-	-	1	-	-	-	-	-
27	Nutritional security	Pearl millet	<ul style="list-style-type: none"> <li>• Prevalence of anaemia in women (70%) and children (60.9%)</li> <li>• Lack of information on biofortified hybrid</li> </ul> <p>Low yield in local hybrid (10-15 %)</p>	-	Promotion of biofortified pearl millet hybrid VPMH-14 to address anemia in women and children	01	-	-	1	0.5	-	-	02	04

28	Drudgery reduction	Fertilizer Feeder	<ul style="list-style-type: none"> <li>▪ Lack of awareness on portable fertilizer feeder equipment</li> <li>▪ Traditional method is labour intensive, time consuming &amp; drudgery</li> <li>▪ Wastage of fertilizer in broadcasting &amp; less fertilizer use efficiency</li> </ul> <p>Increased weed growth</p>	-	Demonstration of portable fertilizer feeder equipment for uniform application and drudgery reduction	<b>01</b>	-	-	1	-	-	-	-	-
29	Nutritional security	Nutrition Garden	<ul style="list-style-type: none"> <li>• Prevalence of malnutrition in children in Koppal district (55.7 %)</li> </ul> <p>Prevalence of anaemia in women (70%) and children (60.9%)</p>	-	Demonstration of nutri-farms for year round nutrition security among farm families	<b>04</b>	-	-	1	0.09	900	-	-	-

30	Poultry production	Poultry (2021-22)	<ul style="list-style-type: none"> <li>• Decreased reproductive performances (8-10%) in incandescent bulb</li> <li>• High feed intake and mortality in layer birds</li> </ul>		Demonstration of red Spectrum Of Light On Reproductive Performances In Poultry Layer Under Normal Management Practices	-	-	-	1	-	-	100 bulbs	-	-
31	Animal Health	Dairy	Subclinical mastitis- Reduction in milk yield, Theletis, Sour milk	-	Demonstration of <i>masti guard</i> for mastitis management in cross bred dairy cows	-	-	-	1	-	-	-	-	-
32	Fodder production	Dairy	Non-availability of green fodder, Lack of knowledge on perennial leguminous fodder, low milk yield and fat (%)	-	Demonstration of 10 cent model fodder plot for dairy farming	-	-	-	1	-	-	-	-	-
33	Animal Health	Dairy	Hypocalcemia, Lack of awareness regarding drying off, Reduced milk yield after parturition	-	Prevention & control of milk fever in cross breed Cows	-	-	-	1	-	-	-	-	-

34	Value addition	Entrepreneurship development	<ul style="list-style-type: none"> <li>• Lower price during market glut (60-80 rupees per bunch)</li> <li>• Lower price for small size fruits (10 rupees per bunch)</li> </ul> <p>Banana powder rich in magnesium (27mg/100g) and potassium (358mg/100g)</p>	-	Development of Sugandi banana flour and its value added products	01	-	-	1	-	-	-	-	-
35	Production technology	Entrepreneurship development	<ul style="list-style-type: none"> <li>• Introduction of mushroom cultivation as a home scale enterprise</li> <li>• Low income realization (Rs. 60-80/kg) due to poor knowledge on mushroom cultivation, processing, value addition, labeling, packaging and marketing linkage</li> </ul> <p>Mushroom rich in protein (21.8 g/100 g), vitamin D (18 mg/100 g) and potassium (446 mg/100 g)</p>	-	Home scale enterprise : Oyster mushroom cultivation and value addition	02	-	-	1	0.2	-	-	-	-

36	Value addition	Entrepreneurship development	<ul style="list-style-type: none"> <li>• Promotion of millet health products preparation as home scale enterprise</li> <li>• Millets rich in calcium, iron and dietary fiber (Finger millet-350 mg calcium, pearl millet -11.0 mg iron, Foxtail millet -8.0 mg dietary fiber/100g).</li> <li>• Millet consumption decrease the risk of diabetes, heart diseases and cancer</li> </ul> <p>Additional income through value addition</p>	-	Home scale enterprise : Millet and its products	02	-	-	1	1.0	-	-	-	-
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### 3. B2. Details of technology used during reporting period

Sl.No	Title of Technology	Source of technology	Crop/enterprise	No. of programmes conducted			
				OFT	FLD	Training	Others (Field visit/Field day)
1	2	3	4	5	6	7	8
1	Assessment of different salt tolerant paddy varieties for enhancing productivity in saline soils	UAS, Raichur PJ TSAU	Paddy	5		-	3
2	Assessment of Groundnut varieties for higher productivity	UAS, Raichur UAS, Dharwad ANGRAU, AP	Groundnut	5		-	3
3	Assessment of dietary supplementation of fresh and dried azolla on the performance of backyard poultry	KVAFSU, Bidar NIANP. Bengaluru	Poultry	5	-	-	3
4	Demonstration of BBF and IPDM in Groundnut crop for enhancing Yield	AICRP, Groundnut UAS, Raichur	Groundnut		10	-	3
5	Demonstration of organic paddy cultivation in transplanted rice	UAS, Raichur	Paddy	-	10	-	4
6	Demonstration of Tungabhadra Sona (GNV 1801) to enhance higher productivity	UAS, Raichur	Paddy	-	10	-	4
7	Demonstration of Direct Seeded Rice	UAS, Raichur	Paddy	-	10	-	4
8	Demonstration of weed management in paddy	UAS, Raichur	Paddy	-	10	-	4
9	Demonstration of nano-nitrogen and nano zinc for enhancing the productivity and profitability in Paddy	IFFCO Nano Bio- Technology Research Center, Kalalo, Gujarath	Paddy	-	10	-	5
10	Demonstration of salt tolerant paddy variety GNV 1109 for enhancing productivity in saline soils	UAS, Raichur	Paddy	-	10	-	4
11	Demonstration of site specific nutrient management in paddy	UAS, Raichur	Paddy	-	10	-	3
12	Demonstration of drum seeder in wet land condition	TNAU	Paddy	-	10	-	4
13	Demonstration of integrated management of yellow stem borer in summer paddy	UAS, Raichur	Paddy	-	10	-	4

14	Demonstration of groundnut variety – KadariLepakshi 1812 with IPDM practices for higher productivity	ANGRAU, AP	Groundnut	-	10	-	4
15	Demonstration of good management practices (GMPs) in mango for higher productivity	IIHR, Bangalore	Mango	-	05	-	4
16	Demonstration of novel microorganism ( <i>Penicillium pinophilum</i> ) for nutrient management in pomegranate fruit crop to reduce wilt incidence	NRCP, Solapur	Pomegranate	-	10	-	4
17	Eco friendly management of wilt complex in guava to enhance yield	IIHR, Bangalore	Guava	-	10	-	3
18	ICM in Banana	IIHR, Bangalore	Banana	-	10	-	3
19	Demonstration of yalakki banana propagated through Macro propagation	NRC-Banana	Banana	-	03	-	3
20	Demonstration of high yielding Chilli hybrid ArkaKyati with Integrated black thrips ( <i>Thrips pervispinus</i> ) management	IIHR, Bangalore	Chilli	-	10	-	4
21	Management of fruit borer, pin worm and early blight in tomato	IIHR, Bangalore	Tomato	-	10	-	4
22	Demonstration of high yielding nutrient fortified Ridgegaurd hybrid ArkaPrasan	IIHR, Bangalore	Ridgegaurd	-	05	-	4
23	Demonstration of new popular rose variety ArkaSavi for higher productivity	IIHR, Bangalore	Rose	-	02	-	3
24	Demonstration of terrace garden for livelihood security	UHS, Bagalkot	terrace garden		30	-	2
25	Demonstration of solar operated nipping machine for chickpea for drudgery reduction	UAS, Dharwad/ Raichur	solar operated nipping machine	-	25 farmers	-	2
26	Demonstration of low cost improved storage bags for food grains to enhance shelf life	UAS, Raichur	Cereal &Pulses	-	10	-	4

27	Promotion of biofortified pearl millet hybrid VPMH-14 to address anemia in women and children	UAS Dharwad	Pearl millet	-	10	-	3
28	Demonstration of portable fertilizer feeder equipment for uniform application and drudgery reduction	Adaptive Agritech solutions, Belgaum	Fertilizer application	-	25 farmers	-	3
29	Demonstration of nutri-farms for year round nutrition security among farm families	UAS Bengaluru	Nutrition Garden	-	30 New families	-	5
30	Demonstration of red Spectrum Of Light On Reproductive Performances In Poultry Layer Under Normal Management Practices	ICAR-NIANP, Bengaluru	Poultry (2021-22)	-	10	-	3
31	Demonstration of <i>masti guard</i> for mastitis management in cross bred dairy cows	TANUVAS, Chennai	Dairy	-	10	-	3
32	Demonstration of 10 cent model fodder plot for dairy farming	TANUVAS, Chennai	Dairy	-	10	-	3
33	Prevention & control of milk fever in cross breed Cows	GADVASU, Ludiana	Dairy	-	10	-	3
34	Development of Sugandi banana flour and its value added products	NRC banana Tiruchirapalli, TN	Entrepreneurship development	-	2 SHG's	-	3
35	Home scale enterprise : Oyster mushroom cultivation and value addition	IIHR, Bengaluru	Entrepreneurship development	-	2 SHG's	-	4
36	Home scale enterprise : Millet and its products	UAS, Dharwad	Entrepreneurship development	-	2 SHG's	-	3

## 3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Method demonstration/Field days)			
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
03	-	02	-	-	-	-	-	17	05	07	01	10	-	02	-
03	-	02	-	-	-	-	-	-	-	-	-	15	01	04	-
04	-	01	-	-	-	-	-	-	-	-	-	13	02	03	01
-	-	-	-	07	-	03	-	-	-	-	-	08	-	03	-
-	-	-	-	07	01	02	-	19	01	07	-	13	-	03	-
-	-	-	-	09	-	01	-	-	-	-	-	19	-	07	01
-	-	-	-	08	-	02	-	-	-	-	-	15	02	04	-
-	-	-	-	09	-	01	-	-	-	-	-	14	01	06	-
-	-	-	-	07	03	-	-	-	-	-	-	23	04	10	-
-	-	-	-	09	01	-	-	21	-	06	-	29	04	07	-
-	-	-	-	08	-	02	-	-	-	-	-	31	-	04	-
-	-	-	-	08	01	01	-	19	01	05	-	23	-	07	01
-	-	-	-	09	-	01	-	-	-	-	-	15	02	07	-
-	-	-	-	09	-	01	-	-	-	-	-	13	-	05	-
-	-	-	-	05	-	-	-	-	-	-	-	11	-	06	-
-	-	-	-	08	-	02	-	-	-	-	-	15	01	05	-
-	-	-	-	07	01	02	-	-	-	-	-	16	-	07	-
-	-	-	-	08	-	02	-	-	-	-	-	12	-	06	-
-	-	-	-	03	-	-	-	-	-	-	-	14	02	06	-
-	-	-	-	09	-	01	-	21	-	08	-	17	06	02	-
-	-	-	-	04	-	06	-	-	-	-	-	16	-	08	-
-	-	-	-	05	-	-	-	16	02	07	01	14	-	06	-
-	-	-	-	01	-	01	-	14	-	03	-	11	-	05	-
-	-	-	-	-	25	-	05	-	-	-	-	-	21	-	03
-	-	-	-	15	03	07	-	23	08	02	03	02	08	03	01
-	-	-	-	07	-	03	-	18	05	02	03	10	01	02	01
-	-	-	-	08	-	02	-	15	06	03	01	12	07	02	03
-	-	-	-	18	2	04	01	10	11	02	04	-	21	-	03
-	-	-	-	-	24	-	06	05	56	02	18	01	21	-	03



**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	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	-	-	-	-	-	-	-	-	-	-

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

Thematic areas	Cattle	Poultry	Piggery	Rabbit	Fisheries	TOTAL
Evaluation of Breeds	-	-	-	-	-	-
Nutrition Management	-	01	-	-	-	01
Disease of Management	-	-	-	-	-	-
Value Addition	-	-	-	-	-	-
Production and Management	-	-	-	-	-	-
Feed and Fodder	-	-	-	-	-	-
Small Scale income generating enterprises	-	-	-	-	-	-
Dairy	-	-	-	-	-	-
Others (Pl. specify)	-	-	-	-	-	-
<b>TOTAL</b>	-	01	-	-	-	01

#### 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)	-	-	-	-	-	-
<b>TOTAL</b>	-	-	-	-	-	-

#### 4.B. Achievements on technologies Assessed and Refined:

##### 4.B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technologies	No. of trials	Number of farmers / locations	Area in ha (Per trial covering all Technological Options in a farm)
Integrated Nutrient Management					
Varietal Evaluation	Paddy	Assessment of different salt tolerant paddy varieties (TO1: Gangavathisona, TO2: GNV-1109, TO3: NLR3041) for enhancing productivity	05	05	2.5
	Groundnut	Assessment of groundnut varieties (TO1: TMV-2, TO2: G-2-52, TO3: KDG-128, TO4: KadariLepakashi 1812 for higher productivity	05	05	2.5
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	-	-	-	-	-
<b>Total</b>				10	10
					5.0

#### 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	-	-	-	-	-
<b>Total</b>	-	-	-	-	-

#### 4.B.3. Technologies assessed under Livestock :

Thematic areas	Name of the livestock	Name of the technologies	No. of trials	No. of farmers/locations
Evaluation of breeds	-	-	-	-
Nutrition management	Poultry	<b>Assessment of dietary supplementation of fresh and dried azolla on the performance of backyard poultry</b> (TO1: Local bird rearing without azolla feeding, TO2: Fresh azolla feeding+ Vaccination against RD and IBD, TO3: Dried azolla feeding+ Vaccination against RD and IBD)	05	05
Disease management	-	-	-	-
Processing and Value addition	-	-	-	-
Production and management	-	-	-	-
Feed and fodder management	-	-	-	-
Small scale income generating enterprises	-	-	-	-
Others, pl. specify	-	-	-	-
<b>Total</b>				

**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	-	-	-	-
<b>Total</b>				

**4.B.5. Technologies assessed under various enterprises by KVKs : NIL**

Sl. No	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. Technologies 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	-	-	-	-

#### 4. C1. Results of Technologies Assessed

Crop/ enterprise	Farmin g 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)
									No. of Eff. tillers	BPH/hil l			
1	2	3	4	5	6	7	8	9	10		11	12	13
Cereals	Irrigated	<ul style="list-style-type: none"> <li>Increased soil salinity (4 – 10 dS/m) in TBP command area from 20,000 ha to 96,000 ha</li> <li>Yield reduction by 15-20 %</li> </ul>	Assessment of different salt tolerant paddy varieties for enhancing productivity in saline soils	5	TO1: BPT 5204/Gangavathison a	UAS, Raichur	71.20	q/ha	650	13.36	135280	67180	1.99
					TO2: GNV - 1109	UAS, Raichur	78.25		684	7.80	140850	74450	2.12
					TO3: Nellore Sona (NLR3041)	PjTSAU	65.30		622	8.10	130600	59800	1.84
									<b>Days to</b>	<b>PDI</b>			

									maturity				
Oilseeds	Irrigated	Lack of awareness on high yielding, drought tolerant & High oil content varieties	Assessment of Groundnut varieties for higher production	5	TO1: TMV-2	TNAU, Coimbatore	17.5		105	32	105000	66800	2.75
					TO2: G-2-52	UAS, Dharwad	24.3		106-110	16.36	145800	105500	3.62
					TO3: KDG-128	UAS, Raichur	22.8		112-115	13.20	136800	96500	3.39
					TO4: Kadirilepakshi 1812	ANGRAU, AP	32.6		118-120	9.16	179300	134100	3.97
Poultry	-	Lower body weight gain, Higher feed cost	Assessment of dietary supplementation of fresh and dried azolla on the performance of backyard poultry	5	TO1: Local bird rearing without azolla feeding	-		Continued....					
					TO2: Fresh azolla feeding+ Vaccination against RD and IB	KVAFSU, Bidar							
					TO3: Dried azolla feeding+ Vaccination against RD and IB	NIANP, Bengaluru							

#### 4. C2. Feedback on technologies assessed:

Name of technology assessed	Useful characters as well as constraints of technology	Socio-economic as well as administrative constraints for its adoption
Assessment of different salt tolerant paddy varieties for enhancing productivity in saline soils	-	-
Assessment of Groundnut varieties for higher production	Higher oil content and higher yield	Bitter taste of the seeds and it fetched Rs. 500 to 1000 less price

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

1. Title of Technology Assessed
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 and feedback received

## 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
-	-	-	-	-						-		
-	-	-	-	-						-		

**4. D2. Feedback on technologies refined : NIL**

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

**4.D.2. Details of Technologies refined: NIL**

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

**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
<b>1</b>	<b>Oilseeds</b>													
		Irrigated	Kharif	Ground nut	G-2-52	-	IPDM	Demonstration of BBF and IPDM in Groundnut crop for enhancing Yield	4	4	03	07	8	2
		Rainfed	Rabi/Summer	Groundnut	Kadari Lepakshi 1812	-	Higher productivity and IPDM	Demonstration of groundnut variety – KadariLepakshi 1812 with IPDM practices for higher productivity	4	4	01	09	09	01
<b>2</b>	<b>Pulses</b>													
		-	-	-	-	-	-	-	-	-	-	-	-	-
<b>3</b>	<b>Cereals</b>													
		Irrigated	Kharif	Paddy	RNR-15048	-	Organic paddy cultivation in transplanted rice	Demonstration of organic paddy cultivation in transplanted rice	4	4	02	08	06	04
		Irrigated	Kharif	Paddy	Tungabhadra Sona (GNV 1801)	-	Crop productivity	Demonstration of Tungabhadra Sona (GNV 1801) to enhance higher productivity	4	4	01	09	07	03
		Irrigated	Kharif/Rabi	Paddy	RNR-15048	-	Water productivity	Demonstration of Direct Seeded Rice	4	4	02	08	05	05
		Irrigated	Kharif/Rabi	Paddy	RNR-15048	-	Weed management	Demonstration of weed management in paddy	4	4	01	09	06	04
		Irrigated	Kharif/Rabi	Paddy	RNR-15048	-	Nano-nitrogen and nano zinc for enhancing the productivity	Demonstration of nano-nitrogen and nano zinc for enhancing the	4	4	00	10	08	02

								productivity and profitability in Paddy						
		Irrigated	Rabi/Summer	Paddy	GNV-1109	-	Enhancing productivity in saline soils	Demonstration of salt tolerant paddy variety GNV 1109 for enhancing productivity in saline soils	4	4	00	10	04	06
		Irrigated	Kharif/Rabi	Paddy	GNV-1105	-	Site specific nutrient management	Demonstration of site specific nutrient management in paddy	4	4	02	08	07	03
		Irrigated	Kharif	Paddy	RNR-15048	-	Drum seeder in wet land condition	Demonstration of drum seeder in wet land condition	4	4	01	09	06	04
		Irrigated	Rabi/Summer	Paddy	RNR-15048	-	Integrated management of yellow stem borer in summer paddy	Demonstration of integrated management of yellow stem borer in summer paddy	4	4	01	09	08	02
<b>4</b>	<b>Millets</b>													
		Rainfed	Kharif	Pearl millet	VPM H-14	-	Nutritional security	Promotion of biofortified pearl millet hybrid VPMH-14 to address anemia in women and children	4	4	02	08	08	02
<b>5</b>	<b>Vegetables</b>													
		Irrigated	Rabi/Summer	Chilli	-	ArkaKyati	IPM	Demonstration of high yielding Chilli hybrid ArkaKyati with Integrated black thrips ( <i>Thrips pervispinus</i> ) management	4	4	01	09	09	01
		Irrigated	Late Kharif	Tomato	-	Private hybrids	IPDM	Management of fruit borer, pin	4	4	06	04	09	01

								worm and early blight in tomato						
		Irrigated	Kharif/Rabi	Ridgegaurd	-	ArkaPrasan	Crop productivity	Demonstration of high yielding nutrient fortified Ridgegaurd hybrid ArkaPrasan	2	2	00	05	04	01
		Irrigated	Kharif/Rabi	Vegetables	Nutri garden Kit	-	Nutrition garden	Demonstration of nutri-farms for year round nutrition security among farm families	30	30	06	24	30	-
<b>6</b>	<b>Flowers</b>													
		Irrigated	Kharif/Rabi	Rose	-	ArkaSavi	Crop productivity	Demonstration of new popular rose variety ArkaSavi for higher productivity	2	2	01	01	02	1
<b>7</b>	<b>Ornamental</b>													
					-	-	-	-	-	-		-	-	-
<b>8</b>	<b>Fruit</b>													
		Irrigated	Kharif/Rabi/Summer	Mango	Dashe ri and Kesar	-	ICM	Demonstration of good management practices (GMPs) in mango for higher productivity	2	2	00	05	2	3
		Irrigated	Rabi/Summer	Pomegranate	Bhag wa	-	Nutrient management	Demonstration of novel microorganism ( <i>Penicillium pinophilum</i> ) for nutrient management in pomegranate fruit crop to	4	4	02	08	04	06

								reduce wilt incidence						
		Irrigated	Rabi/Summer	Guava	Tiwan pink		ICM	Eco friendly management of wilt complex in guava to enhance yield	4	4	02	08	06	04
		Rainfed	Kharif	Banana	G-9	-	ICM	ICM in Banana	4	4	02	08	7	3
		Irrigated	Kharif	Banana	Yalakki banana	-	Crop productivity	Demonstration of yalakki banana propagated through Macro propagation	0.9	0.9	00	03	03	0
<b>9</b>	<b>Spices and condiments</b>													
<b>10</b>	<b>Commercial</b>													
<b>11</b>	<b>Medicinal and aromatic</b>													
<b>12</b>	<b>Fodder</b>													
		-	-	-	-	-	-	-	-	-	-	-	-	-
<b>13</b>	<b>Plantation</b>													
<b>14</b>	<b>Fibre</b>													
		-		-	-		-	-	-	-	-	-	-	-
<b>15</b>	<b>Dairy</b>													
				Dairy		-		Demonstration of masti guard for mastitis management in cross bred dairy cows	-	-	02	08	9	1
				Dairy		-	Fodder production	Demonstration of 10 cent model	0.04	0.04	03	07	10	0



26	Vermicompost													
27	Sericulture													
28	Apiculture													
29	Implements													
		-	-	solar operated nipping machine	-	-	Drudgery reduction	Demonstration of solar operated nipping machine for chickpea for drudgery reduction			07	18	21	04
		-	-	Fertilizer application	-	-	Drudgery reduction	Demonstration of portable fertilizer feeder equipment for uniform application and drudgery reduction			05	20	25	0
30	Safe storage practices													
		-	-	Cereal & Pulses	-	-	Storage of seeds	Demonstration of low cost improved storage bags for food grains to enhance shelf life	-	-	03	07	10	0
31	Fisheries													
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	Green manure crops													
	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

Sl.	Category	Farming	Season	Crop	Variety/ breed	Hybri	Thematic	Technology	Season and	Status of soil	Previou
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No	Situation	and Year		d	area	Demonstrated	year	N	P	K	s crop grown	
<b>1</b>	<b>Oilseeds</b>											
-	-	-	-	-	-	-	-	-	-	-	-	-
<b>2</b>	<b>Pulses</b>											
<b>3</b>	<b>Cereals</b>											
	Irrigated	Kharif	Paddy	RNR-15048	-	Organic paddy cultivation in transplanted rice	Demonstration of organic paddy cultivation in transplanted rice	Kharif 2022	M	H	M	Green manure crops
	Irrigated	Kharif/Rabi	Paddy	RNR-15048	-	Nano-nitrogen and nano zinc for enhancing the productivity	Demonstration of nano-nitrogen and nano zinc for enhancing the productivity and profitability in Paddy	Kharif/Rabi 2022	M	M	M	Paddy
	Irrigated	Kharif/Rabi	Paddy	GNV-1105	-	Site specific nutrient management	Demonstration of site specific nutrient management in paddy	Kharif/Rabi 2022	M	M	H	Paddy
	Irrigated	Kharif	Paddy	RNR-15048	-	Drum seeder in wet land condition	Demonstration of drum seeder in wet land condition	Kharif 2022	M	M	M	Paddy
<b>4</b>	<b>Millets</b>											
-	-	-	-	-	-	-	-	-	-	-	-	-
<b>5</b>	<b>Vegetables</b>											
-	-	-	-	-	-	-	-	-	-	-	-	-
<b>6</b>	<b>Flowers</b>											
-	-	-	-	-	-	-	-	-	-	-	-	-
<b>7</b>	<b>Ornamental</b>											
-	-	-	-	-	-	-	-	-	-	-	-	-
<b>8</b>	<b>Fruit</b>											
	Irrigated	Rabi/Summer	Guava	Tiwan pink		ICM	Eco friendly management of wilt complex in guava to enhance yield	Rabi/Summer 2022	M	M	M	Guava

<b>9</b>	<b>Spices and condiments</b>												
		-	-	-	-		-	-	-	-	-	-	-
<b>10</b>	<b>Commercial</b>												
		-	-	-	-		-	-	-	-	-	-	-
<b>11</b>	<b>Medicinal and aromatic</b>												
		-	-	-	-		-	-	-	-	-	-	-
<b>12</b>	<b>Fodder</b>												
		-	-	-	-		-	-	-	-	-	-	-
<b>13</b>	<b>Plantation</b>												
		-	-	-	-		-	-	-	-	-	-	-
<b>14</b>	<b>Fibre</b>												
		-	-	-	-		-	-	-	-	-	-	-

## 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								
	Demonstration of BBF and IPDM in Groundnut crop for enhancing Yield	G-2-52	-	Rainfed	10	4	29.3	23.7	26.5	24.2	9.50	1,59,000	1,18,800	3.95	1,45,200	1,07,100	3.81
<b>Oilseeds</b>	Demonstration of groundnut variety – KadariLepakshi 1812 with IPDM practices for higher productivity	KadariLepakshi 1812	-	Rainfed	10	4	Continued....										
<b>Pulses</b>																	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Cereals</b>																	
	Demonstration of organic paddy cultivation in transplanted rice	RNR-15048	-	Irrigated	10	4	55.12	49.54	52.33	70.12	-33.99	1,36,058	88,050	3.21	1,54,264	82,260	1.89

Demonstration of Tungabhadra Sona (GNV 1801) to enhance higher productivity	Tungabhadra Sona (GNV 1801)	-	Irrigated	10	4	72.43	69.77	71.10	68.30	4.10	1,56,450	86,420	2.23	1,50,260	78,200	2.09
Demonstration of Direct Seeded Rice	RNR-15048	-	Irrigated	10	4	68.19	67.21	67.7	65.8	2.89	1,48,940	93,920	2.71	1,44,760	74,730	2.07
Demonstration of weed management in paddy	RNR-15048	-	Irrigated	10	4	73.59	68.91	71.25	67.13	6.13	1,56,750	87,750	2.27	1,47,686	75,686	2.05
Demonstration of nano-nitrogen and nano zinc for enhancing the productivity and profitability in Paddy	RNR-15048	-	Irrigated	10	4	74.81	70.29	72.55	69.5	4.38	1,59,610	91,130	2.33	1,52,900	80,450	2.10
Demonstration of salt tolerant paddy variety GNV 1109 for enhancing productivity in saline soils	GNV-1109	-	Irrigated	10	4	74.37	66.43	70.40	56.50	24.60	140800	74,300	2.11	124300	54400	1.77
Demonstration of site specific nutrient management in paddy	GNV-1105	-	Irrigated	10	4	75.46	71.14	73.30	71.40	2.66	1,46,600	80400	2.21	1,42,800	73200	2.05

	Demonstration of drum seeder in wet land condition	RNR-15048	-	Irrigated	10	4	73.19	69.91	71.55	69.33	3.20	1,57,410	99,410	2.71	1,52,526	80,526	2.10
	Demonstration of integrated management of yellow stem borer in summer paddy	RNR-15048	-	Irrigated	10	4	Continued....										
<b>Millets</b>																	
	Promotion of biofortified pearl millet hybrid VPMH-14 to address anemia in women and children	VPMH-14	-	Rainfed	10	4	21.6	17.4	19.5	16.0	21.8	35588	26088	3.74	29200	17900	2.58
<b>Vegetables</b>																	
	Demonstration of high yielding Chilli hybrid ArkaKyati with Integrated black thrips ( <i>Thrips pervispinus</i> ) management	-	ArkaKyati	Irrigated	10	4	25.62	22.78	24.2	20.5	18.05	539600	462000	1:4.07	410000	283000	1:3.22
	Management of fruit borer, pin worm and early blight in tomato	-	Private hybrids	Irrigated	10	4	Continued....										

	Demonstration of high yielding nutrient fortified Ridgegaurd hybrid ArkaPrasan	-	ArkaPrasan	Irrigated	5	1.2	191.3	184.3	187.8	152.7	22.99	225435	160435	1:3.46	152775	72775	1:2.88
	Demonstration of terrace garden for livelihood security	-	-	Irrigated	30 families	-	<b>Results mentioned below</b>										
	Demonstration of nutri-farms for year round nutrition security among farm families	2021-22		Irrigated	30 families	-	<b>Results mentioned below</b>										
		2022-23		Irrigated	30 families	-	<b>Continued....</b>										
<b>Flowers</b>																	
	Demonstration of new popular rose variety ArkaSavi for higher productivity	-	ArkaSavi	Irrigated	5	1.2	<b>Continued....</b>										
<b>Ornamental</b>																	
<b>Fruit</b>																	
	Demonstration of good management practices (GMPs) in mango for higher productivity	Dasherri and Kesar	-	Irrigated	5	1.2	<b>Continued....</b>										

	Demonstration of novel microorganism ( <i>Penicillium pinophilum</i> ) for nutrient management in pomegranate fruit crop to reduce wilt incidence	Bhagwa	-	Irrigated	5	1.2	95.14	86.26	90.7	82.2	10.34	761880	509380	1:3.02	690480	422980	1:2.58
	Eco friendly management of wilt complex in guava to enhance yield	Tiwan pink		Irrigated	10	4	Continued....										
	ICM in Banana	G-9	-	Irrigated	10	4	Continued....										
	Demonstration of yalakki banana propagated through Macro propagation	Yalakki banana	-	Irrigated	5	1.2	Continued....										
<b>Spices and condiments</b>																	
	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
<b>Commercial</b>																	
	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
<b>Fibre crops like cotton</b>																	
	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
<b>Medicinal and aromatic</b>																	
	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
<b>Fodder</b>																	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Plantation</b>																	



	Plant population/m <sup>2</sup>	50	35
	No. of Eff. tillers	720	700
	PDI	3.16	8.13
Demonstration of weed management in paddy	No. of labours	88	108
	Weed count/m <sup>2</sup>	12.5	19.6
	Weed dry weight/m <sup>2</sup>	14.0	24.2
	WCE	42.14%	-
	WI	5.7	-
	DH/hill,	2.12	5.32
	BPH/hill	2.64	8.93
	PDI (%)	2.11	5.12
	Demonstration of nano-nitrogen and nano zinc for enhancing the productivity and profitability in Paddy	Plant height	104
No. of effective tillers/plant		785	748
No. of hoppers/hills		7.13	16.10
soil pH		8.5	8.4
EC		1.3	2.5
Av. N (kg/ha)		104	85
Av. P <sub>2</sub> O <sub>5</sub> (kg/ha)		21.2	30.5
Av. K <sub>2</sub> O (kg/ha)		110	127
Zn (ppm)		0.46	0.62
Demonstration of salt tolerant paddy variety GNV 1109 for enhancing productivity in saline soils	pH	8.7	8.5
	EC	8.0	7.8
	Av. N (kg/ha)	90	104
	Av. P <sub>2</sub> O <sub>5</sub> (kg/ha)	21	28
	Av. K <sub>2</sub> O (kg/ha)	110	115
	No. of eff. tillers/plant	660	570
	BPH/hill	6.5	11.4
	Duration of crop	135	145
	Cooking quality	suitable for making mandakki	-
Demonstration of site specific nutrient management in paddy	pH	8.6	8.4
	EC	2.0	1.8
	Av. N (kg/ha)	85	97
	Av. P <sub>2</sub> O <sub>5</sub> (kg/ha)	18	22
	Av. K <sub>2</sub> O (kg/ha)	98	107
	No. of effective tillers/ hill	622	608
Demonstration of drum seeder in wet land condition	No. of labours	03	30
	No. of eff. tillers/plant	700	685
Demonstration of high yielding nutrient fortified Ridgegaurd hybrid ArkaPrasan	Tenderness (K Pa)	1.2	1.5
	Duration of the crop	128	110
	length of the fruit (cm)	32	21

	Number of picking	16	13
	% Pest (fruit fly) & disease (Downey mildew) incidence	2.80 5.81	10.30 9.63
	Fruit weight	113	97
	No. of fruits/plant	22	17
Demonstration of high yielding Chilli hybrid ArkaKyati with Integrated black thrips ( <i>Thrips pervispinus</i> ) management	No of thrips/leaf or flower	4	11
	% CMV incidence	5	12
	Yield/ plant	1590	1219
	Length of the fruit (cm)	10.23	8.89
	Number of pickings	4	3
	Duration of the crop	178	158
	Demonstration of novel microorganism ( <i>Penicillium pinophilum</i> ) for nutrient management in pomegranate fruit crop to reduce wilt incidence	Flower drop count at 15 days intervals	19
Average fruit weight		351	333
No. of fruits/plant		27	22
% wilt incidence (Initial and Final)		8.02 5.10	8.63 9.20
Promotion of biofortified pearl millet hybrid VPMH-14 to address anemia in women and children	<b>Mentioned below</b>		

### 1. Demonstration of nutri-farms for year round nutrition security among farm families (2021-22)

Villages:-Chikkadankankal and kuderemoti

General information of the families who adopted nutri-garden (N=30)

Sl.No.	Particulars	Categories	Numbers
1	Categories to which beneficiaries belonged	SC	4
		ST	6
		Others	20
2	Age groups to which beneficiaries belongs	20-30 years	10
		30-40 years	15
		40-50 years	5
3	Occupation of the beneficiaries	Farming	30
		House wives	--
		Others	--
4	Type of family (Av. of 30 FLD Farm Families)	Nuclear	6
		Joint	24
5	Education status of the farm women	Primary education	19
		Secondary education	6
		Illiterate	5

6	Average monthly income of the families		Rs. 5900
7	Expenditure pattern (Rupees)	Food	1820
		Education	283
		Health and medicine	684
		Fruits and vegetables	764
		Others	2355
8	Experience in farming/nutri-garden	Less than 5 years	--
		More than 5 years	30
		Never involved in farming	--
9	Purpose of nutrition garden	Social or recreational	--
		Family health and Financial benefits	30
10	Average man hours in nutri-garden		1.6 hrs

**Average production of vegetables of farm families (2021-22)**

Sl. No.	Name of the vegetables	Vegetables production (kgs)
<b>Green leafy vegetables</b>		
1	Methi	5.00
2	Spinach	5.00
3	Amaranthus	4.50
4	Coriander	5.00
5	Dill	8.00
6	Spring roll	2.00
<b>Roots &amp; tubers</b>		
7	Onion	8.00
8	Radish	5.00
9	Carrot	2.00
10	Beet root	5.00
<b>Other vegetables</b>		
11	Ridge gouard	15.00
12	Sponge gouard	18.00
13	Pumpkin	15.00
14	Ladies finger	5.00

15	Tomato	20.00
16	Bitter gouard	12.00
17	Brinjal	20.00
18	Cluster bean	11.00
20	Cucumber	15.00
<b>Spices</b>		
21	Chilli	2.00
<b>Pulses</b>		
22	Pigeon pea (Tender)	6.00
<b>Total</b>		<b>188.5</b>

#### Change occurrence by intervention of nutrition garden in rural families

Particulars	Production (kgs)	Purchase (kgs)	Distribution (kgs)	Consumption(kgs)
Before intervention	25	85	--	110
After intervention	188.5	21	10	178.5
Per cent change	187.5 %	75.3%	100%	62.3

#### Impact of nutrition garden intervention on food intake of farm women

Food groups	RDA (g)	Before		After		% change (Before and after)
		Mean	% Adequacy	Mean	% Adequacy	
Cereals and millets	330	285	86.36	320	97.0	12.28
Pulses	75	40	53.3	60	80.0	33.33
Meat, egg & fish	150	50	33.3	80	53.3	60.0
Milk & Milk products	500	150	30.0	200	40.0	33.33
Roots and tubers	200	55	27.5	120	62.5	118.2
Green leafy vegetables	100	45	45.0	85	85.0	88.8
Other vegetables	200	80	40.0	130	65.0	62.5
Fruits	100	40	40.0	75	75.0	87.5
Sugar	30	30	100	30	100	--
Fat	25	25	100	25	100	--

#### Impact of nutrition garden on nutrient intake of farm women

Nutrients	Rec. Dietary Allowance (RDA)	Before		After		% change (Before and after)
		Mean	% Adequacy	Mean	% Adequacy	
Energy (K cal)	2230	1840	82.5	2110	94.6	12.80

Protein (g)	55	35	63.6	48	87.2	37.14
Fat (g)	25	25	100	25	100	--
Fibre (g)	30	20	66.6	28	93.3	40.00
Calcium (mg)	600	265	44.2	430	71.6	62.26
Iron (mg)	21	14	66.6	19	90.46	35.71
β- carotene (I.U)	4800	1200	25.0	2800	58.3	133.33
Vitamin C (mg)	40	20	50.0	35	87.5	75.00

### Body Mass Index of farm women

Sl. No.	Anthropometric range	Group	No. of women	
			Before intervention	After intervention
1	BMI <18.5	Under weight	5	2
2	18.5 – 22.9	Normal	20	24
3	23.0 – 24.9	Over weight	5	4
4	25.0 – 29.9	Obese G-I	-	-
5	BMI >29.9	Obese G-II	-	-
<b>Total</b>			<b>30</b>	<b>30</b>

## 2. Demonstration of terrace garden for livelihood security

Villages:- Gangavthi

General information of the families who adopted terrace garden (N=30)

Sl.No.	Particulars	Categories	Numbers
1	Categories to which beneficiaries belonged	SC	5
		ST	5
		Others	20
2	Age groups to which beneficiaries belongs	20-30 years	4
		30-40 years	16
		40-50 years	6
3	Occupation of the beneficiaries	Farming	-
		House wives	30
		Others	--
4	Type of family (Av. of 30 FLD Farm Families)	Nuclear	27
		Joint	3
5	Education status of the farm women	Primary education	3

		Secondary education	27
		Illiterate	-
6	Average monthly income of the families		Rs. 12000
7	Expenditure pattern (Rupees)	Food	2800
		Education	2000
		Health and medicine	850
		Fruits and vegetables	920
		Others	4500
8	Experience in farming/nutri-garden	Less than 5 years	30
		More than 5 years	--
		Never involved in farming	--
9	Purpose of nutrition garden	Social or recreational	--
		Family health and Financial benefits	30
10	Average Man hours in nutri-garden		1.2 hrs

#### Average production of vegetables of farm families (2021-22)

SI. No.	Name of the vegetables	Vegetables production (kgs)
<b>Green leafy vegetables</b>		
1	Methi	6.00
2	Spinach	4.00
3	Amaranthus	5.00
4	Coriander	5.00
5	Dill	6.00
6	Spring roll	2.00
<b>Roots &amp; tubers</b>		
8	Radish	5.00
9	Carrot	2.00
<b>Other vegetables</b>		
11	Ridge gouard	15.00
12	Sponge gouard	15.00
13	Pumpkin	15.00
14	Ladies finger	5.00
15	Tomato	15.00
16	Bitter gouard	6.00

17	Brinjal	20.00
18	Cluster bean	11.00
20	Cucumber	10.00
<b>Spices</b>		
21	Chilli	2.00
	<b>Total</b>	<b>149.00</b>

#### Change occurrence by intervention of nutrition garden in rural families

Particulars	Production(kgs)	Purchase (kgs)	Distribution(kgs)	Consumption (kgs)
<b>Before intervention</b>	15	82	--	85
<b>After intervention</b>	149	25	10	139
<b>Per cent change</b>	89.9	69.5	100	63.5

#### Impact of nutrition garden intervention on food intake of farm women

Food groups	RDA (g)	Before		After		% change (Before and after)
		Mean	% Adequacy	Mean	% Adequacy	
Cereals and millets	330	280	84.8	320	96.0	14.2
Pulses	75	40	46.6	65	86.6	62.5
Meat, egg & fish	150	50	33.3	90	60.0	80.0
Milk & Milk products	500	150	30.0	220	44.0	33.33
Roots and tubers	200	55	27.5	140	70.0	69.0
Green leafy vegetables	100	45	45.0	85	85.0	88.8
Other vegetables	200	80	40.0	135	67.5	46.6
Fruits	100	40	40.0	72	72.0	71.25
Sugar	30	30	100	30	100	--
Fat	25	25	100	25	100	--

#### Impact of nutrition garden on nutrient intake of farm women

Nutrients	Rec. Dietary Allowance (RDA)	Before		After		% change (Before and after)
		Mean	% Adequacy	Mean	% Adequacy	
Energy (K cal)	2230	1900	85.2	2110	94.6	9.94
Protein (g)	55	35	63.6	46	83.6	31.4
Fat (g)	25	25	100	25	100	--
Fibre (g)	30	18	60.0	26	86.6	44.4
Calcium (mg)	600	265	44.2	450	75.0	69.8
Iron (mg)	21	11	52.4	18	85.7	84.7
β- carotene (I.U)	4800	1200	25.0	2900	60.4	59.4
Vitamin C (mg)	40	20	50.0	36	90.0	80.0

#### Body Mass Index of farm women

SI No	Anthropometric range	Group	No. of women	
			Before intervention	After intervention
1	BMI <18.5	Under weight	5	2
2	18.5 – 22.9	Normal	17	21
3	23.0 – 24.9	Over weight	5	5
4	25.0 – 29.9	Obese G-I	3	2
5	BMI >29.9	Obese G-II		-
<b>Total</b>			<b>30</b>	<b>30</b>

### 3.Promotion of biofortified pearl millet hybrid VPMH-14 to address anemia in women and children

#### Sensory evaluation

Sensory attributes	Colour	Taste	Aroma	Texture	Over all acceptability
Bajra Roti Hybrid (VPMH-14)	8.6	8.0	8.5	8.2	8.5
Bajra Roti Local hybrid ( Kaveri)	8.3	-	8.2	8.2	8.3

### Consumer Acceptability

Food product	Like	Dislike	Neutral
Bajra Roti Hybrid (VPMH-14)	80	-	2

#### 4. Demonstration of super grain bags-for storage of food grains and seeds for enhancing shelf life (2021-22)

Details	Demo	check	Demo	check	Demo	check
	Redgram (pulse beetle)		Sorghum (rice weevil)		Rice (rice weevil)	
No of live insects/kg	0	5.02	0	7.13	0	7.55
Initial weight of grains (Kg)	50	50	50	50	50	50
Final weight of grains (Kg)	49.35	44.20	49.45	45.15	49.31	45.50
Weight loss of grains (kg)	0.65	5.80	0.55	4.85	0.69	4.50
Weight loss of grains (%)	1.30	11.60	1.10	9.75	1.38	9.10

#### 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
Demonstration of BBF and IPDM in Groundnut crop for enhancing Yield	Higher yield, Less incidence of pest and disease	-
Demonstration of organic paddy cultivation in transplanted rice	Less spray requirement and less cost of cultivation with good quality rice	-
Demonstration of Tungabhadra Sona (GNV 1801) to enhance higher productivity	Early harvesting (20-25 days), Suitable for Kharif and Summer Season	-
Demonstration of Direct Seeded Rice	Less labour requirement resulted in less cost of cultivation and water saving	Technology adoption depends on release of water to the canals
Demonstration of weed management in paddy	Efficient weed control and less cost of cultivation	-
Demonstration of nano-nitrogen and nano zinc for enhancing the productivity and profitability in Paddy	Reduce 50% of nitrogen fertilizer application, Increased nitrogen use efficiency and easy availability	-
Demonstration of salt tolerant paddy variety GNV 1109 for enhancing productivity in saline soils	suitable for saline soils, tolerant to Blast disease and suitable for making puffed rice	-
Demonstration of site specific nutrient management in	Higher yield, net return and benefit cost ratio due to	-

paddy	balanced application of fertilizer	
Demonstration of drum seeder in wet land condition	Less labour requirement and cost saving due to no nursery preparation requirement	-
Demonstration of high yielding nutrient fortified Ridgegaurd hybrid ArkaPrasan	Higher yield with good market acceptability	-
Demonstration of high yielding Chilli hybrid ArkaKyati with Integrated black thrips ( <i>Thrips pervispinus</i> ) management	Yield of Red chilli is considerably good with reduced thrips population	-
Demonstration of novel microorganism ( <i>Penicillium pinophilum</i> ) for nutrient management in pomegranate fruit crop to reduce wilt incidence	Reduced flower drop, Healthy plants, Cost saving towards purchase of inorganic fertilizer (PNK fertilizer)	-
Demonstration of nutri-farms for year round nutrition security among farm families	<ul style="list-style-type: none"> <li>Year round availability of fresh and pesticide free vegetables.</li> <li>Children's actively involved in kitchen garden activity.</li> <li>Children's and teenage developed positive attitude towards healthy food choices</li> </ul>	
Demonstration of terrace garden for livelihood security	<ul style="list-style-type: none"> <li>Pesticide free vegetable</li> <li>Proper utilization of free time</li> </ul>	
Promotion of biofortified pearl millet hybrid VPMH-14 to address anemia in women and children	<ul style="list-style-type: none"> <li>Higher yield</li> <li>Higher fodder production</li> </ul>	
Demonstration of Super Grain Bags-For storage of food grains and seeds for enhancing shelf life	Use of super grain bags increased in the storage life by 6 months and decreased loss by 9 to 12 %	-

### 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	Demonstration of masti guard for prevention & control of sub clinical mastitis in cross bred dairy cows	-	10	-		Results mentioned below										
Dairy	Demonstration of 10 cent model fodder plot for dairy farming	-	10	-	Fodder yield (Ton/ha/year)	-	-	Super Napier-360 CoFS- 31-175 Lucerne-50 S.haemata- Drumstick- Sesbania-25	Hybrid Napier-C0-4 (180)	-	-	-	-	-	-	-

					Milk yield (litre/day/cow)	-	-	10.25	7.5	-	-	-	-	-	-	-
					Fat%	-	-	4.2	3.7	-	-	-	-	-	-	-
					SNF	-	-	9.2	8.4	-	-	-	-	-	-	-
					Body condition score (0-5)			4.0	3.0	-	-	-	-	-	-	-
Dairy	Prevention & control of Milk fever in cross breed Cows	cross breed	10		No.of Hypocalcemia-Milk fever cases	-	-	1	8	-	-	-	-	-	-	-
					Percent affected	-	-	10	80	-	-	-	-	-	-	-
					% Mortality	-	-	Recovered	75 (6 died)	-	-	-	-	-	-	-
Others																
Poultry (2021-22)	Demonstration of red spectrum of light on reproductive performances in poultry layer under normal management practices`	-	10	-		<b>Results mentioned below</b>										

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

\*\* BCR= Gross Return/Gross Cost

### 1. Demonstration of masti guard for prevention & control of sub clinical mastitis in cross bred dairy cows

Particulars	No.of cows	Somatic Cell Count (cells per ml)	pH	Appearance
Subclinical Mastitis ( Test)	08	500 x 1000	7.7	Curdy
Healthy Cows (Free from Subclinical Mastitis)-Control group	10	x 1000	6.5	Light yellow
Teat Protect Spray immediately sprayed on all teats after milking for period of 6 weeks.	-	100 x 1000	6.6	Yellow

### 2. Demonstration of red spectrum of light on reproductive performances in poultry layer under normal management practices

Sl No.	Weekly interval	Check (Incandescent Bulb-13 W)			Demo (LED Redlight-4W)		
		Egg Production for 5000 birds	Feed intake	Mortality	Egg Production for 5000 birds	Feed intake	Mortality
1	From 27 <sup>th</sup> week	148295	<b>181.125 tonnes/5000/315 days</b> Average intake per bird/day after 27 <sup>th</sup> of week to 67 <sup>th</sup> week =115grams	4-5% mortality	148750	<b>180 tonnes/5000/315 days</b> Average intake per bird/day after 27 <sup>th</sup> of week to 67 <sup>th</sup> week =114.25grams	4-5% mortality
2	32	148195			148650		
3	37	148210			148900		
4	42	148215			148700		
5	47	148300			148526		
6	52	148315			149003		
7	57	148287			148750		
8	62	148310			148658		
9	67	148312			148753		
	5 weeks Average	148271			148744		
	<b>Per day egg production</b>	<b>29654</b>		<b>29748</b>			

#### Egg Production

Normal Total egg production (85%)	Anticipated increase (%) 16 eggs/day	Egg production increased 16 eggs / day Total eggs for 315 days 315X16	Price per egg (Rs.5.00)	Total amount (Rs.)
4250	0.317	5040	5.00	25200

The profit from 0.317% increase in egg production for 45 weeks or 315 days is Rs.25200

#### Economics:

Sl. No.	Particulars	Total (Rs.)
1	Profit on extra egg production	25200
2	Profit on feed 1.125 tonnes (Rs.20/Kg)	22500
<b>Total:</b>		<b>47700</b>

#### Data on additional parameters other than yield: NIL

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

#### 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
Demonstration of masti guard for prevention & control of sub clinical mastitis in cross bred dairy cows	<ul style="list-style-type: none"> <li>• Mastiguard is very effective mastitis control in high milk yielders</li> <li>• Farmers friendly technology</li> <li>• No expertise required- very simple method to find out subclinical mastitis and prevention</li> </ul>	-
Demonstration of 10 cent model fodder plot for dairy farming	<ul style="list-style-type: none"> <li>• Small dairy farmers (3-4 cows/Bufaloes) can grow and manage fodder throughout the year</li> <li>• Due to balanced fodder – Milk yield, SNF and fat% increases to optimal level</li> <li>• Cost of production is less</li> </ul>	-
Prevention & control of Milk fever in cross breed Cows	<ul style="list-style-type: none"> <li>• Feeding calcium in advance pregnancy and immediately after pregnancy can save life of cow</li> </ul>	-
Demonstration of red spectrum of light on reproductive performances in poultry layer under normal management practices`	<ul style="list-style-type: none"> <li>• Anticipated increase (0.317%) 16 eggs /day</li> <li>• Commercial poultry feed saved-1.125 tonnes</li> <li>• Electricity: More than 50% saved ( 13W-5W)=8W</li> </ul>	

#### 5.B.5. Fisheries : NIL

Type of Breed	Name of the technology demonstrated	Breed	No. of Demo	Units/ Area (m <sup>2</sup> )	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.) NIL**

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

**5. B6. Feedback on fisheries technologies demonstrated: NIL**

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 : NIL**

Enterprise	Name of the technology demonstrated	Variety/ species	No. of Demo	Units/ Area {m <sup>2</sup> }	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	Home scale enterprise : Oyster mushroom cultivation and value addition	Oyster mushroom	2 SHGs	-	-	Continued...										
Button mushroom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Vermicompost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sericulture	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Apiculture	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Value addition	Development of <i>Sugandibanana</i> flour and its value added products	<i>Sugandibanana</i>	2 SHGs	-	-	Continued...										
	Home Scale enterprise: Millet and its health products	-	2 SHGs	-	-	Continued...										

\* 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.) NIL**

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

**5. B8. Feedback on enterprises demonstrated: NIL**

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
Fertilizer feeder	3200	Safe practices of pesticide & fertilizer application	02	-		Continued...									
Solar operated nipping machine	4000	Demonstration of solar operated nipping machine for chickpea for drudgery reduction	01	-		Continued...									

\* 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.) NIL**

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

**5. B10. Feedback on farm implements demonstrated: NIL**

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 organized	Number of participants	Remarks
1	Field days	09	635	-
2	Farmers Training	27	1067	-
3	Media coverage	147	-	-
4	Training for extension functionaries	04	224	-
5	Others (Please specify)	-	-	-



<b>Total</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fodder crops	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize (Fodder)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sorghum (Fodder)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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: NIL**

<b>Name of crop hybrid demonstrated</b>	<b>Useful characters as well as constraints of technology</b>	<b>Socio-economic as well as administrative constraints for its adoption</b>











Group dynamics	-	-	-	-	-	-	-	-	-	-
Formation and Management of SHGs	-	-	-	-	-	-	-	-	-	-
Mobilization of social capital	-	-	-	-	-	-	-	-	-	-
Entrepreneurial development of farmers/youths	01	09	01	10	02	04	06	11	05	16
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
<b>Agro-forestry</b>	-	-	-	-	-	-	-	-	-	-
Production technologies	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Farming Systems	02	41	06	47	07	02	09	48	08	56
Others (Pl. specify)										
Transformative Agriculture	01	21	-	21	07	-	07	28	-	28
<b>TOTAL</b>	<b>13</b>	<b>482</b>	<b>38</b>	<b>520</b>	<b>55</b>	<b>12</b>	<b>67</b>	<b>537</b>	<b>50</b>	<b>587</b>









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)	-	-	-	-	-	-	-	-	-	-
<b>Production of Inputs at site</b>	-	-	-	-	-	-	-	-	-	-
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)	-	-	-	-	-	-	-	-	-	-
<b>CapacityBuilding and Group Dynamics</b>	-	-	-	-	-	-	-	-	-	-
Leadership development	-	-	-	-	-	-	-	-	-	-
Group dynamics	-	-	-	-	-	-	-	-	-	-
Formation and Management of SHGs	-	-	-	-	-	-	-	-	-	-
Mobilization of social capital	-	-	-	-	-	-	-	-	-	-
Entrepreneurial development of farmers/youths	-	-	-	-	-	-	-	-	-	-
Others (pl.specify)	-	-	-	-	-	-	-	-	-	-
<b>Agro-forestry</b>	-	-	-	-	-	-	-	-	-	-
Production technologies	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Farming Systems	-	-	-	-	-	-	-	-	-	-
Others (Pl. specify)	-	-	-	-	-	-	-	-	-	-
PoshanAbhiyana	01	04	29	33	01	01	02	05	30	35
<b>TOTAL</b>	<b>14</b>	<b>282</b>	<b>160</b>	<b>442</b>	<b>26</b>	<b>12</b>	<b>38</b>	<b>308</b>	<b>172</b>	<b>480</b>



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)	<b>03</b>	<b>0</b>	<b>81</b>	<b>81</b>	<b>0</b>	<b>09</b>	<b>09</b>	<b>0</b>	<b>90</b>	<b>90</b>
Krishi Sakhi										
<b>TOTAL</b>	<b>03</b>	<b>0</b>	<b>81</b>	<b>81</b>	<b>0</b>	<b>09</b>	<b>09</b>	<b>0</b>	<b>90</b>	<b>90</b>



**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	-	-	-	-	-	-	-	-	-	-
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) Technical workshop for Agriculture Officers	01	19	04	23	03	02	05	22	06	28
<b>Total</b>	<b>01</b>	<b>19</b>	<b>04</b>	<b>23</b>	<b>03</b>	<b>02</b>	<b>05</b>	<b>22</b>	<b>06</b>	<b>28</b>



## 7.G. Sponsored training programmes conducted -Nil

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	
<b>1</b>	<b>Crop production and management</b>	-	-	-	-	-	-	-	-	-	-	-
1.a.	Increasing production and productivity of crops	-	-	-	-	-	-	-	-	-	-	-
1.b.	Commercial production of vegetables	-	-	-	-	-	-	-	-	-	-	-
<b>2</b>	<b>Production and value addition</b>	-	-	-	-	-	-	-	-	-	-	-
2.a.	Fruit Plants	-	-	-	-	-	-	-	-	-	-	-
2.b.	Ornamental plants	-	-	-	-	-	-	-	-	-	-	-
2.c.	Spices crops	-	-	-	-	-	-	-	-	-	-	-
<b>3.</b>	<b>Soil health and fertility management</b>	-	-	-	-	-	-	-	-	-	-	-
<b>4</b>	<b>Production of Inputs at site</b>	-	-	-	-	-	-	-	-	-	-	-
<b>5</b>	<b>Methods of protective cultivation</b>	-	-	-	-	-	-	-	-	-	-	-
<b>6</b>	<b>Others (pl.specify)</b>	-	-	-	-	-	-	-	-	-	-	-
<b>7</b>	<b>Post harvest technology and value addition</b>	-	-	-	-	-	-	-	-	-	-	-
7.a.	Processing and value addition	-	-	-	-	-	-	-	-	-	-	-
7.b.	Others (pl.specify)	-	-	-	-	-	-	-	-	-	-	-
<b>8</b>	<b>Farm machinery</b>	-	-	-	-	-	-	-	-	-	-	-
8.a.	Farm machinery, tools and implements	-	-	-	-	-	-	-	-	-	-	-
8.b.	Others (pl.specify)	-	-	-	-	-	-	-	-	-	-	-
<b>9.</b>	<b>Livestock and fisheries</b>	-	-	-	-	-	-	-	-	-	-	-
<b>10</b>	<b>Livestock production and management</b>	-	-	-	-	-	-	-	-	-	-	-
10.a.	Animal Nutrition Management	-	-	-	-	-	-	-	-	-	-	-
10.b.	Animal Disease Management	-	-	-	-	-	-	-	-	-	-	-
10.c.	Fisheries Nutrition	-	-	-	-	-	-	-	-	-	-	-
10.d.	Fisheries Management	-	-	-	-	-	-	-	-	-	-	-
10.e.	Others (pl.specify)	-	-	-	-	-	-	-	-	-	-	-
<b>11.</b>	<b>Home Science</b>	-	-	-	-	-	-	-	-	-	-	-
11.a.	Household nutritional security	-	-	-	-	-	-	-	-	-	-	-
11.b.	Economic empowerment of women	-	-	-	-	-	-	-	-	-	-	-
11.c.	Drudgery reduction of women	-	-	-	-	-	-	-	-	-	-	-
11.d.	Others (pl.specify)	-	-	-	-	-	-	-	-	-	-	-
<b>12</b>	<b>Agricultural Extension</b>	-	-	-	-	-	-	-	-	-	-	-
12.a.	CapacityBuilding and Group Dynamics	-	-	-	-	-	-	-	-	-	-	-
12.b.	Others (pl.specify)	-	-	-	-	-	-	-	-	-	-	-
	<b>Total</b>	-	-	-	-	-	-	-	-	-	-	-

## Details of sponsoring agencies involved

- 1.
- 2.
- 3.



**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	2745	-	-	-	-	-	-	-	-	-
Farmers visit to KVKs	-	551	12	563	21	6	27	-	-	-
Lectures delivered as resource persons	103	931	25	956	37	5	42	16	4	20
Diagnostic Visits	4	-	-	-	-	-	-	16	1	17
Field Days	9	597	4	601	31	3	34	11	4	15
Group discussions/ meetings	8	143	14	157	8	6	14	12	1	13
Kisan Gosthies	-	-	-	-	-	-	-	-	-	-
Film Shows	3	49	4	53	12	2	14	-	-	-
Self help group meetings	2	-	86	86	-	7	7	-	6	6
Mahila mandals meetings	-	-	-	-	-	-	-	-	-	-
Kisan Melas	1	247	6	253	18	4	22	5	-	5
Exhibitions	4	-	-	-	-	-	-	-	-	-
Scientist visit to farmers fields	148	-	-	-	-	-	-	-	-	-
Soil health camps	04	-	-	-	-	-	-	-	-	-
Animal health camps	06	-	-	-	-	-	-	-	-	-
Plant health camps	-	-	-	-	-	-	-	-	-	-
Farm Science Club meetings	-	-	-	-	-	-	-	-	-	-
Ex-trainees Sammelans	-	-	-	-	-	-	-	-	-	-
Farmers seminars	-	-	-	-	-	-	-	-	-	-
Workshops	-	-	-	-	-	-	-	-	-	-
Method Demonstrations	12	-	-	-	-	-	-	-	-	-
Celebration of important days	04	-	-	-	-	-	-	-	-	-
Special day celebrations	08	-	-	-	-	-	-	-	-	-
Exposure visits	04	-	-	-	-	-	-	-	-	-
Others, Please specify	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>3065</b>	<b>2518</b>	<b>151</b>	<b>2669</b>	<b>127</b>	<b>33</b>	<b>160</b>	<b>60</b>	<b>16</b>	<b>76</b>

**8.2 Other extension activities like print and electronic media etc.**

Sl. No.	Type of media/activity	Number of activities/Number
1	Popular articles	02
2	Newspaper coverage	147
3	Extension Literature	01
4	Radio Talks	05
5	TV Talks	04
6	CD/DVD/Video clips	05
7	Animal health camps (no. of animal treated)	06
8	Others, please specify (KVK Times)	01
	<b>Total</b>	<b>171</b>

**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)	Paddy (Summer 2021-22)	Tungabhadra Sona RNR-15048 GNV-1109	452.65	10,95,413	938
	Paddy (Kharif 2022-23)	GGV-05-01 RNR-15048 BPT-5024	708.35	Under processing	
Oilseeds	-	-	-	-	
Commercial crops	-	-	-	-	
Vegetables	-	-	-	-	
Flower crops	-	-	-	-	
Spices	-	-	-	-	
Fodder crop seeds	-	-	-	-	
Fiber crops	-	-	-	-	
Forest Species	-	-	-	-	
Others (specify)	-	-	-	-	
<b>Total</b>			<b>1161</b>	<b>10,95,413</b>	<b>938</b>

**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
-	-	-	-	-	-
<b>Total</b>					

## 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	Drumstick	Bhagya	02	20	01
Fruits	Mango	Baneshan	15	750	05
	Acid Lime	Kagzi	206	3090	04
	Duranta Badam Jasmine Cherry Tubernamentam Neerium Hybiscus Rose Marigold Tuberose Tree Jasmine	-	907	11370	43
Ornamental plants					
Medicinal and Aromatic	-	-	-	-	-
Plantation	-	-	-	-	-
Spices	-	-	-	-	-
Tuber	-	-	-	-	-
Fodder crop saplings	-	-	-	-	-
Forest Species	Neem, Ashoka, Silver Oak	-	5	50	01
Others(specify)	-	-	-	-	-
<b>Total</b>			<b>1135</b>	<b>15,280</b>	<b>54</b>

## 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
-	-	-	-	-	-
-					
<b>Total</b>					

## 9.C. Production of Bio-Products

Bio Products	Name of the bio-product	Quantity (q)	Value (Rs.)	Number offarmers to whom provided
Bio Fertilizers	-	-	-	-
Bio-pesticide	-	-	-	-
Bio-fungicide	-	-	-	-
Bio Agents	-	-	-	-
Others (specify)	Vermicompost	166.95	1,00,000	21
	Vermis	0.785	39,000	08
	Vegetable special	6.52	1,90,000	39
<b>Total</b>		<b>174.255</b>	<b>3,29,000</b>	<b>68</b>

## 9.D. Production of livestock

Particulars of Livestock	Name of the breed	Number	Value (Rs.)	Number of farmers to whom provided
<b>Dairy animals</b>	-	-	-	-
Cows	-	-	-	-
Buffaloes	-	-	-	-
Calves	-	-	-	-
Others (Pl. specify)	-	-	-	-
<b>Poultry</b>	-	-	-	-
Broilers	-	-	-	-
Layers	-	-	-	-
Duals (broiler and layer)	-	-	-	-
Japanese Quail	-	-	-	-
Turkey	-	-	-	-
Emu	-	-	-	-
Ducks	-	-	-	-
Others (Pl. specify)	-	-	-	-
<b>Piggery</b>	-	-	-	-
Piglet	-	-	-	-
Others (Pl. specify)	-	-	-	-
<b>Fisheries</b>	-	-	-	-
Fingerlings	-	-	-	-
Others (Milk)	-	1797 lits	71,000	-
<b>Total</b>		<b>1797</b>	<b>71,000</b>	

**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	4
Technical reports	0
Technical bulletins	0
Popular articles - English	1
Popular articles – Local language	1
Extension literature	01
Others if any	-

(iii) Details of Literature developed/published

Please provide the details of above publication in the following format:

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

Example:

**Raghavendra Yaligar, P.R.** Badribi Prasad, HanumanthappaShrihari, Mansoor, R. Jyothi and G. Narappa, 2022, Evaluation of Bioefficacy of newer molecule GPI 1316 (Novaluron 9.45%+Lambda-cyhalothrin 1.9 % ZC)against tamoto fruit borer and its phytotoxicity, *Journal of Experimental Zoology India. Volume 25(1)*

**Raghavendra Yaligar\*, P.R. Badari Prasad, HanumanthappaShrihari, Mansoor, Sujay Hurali, R. Jyothi and Suhasini**, 2022, Evaluation of Bio-Efficacy and Phytotoxicity of Flubendiamide 90 + Deltamethrin 60-150 SC (15% W/V) against Pest Complex in Cucumber, *Biological Forum – An International Journal 14(1): 883-889(2022)*

Badari Prasad P.R., **Raghavendra Yaligar**, Sujay Hurali , Mansoor , Suhasini and HanumanthappaShrihari, 2022, Evaluation of Bioefficacy of Metaldehyde 2.5% Dry Pellet against Snails in Cabbage and its Phytotoxicity, *Biological Forum – An International Journal 14(1): 936-940(2022)*.

Ullikashi K. Y., Kulkarni U. N., Matt K. K., Pushpa Bharathi and Sankangoudar S. K., 2022, Assessment of drinking water quality in mining affected Hospet and Sandur Talukas of Ballari district, *The Pharma. Innov. J*, 2022, *SP-11(7):2043-2046*.

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

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

Popular articles – English

Kavitha.Y.Ullikashi, Miracle food dragon fruit, November-2022, Times of agriculture, Pg No:85

Popular articles – Local language

Kavita Y Ullikashi, Jyothi R. and Raghavendra Yaligar, Aparopada Siridhaanya – Haraka, December-2022, Krishi Kamadhenu, Pg No:26-27

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

Raghavendra Yaligaret *al.*, 2022, KVK Times. *Published by KVK, Koppal, P No. 1-62*.

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

S. No.	Type of media	Title	Details
1	CD / DVD	-	-
2	Mobile Apps	-	-
3	Social media groups with KVK as Admin	KVK GANGAVATHI farmers	-
4	Facebook account name	ICAR-Krishi Vigyan Kendra, Gangavathi-Koppal	<a href="http://www.facebook.com/kvkgangavathi">www.facebook.com/kvkgangavathi</a>
5	Instagram account name		
6	Others if any Youtube channel	ICAR-Krishi Vigyan Kendra, Gangavathi-Koppal	<a href="http://www.youtube.com/channel/UCJ0s0ZN25Kz3VuKO5Sec9UA">www.youtube.com/channel/UCJ0s0ZN25Kz3VuKO5Sec9UA</a>

**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).**

**Title :** Successful progressive farmer Veeranagouda Kulkarni, IFS farmer

Integrated farming system is always considered as very promising and sustainable approach for measuring over all productivity and profitability through integrating with agriculture, horticulture, forestry, livestock and utilization of natural resources including other enterprises also. This system of farmer is committed to maintain and preserve the natural resources base of soil, water and atmosphere ensuring future generation the capacity to feed them with advocate supply of safe and whole some food.

This is the story of an enthusiastic farmer named Sri. Veeranagouda Kulkarni, one of the best IFS farmer living in Malkanmardi village of Gangavathi taluk of Koppal district aged 60 years with the education of PUC Sri. Veeranagouda Kulkarni is doing integrated farming since from past 40 years. He gained handful knowledge about integrated farming system with experience of 40 years of farming and he also groomed himself with natural resources management.

In his farming system he adopted horticulture crops such as banana, areca nut, guava, lemon and custard apple cultivation and also growing of forest spices like sandal, red sandal and silver oak. He engaged himself in animal husbandary with rearing cows and buffalows not only to achieve self sufficiency in milk obtaining but also for the benefit of organic manure. He also thus apiculture as a part of productivity increase through natural resources management.

Sri. Veeranagouda Kulkarni utilized the farm waste to produce vermicompost. He also adopted organic farming technologies suggested by the UAS, Dharwad and Raichur and there by achieve sustainable production along with the improved soil fertility. He gained income approximately 9 to 10 lakhs per annum from IFS.

He achieved self-sufficient in terms of electrical supply by installing solar pumpsets for irrigation which promised him to supply 24 hours water in the field.

Many adjoining village farmers also influenced and adopted his technologies. Now he considered not only good IFS farmers but also one of best resource person for young farmers of Koppal district. He has also given radio and TV talks on IFS and popularized the technologies useful for the farming community. He also bagged “ShreshtaKrishika Award” from Taluka Krishi Pandit Award for the year 2019-20. He also contact with KVK, Koppal for more than 15 years and gaining more knowledge about the technologies of agriculture and allied sectors.



**View of forest crop (Sandalwood)**



**View of bee keeping**



**View of areca nut farming**



**View of organic banana field**

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

**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) : NIL**

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK	Scientific Rationale
-	-	-	-	-

**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

Sl. No.	Name of the Farmer/Scientist	Award/Year	Institution	Major Enterprises/Subject	Farminnovations
1	Smt. Shakamma Kalmangi, Agoli, Tq: Gangavathi, Dist: Koppal	Best Farm Women 2022-23	UAS, Raichur	Integrated farming	-
2	Sri. Veeranagouda Kulkarni, Malakanamaradi, Tq: Gangavathi Dist: Koppal	Best farmer 2022-23	UAS, Raichur	IFS	Solar pumpset, Organic Banana and lime cultivation
3	Sri. Sudesh Pattanashetti, Irkalgadha, Tq: Koppal Dist: Koppal	Best farmer 2022-23	UAS, Raichur	Vegetable seed production	-
4	Dr. Raghavendra Yaligar, Senior Scientist and Head, KVK, Gangavathi	Outstanding Achievement Award 2022-23	Society for Agriculture Innovation and Development, Ranchi	Outstanding Achievement in the field of Agriculture Entomology	-
5	Dr. Raghavendra Yaligar, Senior Scientist and Head, KVK, Gangavathi	Extension Excellence Award 2022-23	Gochar Educational and Welfare Society, Saharanpur (UP)	Outstanding Achievement in the field of Agriculture Entomology	-
6	Smt. J. Radha, Scientist (Seed Science and Technology), KVK, Gangavathi	Women Scientist Award 2022	Birsa Agriculture University, Kanke, Ranchi, Jharkhand	Agriculture and Allied Sciences	-
7	Smt. J. Radha, Scientist (Seed Science and Technology), KVK, Gangavathi	Adarsha Vidya Saraswathi Rashtriya Puraskar-2022	Global Management Council, Glacier Journal Research foundation	Agriculture and Allied Sciences	
6	Mr. Narappa G. Technical Officer (FM), KVK, GVT	Outstanding Achievement award 2022	Agriculture & Environmental Technology Development Society (AETDS)	Outstanding contribution and recognition in the field of Agronomy (Irrigation Agronomy)	-

**PART XI – SOIL AND WATER TEST**

### 11.1 Soil and Water Testing Laboratory

#### A. Status of establishment of Lab :

1. Year of establishment : 2013
2. List of equipments purchased with amount : 164000

Sl. No	Name of the Equipment	Qty.	Cost	Status
1	Details Crew Auger head sign obtaining soil suppres complete with lemmelie lo + peces& Handle	1	3835	Good
2	Details post hold Augush Z for obtaining undreshedule soil samples with one m long pipe & thrithandel	1	3835	Good
3	Details soil Agustube 1nd decton long with 50 cm verticle soil completewith hand	1	6300	Good
4	Alminiummoster cum roundshape with lid size 75mm dicr SD MMH	1	13970	Good
5	Aluminium moisture cancrowd shape with lid size 75mm dicrdiax 50mm ht	1	7050	Good
6	SE mg Rotary shaker-2 model 22/99 450x450mm, 252 mlx16No	1	41800	Good
7	Deioniser, CA model consists of inbuiHprefilter, contion& anion resinolum conductivesmetere all housed in trolly mounted method stand, deionized water w how the conductivity of less than 10m/cm	1	22770	Good
8	Wooden stool			
9	Specificatives Single solid door with lods&hore four wheels	1	94000	Good
10	Soiltlydrometere	1	19750	Good
11	Double ring inifitrometer With point gaege double ring infiltrmetere made from mild steel shed rolled	1	31450	Good
12	Details high speed stress	1	18800	Good
<b>Total</b>		<b>12</b>	<b>164000</b>	

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

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	10,386	10,386	5,641	20,36,000
Water Samples	7,160	7,160	3,719	6,95,600
Plant samples	-	-	-	-
Manure samples	-	-	-	-
Others (specify)	-	-	-	-
<b>Total</b>	<b>17,546</b>	<b>17,546</b>	<b>9,360</b>	<b>27,31,600</b>

#### C. Details of samples analyzed during 2022:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	532	732	501	1,06,400
Water Samples	487			48,700
Plant samples				
Manure samples				
Others (specify)				
<b>Total</b>	<b>1,019</b>	<b>732</b>	<b>501</b>	<b>1,55,100</b>

### 11.2 Mobile Soil Testing Kit : NIL

#### A. Date of purchase and current status

Mobile Kits	Date of purchase	Current status
1.-	-	-
2.-	-	-

#### B. Details of soil samples analyzed during 2022 and since establishment with Mobile Soil Testing Kit: NIL

	During 2021	During 2022	Cumulative progress (Total)
Samples analyzed (No.)	-	-	-
Farmers benefited (No.)	-	-	-
Villages covered (No.)	-	-	-

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

Particulars	Date (s)	Villages (No.)	Farmers (No.)	Samples analyzed (No.)	Soil health cards issued (No.)
SWTL	-	-	-	-	-
Mobile Soil Testin Kit	-	-	-	-	-

### 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	97	25	-	2	6	3

## PART XII. IMPACT

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Demonstration of Direct seeded rice	660	60	Rs.43000/ha.	Rs. 60000/ha.
Integrated Farming System	90	40	Rs. 100000/farm family/year	Rs. 150000/farm family/year
Honey bee cultivation	1800	15	Rs. 0.0/ Unit	Rs. 1200000/ Unit
Establishment of Scientific Dairy farms	320	50	Rs.11000 /animal / lactation	Rs. 20000/animal / lactation
Vegetable special micronutrient application in vegetable crops	450	69	Rs. 39,900/ ha.	Rs. 61500/ha.
Demonstration of High yielding Bengalgram variety (JG-11)	286	73	Rs. 29154/ ha.	Rs. 35174 / ha.
Bio-control agent ( <i>Trichoderma</i> , <i>psuedomonous</i> , <i>Beauria</i> , <i>paceilomyces</i> )	500	20	Rs. 0.0/ Unit	Rs. 5000/ acre

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)****Technology :**

- ICM in Direct Seeded Rice (DSR) method
- Technology: Direct seeding using paddy tractor drawn seed drill, Weedicides and Cycle Weeder for weed management, ICM practices
- Major features: High cost of cultivation, scarcity of labor, water for irrigation, delayed planting, non awareness about use of seed drill
- Relevance to district: Paddy area in Koppal dist is 39000 ha.

**Extension activities carried out for spread of technology**

Year	Taluk	Area (Acre)	No. of Demos	Training(No. farmers )
2016-17	J.Kalgudi	10	10	65
2017-18	Yeradona	10	10	65
2018-19	Chellur	10	10	150
2019-20	Marali	10	10	80
2020-21	Thimmapur	10	10	60
2022-23	Basapattana	10	10	120

**Other activities for spread of technology:**

- Short messages , Field visits , Leaf lets, folders, leading newspaper coverage,

- Tie up with Agril. Dept in spread of technology
- Technical bulletin was published and distributed to farmers

#### **Spread of technology:**

This is a new technology to the farmers of Koppal Dist. and farmers are showing interest to adopt the technology. From 2015-16 to 2019-20 , morethan 6500 ha area is under DSR Paddy.

#### **Outcome :**

Adoption of ICM in DSR method using tractor drawn seed drill increases the yield 8-9% than conventional practice by saving cost of cultivation around 7000 to 9000 per acre in demonstration field



#### **Other technologies spread during 2022-23**

- Horizontal spread of Machine Transplanting in Paddy about 150 acres
- Under Raita Bandhu& capacity building Programme more than 300 vermicompost unit established
- Salt tolerant Paddy var. GNV-1109 introduced around 3000 acres in TBP command area.
- Dragon fruit crop has been introduced for dryland horticulture (about 10 farmers)
- 15 farmers adopted Bee Keeping under IFS

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Demonstration of Direct seeded rice	650	60	Rs.43000/ha.	Rs. 60000/ha.
Demonstration of High yielding Bengalgram variety (JG-11)	240	68	Rs.29154/ha.	Rs. 35174/ha.
Vegetable special micronutrient application in vegetable crops	300	60	Rs. 39900/ha.	Rs. 61500/ha.

### PART XIII - LINKAGES

#### 13A. Functional linkage with different organizations

Name of organization	Nature of linkage
<ul style="list-style-type: none"> <li>• Karnataka State Dept. of Agriculture (KSDA)</li> <li>• Karnataka State Dept. of Horticulture (KSDH)</li> <li>Dept. of AH &amp; VS, Dept of Women and Child Welfare, ARS, NABARD, NGO (BAIF, Sarvodaya)</li> </ul>	Trainings, Demonstration, field days, Joint Diagnostic survey, Awareness campaigns and meetings
<ul style="list-style-type: none"> <li>• Dept. of Information and Broadcasting (AIR, DD-1) and Daily Newspapers like Prajavani, Vijaya Karnataka, SamyuktaKarnataka, Deccan Herald, The Hindu and Local Newspapers</li> </ul>	Live phone-in programmes, Radio tips, Press coverage, publicity etc.

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

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

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)

#### 13C. Details of linkage with ATMA

##### Coordination activities between KVK and ATMA

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	Meetings	SREP			
02	Research projects	-			
03	Training programmes	Training on ICM, IPM, IDM and value addition to millets	03	04	

<b>04</b>	<b>Demonstrations</b>	Method demonstration, seed treatment, soil sampling	<b>04</b>	-	
<b>05</b>	<b>Extension Programmes</b>				
	Kisan Mela				
	Technology Week				
	Exposure visit				
	Exhibition				
	Soil health camps		-	-	
	Animal Health Campaigns				
	Others (Pl. specify)				-
<b>06</b>	<b>Publications</b>				
	Video Films				
	Books				
	Extension Literature				
	Pamphlets				
	Others (Pl. specify)				
<b>07</b>	<b>Other Activities</b> (Pl. specify)				
	Watershed approach				
	Integrated Farm Development				
	Agripreneurs development				

**13D. Give details of programmes implemented under National Horticultural Mission: NIL**

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

**13E. Nature of linkage with National Fisheries Development Board : Nil**

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

**13F. Details of linkage with RKVY**

Sl. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
1	Empowerment of small and marginal farmers in integrated farming system through strengthening of missing link in six district of kalyana Karnataka region	Survey, trainings, Supply of missing components for IFS farming to the selected beneficiary farmers.	45.50 lakhs	32 lakh	Supplied Horticulture planting material, Honey bee box, Silage bag, Vermicompost bag, Cycle weeder, sprayer, serrated sickle and fodder seeds to selected 50 farmers

### 13G. Kisan Mobile Advisory Services: NIL

Month	No of Advisories	Message type (Text/Voice)	SMS/voice calls sent (No.)						Total SMS/Voice calls sent (No.)	Farmers benefitted (No.)
			Crop	Livestock	Weather	Marketing	Awareness	Other enterprises		
January	-	-	-	-	-	-	-	-	-	
February	-	-	-	-	-	-	-	-	-	
March	-	-	-	-	-	-	-	-	-	
April	-	-	-	-	-	-	-	-	-	
May	-	-	-	-	-	-	-	-	-	
June	-	-	-	-	-	-	-	-	-	
July	-	-	-	-	-	-	-	-	-	
August	-	-	-	-	-	-	-	-	-	
September	-	-	-	-	-	-	-	-	-	
October	-	-	-	-	-	-	-	-	-	
November	-	-	-	-	-	-	-	-	-	
December	-	-	-	-	-	-	-	-	-	
<b>Total</b>	-	-	-	-	-	-	-	-	-	

### PART XIV- PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Vermicompost Units	2011	0.1	-	Commercial	32.00	6	19200	The mentioned quantity of vermicompost and worm are supplied to 18 farmers
	Earth worms	2011	0.1	-	Commercial	0.47	500	23500	
2	Horticulture Nursery	2013	0.2	-	Commercial	<b>1048</b>	-	<b>33310</b>	The mentioned quantity of planting material was supplied to 32 farmers
3	Chaff Cutter Cum Grinder	2013	1No.	-	Demo	-	-	-	-
4	Nutrition Garden	2013	0.05	-	Demo	-	-	-	-
5	Vegetable Special	2014	01 Unit	-	Commercial	7.56	150	113400	The mentioned quantity of Vegetable Special was supplied to 70 farmers
6	Dairy	2015	01 Unit	Cow/ Buffalo	Commercial	1494 ltr	40	59769	-
7	Honey bee unit	2014	02 unit	-	Demo	-	-	-	-
8	Azolla Unit	2013	2 No.	-	Demo	-	-	-	-
9	Millet Processing Unit	2013	1 No.	-	Commercial	-	-	-	-
10	Hydroponics Unit	2022	1 No.	-	Demo	-	-	-	-
11	Poultry Unit	2022	1 No.	Local birds	Demo	-	-	-	-
12	Fodder bank	2022	1 No.	Hedge lucerne, Multicut sorghum, CoFS-31	Demo	-	-	-	-

**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									
Paddy	05.08.2022	19.12.2022	12.5	Tunghabhadra Sona, RNR-15048 GNV-11-09	General	452.65	8,75,000	10,95,413	
Paddy	15.01.2022	12.05.2022	12.25	GGV-05-01	Seed	19.55	8,57,500	Under processing	
Paddy	15.01.2022	12.05.2022		RNR-15048	Seed	241.65			

Paddy	15.01.2022	12.05.2022		BPT-5204	Seed	438.60			
Paddy	15.01.2022	12.05.2022		GNV-11-09	Seed	8.55			
Pulses									
Oilseeds									
Fibers									
Spices & Plantation crops									
Floriculture									
Fruits		-							
Vegetables									
Others (specify)									
Tamarind fruit	-	-	-	-	Tamarind fruit	100 kg	-	3000	

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

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

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

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

**14E. Utilization of hostel facilities**

Accommodation available (No. of beds)

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
January	41	02	-
February	-	-	-
March	-	-	-
April	-	-	-
May	-	-	-
June	43	03	-
July	44	05	-
August	93	10	-
September	-	-	-
October	-	-	-
November	-	-	-
December	09	01	-

#### 14F. Database management

S.No	Database target	Database created
1	Trainings, OFT/ FLD Demo. And Extension Activities	Trainings and Extension Activities

#### 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)**

Sl No.	Agro advisories			Farmers awareness programmes	
	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	14900	14900	25	874

**15.3 Fertilizer awareness programmeorganised:**

State	Name of KVK	Details of Activities/programmeOrganised	Number of Chief Guests	No. of Farmers attended program	Total participants
Karnataka	ICAR-KVK, Koppal	Awareness programme on efficient and balanced use of nano fertilizers	02	54	63

**15.4 Seed Hub: NIL**

Crops	Variety	Year of	Production	No of farmers	Quantity
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		<i>release</i>	<i>Target (q)</i>	<i>Area (ha.)</i>	<i>Actual Production (q)</i>	<i>Category (FS/CS)</i>	<i>benefited/Sold to no. of farmers</i>	<i>seed sold (q)</i>
-	-	-	-	-	-	-	-	-

#### 15.5 CFLD on Oilseeds:

Sl.No.	Crop	Varieties demonstrated and check	Allocated		Implemented	
			Area (ha)	Demos (No.)	Area (ha)	Demos (No.)
1	Groundnut	G-2-52	30	75	12.8	32
2	Sunflower	RFSH-1887	20	50	20	50
	<b>Total</b>		<b>50</b>	<b>125</b>	<b>32.8</b>	<b>82</b>

#### 15.6 CFLDs on Pulses:

Sl.No.	Crop	Varieties demonstrated and check	Allocated		Implemented	
			Area (ha)	Demos (No.)	Area (ha)	Demos (No.)
1	Pigeonpea	TS-3R	20	50	20	50
2	Chickpea	BGD-103	20	50	20	50
3	Blackgram	T-9	10	25	10	25
	<b>Total</b>		<b>50</b>	<b>125</b>	<b>50</b>	<b>125</b>

#### 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 Technolo giess)	Number of farmers involved			Partici pants in extensi on activiti es (No.)	Produ ction of seed (q)	Produ ction of Planti ng materi al (Num ber in lakh)	Produ ction of Livest ock strains (Num ber in lakh)	Produ ction of fingerl ings (Num ber in lakh)	Testi ng of Soil, water , plant, manu res sampl es (Num ber)
No. of Trainings/ Demos	No. of Far mers	No. of Trainings/ Demos	No. of Wo men Far mers	No. of Trainings/ Demos	No. of You ths	No. of Trainings/ Demos	No. of Ext. Per son		On - far m tri als	Front line demo s	Mob ile agro- advis ory to farm ers						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**15.10 SCSP: NIL**

Farmer Training		Women Farmer Training		Rural Youths		Extension Personnel		OFT (No of Technolo giess)	Number of farmers involved			Partici pants in extensi on activiti es (No.)	Produ ction of seed (q)	Produ ction of Planti ng materi al (Num ber in lakh)	Produ ction of Livest ock strains (Num ber in lakh)	Produ ction of fingerl ings (Num ber in lakh)	Testi ng of Soil, water , plant, manu res sampl es (Num ber)
No. of Trainings/ Demos	No. of Far mers	No. of Trainings/ Demos	No. of Wo men Far mers	No. of Trainings/ Demos	No. of You ths	No. of Trainings/ Demos	No. of Ext. Per son		On - far m tri als	Front line demo s	Mob ile agro- advis ory to farm ers						
-	-	-	-	-	-	-	-	-	-	--	-	-	-	-	-	-	-

**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
123	12	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

### 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	Koppal	Koppal	Chikkabomannal	50	33400	Sunflower Redgram, Greengram, Maize, Bengalgram Groundnut	FLD OFT Trainings Field day Field visit	10,000	43400
2	Koppal	Kushtagi	Muddalagundi	50	77250	Sunflower Redgram, Greengram, Maize, Bengalgram Groundnut	FLD OFT Trainings Field day Field visit	12000	89250
3	Koppal	Gangavathi	Chikkadankankal	50	110580	Paddy Onion Maize	FLD OFT Trainings Field day Field visit	15000	125580
4	Koppal	Yelburaga	Vataparvi	50	227800	Sunflower Redgram, Greengram, Maize, Bengalgram Groundnut Vegetables Seed production	FLD OFT Trainings Field day Field visit	25000	252800

### 16.1 Farmers feedback on performance of crop varieties/hybrids

Sl. No.	Crop varieties/hybrids assessed/ demonstrated	Farmer's feedback
1	Paddy Variety GNV-1801	Early harvesting (20-25 days), Suitable for Kharif and Summer Season
2.	Salrt tolerant Paddy Variety GNV-1109	suitable for saline soils, tolerant to Blast disease and suitable for making puffed rice
3.	Chilli Hybrid ArkaKyati	Yield of Red chilli is considerably good with reduced thrips population
4.	Nutrient fortified Ridgegaurd hybrid Arkaperasan	Higher yield with good market acceptability
5.	Bio-fortified pearl millet hybrid VPMH-14	Higher yield and Higher fodder production

### 16.2 Farmers feedback on performance of agronomic practices

Sl. No.	Agronomic practices	Farmer's feedback
1	Demonstration of organic paddy cultivation in transplanted rice	Less spray requirement and less cost of cultivation with good quality rice
2.	Demonstration of Direct Seeded Rice	Less labour requirement resulted in less cost of cultivation and water saving
3.	Demonstration of weed management in paddy	Efficient weed control and less cost of cultivation
4.	Demonstration of nano-nitrogen and nano zinc for enhancing the productivity and profitability in Paddy	Reduce 50% of nitrogen fertilizer application, Increased nitrogen use efficiency and easy availability
5.	Demonstration of site specific nutrient management in paddy	Higher yield, net return and benefit cost ratio due to balanced application of fertilizer
6.	Demonstration of drum seeder in wet land condition	Less labour requirement and cost saving due to no nursery preparation requirement
7.	Demonstration of nutri-farms for year round nutrition security among farm families	<ul style="list-style-type: none"> <li>• Year round availability of fresh and pesticide free vegetables.</li> <li>• Children's actively involved in kitchen garden activity.</li> <li>• Children's and teenage developed positive attitude towards healthy food choices</li> </ul>
8.	Demonstration of terrace garden for livelihood security	<ul style="list-style-type: none"> <li>• Pesticide free vegetable</li> <li>• Proper utilization of free time</li> </ul>

### 16.3 Farmers feedback on performance of pest and disease management in crops

Sl. No.	Pest and disease management in crops	Farmer's feedback
1.	Demonstration of BBF and IPDM in Groundnut crop for enhancing Yield	Higher yield, Less incidence of pest and disease
2.	Demonstration of novel microorganism ( <i>Penicillium pinophilum</i> ) for nutrient management in pomegranate fruit crop to reduce wilt incidence	Reduced flower drop, Healthy plants, Cost saving towards purchase of inorganic fertilizer (PNK fertilizer)

#### 16.4 Farmers feedback on performance of farm machinery technologies:

Sl. No.	Farm machinery technologies	Farmer's feedback
1	Demonstration of Super Grain Bags-For storage of food grains and seeds for enhancing shelf life	Use of super grain bags increased in the storage life by 6 months and decreased loss by 9 to 12 %

#### 16.5 Farmers feedback on performance of livestock and fisheries technologies:

Sl. No.	Livestock/fisheries technologies	Farmer's feedback
1	Demonstration of masti guard for prevention & control of sub clinical mastitis in cross bred dairy cows	<ul style="list-style-type: none"> <li>• Mastiguard is very effective mastitis control in high milk yielders</li> <li>• Farmers friendly technology</li> <li>• No expertise required- very simple method to find out subclinical mastitis and prevention</li> </ul>
2	Demonstration of 10 cent model fodder plot for dairy farming	<ul style="list-style-type: none"> <li>• Small dairy farmers (3-4 cows/Bufaloes) can grow and manage fodder throughout the year</li> <li>• Due to balanced fodder – Milk yield, SNF and fat% increases to optimal level</li> <li>• Cost of production is less</li> </ul>
3	Prevention & control of Milk fever in cross breed Cows	<ul style="list-style-type: none"> <li>• Feeding calcium in advance pregnancy and immediately after pregnancy can save life of cow</li> </ul>
4	Demonstration of red spectrum of light on reproductive performances in poultry layer under normal management practices`	<ul style="list-style-type: none"> <li>• Anticipated increase (0.317%) 16 eggs /day</li> <li>• Commercial poultry feed saved-1.125 tonnes</li> <li>• Electricity: More than 50% saved ( 13W-5W)=8W</li> </ul>

### 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	-	-	-	-	-	-	-
With KVK	-	-	-	-	-	-	-
PFMS	SBI	Gangavati	009752	Senior Scientist & Head	10809525754	583002227	SBIN0009752
ICAR RF	SBI	Gangavati	009752	Senior Scientist & Head	10809526032	583002227	SBIN0009752
KVK Imprest AC	SBI	Gangavati	009752	Senior Scientist & Head	38650317733	583002227	SBIN0009752

**17B. Utilization of KVK funds during the year 2022-23 (Rs. in lakh)**

Sl. No.	Particulars	DAC. No.	Sanctioned	Expenditure
<b>Salary of Teachers</b>				
1	Pay & Allowances	22	16377000	14317817
2	Traveling allowances	121	200000	147645
<b>CONTINGENCIES</b>				
3	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter	200	227000	177819
4	POL, repair of vehicles, tractor and equipment	301	215000	212180
5	Meals/refreshment for farmers/extension personnel @Rs. 150/person/day	580	145000	126240
6	Training material (need based materials and equipments for conducting the training)	570	50000	14580
7	Frontline demonstration	571	511000	508545
8	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	584	18000	18000
9	Integrated Farming System (IFS)	577	50000	26000
10	EDP(1 No)/Innovative Activities	587	97000	56021
11	Training of extension functionaries	581	15000	-
12	Extension Activities	579	50000	34788
13	Soil & Water Testing & Issue of Soil Health Cards	572	25000	24997
14	Nutrigardens- 30 new + 30 ongoing demos	340	25000	24450
15	Maintenance of building (Repair & renovation)	884	75000	34249
16	Farmers Field School	355	0	0
17	Library (Purchase of Journal, Periodicals, News Paper & Magazines)	467	10000	3348

<b>Grand Total (A+B+C)</b>			<b>18090000</b>	<b>15726679</b>
<b>B. NON-RECURRING CONTINGENCIES</b>				
18	Information Technology	701	300000	298839
19	SCSP Programme		263000	0
<b>Total (B)</b>			<b>563000</b>	
<b>Grand Total (A+B)</b>			<b>18653000</b>	<b>16025518</b>

**17C. Status of revolving fund (Rs. in lakh) for the last three years**

Year	Opening balance as on 1 <sup>st</sup> January	Income during the year	Expenditure during the year	Net balance in hand as on 31 <sup>st</sup> December of each year
January to December 2020	<b>8,16,666</b>	<b>52,61,044</b>	<b>39,00,306</b>	<b>21,77,404</b>
January to December 2021	<b>21,77,404</b>	<b>40,27,424</b>	<b>36,53,146</b>	<b>20,21,043</b>
January to December 2022	<b>20,21,043</b>	<b>48,10,443</b>	<b>36,47,029</b>	<b>31,13,720</b>

**18. Details of HRD activities attended by KVK staff**

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Jyothi R.	Scientist (Horticulture)	Short course on 'Arid fruit crops diversification, recent production technologies and value addition for sustainable livelihood and doubling farmers income '.	Department of Horticulture UAS,Raichur	03.01.2022 to 12.01.2022
Dr. Kavitha Ullikashi	Scientist (Home Science)			
Dr. Raghavendra Yaligar	Senior Scientist & Head	Natural Farming	ICAR-KVK, Gangavathi (Online Mode)	19th to 22nd April 2022
		Orientation cum training programme on Natural farming	Natural Farming Training Centre, Gurukul, Kurukshetra, Haryana	5-6.12.2022
Dr. Mahanthes M.T.	Scientist (Animal Science)	Statistical and socio economic methods and impact assessment refinement of technologies in agriculture	CPCRI-Kasargod	11.10.2022 to 12.10.2022

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