

## I N D E X

S.No.	Content	Page No.
	<b>ANNUAL PROGRESS REPORT 2022</b>	
1.	General Information About the KVK	1
2.	Details Of District	5
3.	Technical Achievements	12
4.	Literature Developed/Published	56
5.	Specific Training Need Analysis Tools/Methodology Followed	57
6.	Linkages	58
7.	Convergence with other Agencies and Departments	62
8.	Innovator Farmer's Meet	62
9.	Farmers Field School (FFS)	62
10.	Technical Feedback of The Farmers about the Technologies Demonstrated and Assessed	62
11.	Technology Week Celebration During 2022	63
12.	Interventions on Drought Mitigation	63
13.	Impact	64
14.	Kisan Mobile Advisory Services	64
15.	Performance of Infrastructure In KVK	65
16.	Financial Performance	68
17.	Details of HRD Activities Attended By KVK Staff During Year	69
18.	APR Summary	72
	Annexure I : Training Programmes	
	Annexure II : Success Story	
	Annexure III : Success Story	

**ICAR-ATARI, Pune**  
**DETAILS OF ANNUAL PROGRESS REPORT OF KVKs DURING 2022**  
(January 2022 to December 2022)

**1. GENERAL INFORMATION ABOUT THE KVK**

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

Address with PIN code	Telephone		E mail	Website address & No. of visitors (hits)
Krishi Vigyan Kendra, Yashwantrao Chavan Maharashtra Open University, Nashik - 422 222	Office (0253) 2231714, 2231715, 2230698	FAX (0253) 2231716, 2230698	<a href="mailto:kvknashik@rediffmail.com">kvknashik@rediffmail.com</a>	<a href="http://www.kvknashik.org">www.kvknashik.org</a> Hits:106274

**1.2. Name and address of host organization with phone, fax and e-mail (Not of KVK)**

Address	Telephone		E mail	Website address
	Office	FAX		
Yashwantrao Chavan Maharashtra Open University, Dnyangangotri, Nashik- 422 222	(0253) 2231714, 2231715	(0253) 2231716	info@ycmou.a c.in	<a href="http://ycmou.digitaluniversity.ac">http://ycmou.digitaluniversity.ac</a>

**1.3. Name of the Senior Scientist and Head with phone & mobile no.**

Name	Telephone / Contact		
	Office	Mobile	Email
Dr. Niteen J. Thoke	(0253) 2230698	94234793 36	niteenjay76@gmail.com

**1.4. Year of sanction& type of host organization:** 1 October, 1994 (Others- OEI)

### 1.5. Staff Position (as on December, 2022)

Sl. No.	Sanctioned post	Name of the incumbent	Mobile No.	Discipline	Current Pay Band (7 <sup>th</sup> Pay)	Current Grade Pay	Date of joining	If Temporary, pl. indicate the consolidated amount paid (Rs. /month)
1.	Senior Scientist and Head	Dr. Niteen J. Thoke	9423479336	Agril. Extension	131400- 217100	-	15.11.2022	Permanent
2.	Subject Matter Specialist	Mr. Rajaram Patil	9422283360	Agril. Engineering	78800-209200	-	01.03.1996	Permanent
3.	Subject Matter Specialist	Mr. Hemraj Rajput	9422773602	Horticulture	78800-209200	-	16.12.1998	Permanent
4.	Subject Matter Specialist	Dr. Prakash Kadam	9403774762	Agronomy	78800-209200	-	10.08.2006	Permanent
5.	Subject Matter Specialist	Mrs. Archana Deshmukh	9403774698	Home Science	78800-209200	-	05.06.2007	Permanent
6.	Subject Matter Specialist	Dr. Shyam B. Patil	9403774779	Veterinary Science	78800-209200	-	25.06.2007	Permanent
7.	SMS 6 (Mention subject)	-	-	-	-	-	-	Vacant
8.	Programme Assistant	Mr. Mangesh Vyavahare	9403774763	Agril. Chemistry	56100-177500	-	01.06.2007	Permanent
9.	Computer Programmer	Mr. Harshal Kale	9403696802	Computer	44900-142400	-	18.07.2014	Permanent
10.	Farm Manager	Mr. Sandip Bhagwat	9422707292	Horticulture	67700-208700	-	26.03.2003	Permanent
11.	Accountant/Superintendent	Nikhil M. Shinde	7020747829	Mechanical	35400-112400	-	17.11.2022	Permanent
12.	Stenographer	Mrs. Vanita Rode	9403774656	-	38600-122800	-	01.07.1995	Permanent
13.	Driver 1	Mr. Satish Sakhare	9403774657	-	44900-142400	-	01.10.1998	Permanent
14.	Driver 2	Mr. Dattu Madhe	9403774658	-	21700-69100	-	11.08.1999	Permanent
15.	Supporting staff 1	Mr. Rakesh Nikam	9403774659	-	19900-63200	-	01.07.1995	Permanent
16.	Supporting staff 2	Mr. Vinod Bhadke	9403774660	-	19900-63200	-	01.07.1995	Permanent

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

S. No.	Item	Area (ha)
1.	Under Buildings	00.80
2.	Under Demonstration Units	03.20
3.	Under Crops	0.60
4.	Horticulture	20.00
5.	Pond	0.40
6.	Others if any	-

**1.7. Infrastructural Development:**

**A. Buildings**

S. No.	Name of building	Source of funding	Stage Complete			Incomplete		
			Completion Year	Plinth area (Sq.m)	Expenditure (Rs.)	Starting year	Plinth area (Sq.m)	Status of construction
1	Administrative Building	ICAR	July 1998	694	2650758 1600575	-	-	-
2	Farmers Hostel	ICAR		305		-	-	-
3	Staff Quarters	-		-	-	-	-	-
4	Fencing	ICAR		-	-	-	-	-
5	Rain Water harvesting system	YCMOU	2001 2005	02Ha	1500000	-	-	-
6	Threshing floor	YCMOU	1998	200	35000	-	-	-
7	Farm godown	YCMOU	2003	93	160000	-	-	-
8	Soil and water testing lab	ICAR & YCMOU	1998	45				
9	Mini soil testing Kit	ICAR	2016	-	1,18,095			
1	Sell Contour	-	-	-	-	-	-	-
1	Demo unit	ICAR	June 1996	800	100000	-	-	-
1	ICT lab	-	-	-	-			
1	Solar Panel		June 2015	100				
1	counter seal							
1	Other pl mention							

**B. Vehicles**

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Ferguson Tractor No. 3455	2009	600000	4369.0	Good condition
Motor cycle (Suzuki Samurai)	1995	35,850	Not in use	Not in use
Motor cycle(Suzuki RX-100)	1995	35,536	Not in use	Not in use
Mahindra Jeep : Bolero	2021	795290	29904	Good condition

**C. Equipments& AV aids**

Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
Refrigerator (2)	1997,2005	27,000	Good
Student Microscope (1) YCMOU	1996	10,000	Good
Simple Microscopes (4) YCMOU	1997	2,000	Good
Autoclave (1) YCMOU	1998	15,000	Good
Mixture (1)	1996	1,200	Good
Public address system (1)	1996	17,000	Good
Hand refracto meter (1)	1997	1,000	Good
Water cooler (5) YCMOU	1998	88,019	Good
Fax Machine (1)	1998	18,900	Good
Gas cylinder (4)	1996	3,000	Good
Laminar flow cabinet (1) YCMOU	2000	72,005	Good
Micro PH meter (digital) (1)	2005	13,650	Good
Conductivity Meter (Digital) (1)	2005	15,942	Good
Centrifuge Machine (1) YCMOU	2000	15,000	Good
Stereozoom Trinocular Microscope	2009	1,30,185	Good
Trinocular Microscope	2009	1,50,643	Good
Sanco biological Fermentor with cooling coil & sanco chiller with compressor	2009	5,20,000	Good
Autoclave vertical (Double Jacket)	2009	1,30,555	Good
Digital colony counter (YCMOU)	2018	5,000	Good
Hot plate (2) YCMOU	2000	25,000	Good
Mechanical Flask Shaker (2) ICAR	2000,2005		Good
Top pan balance (Digital) (3) YCMOU	2000,2005,2006	1,25,000	Good
Ribbon Blender	2013	58500	Good
Homogenizer	2013	39375	Good
Air conditioner	2013	28300	Good
Sealing machine	2013	23500	Good
Batch coder	2013	3150	Good
BOD incubator	2013	61875	Good
Chemical balance	2013	20812	Good
Pusa Soil Kit -2 Nos	2016, 2017	1,18,095	Good
Mrida Parikshak Soil testing kit	2017	90,300	Good
Preeti Mixer (YCMOU)	2018	7,000	Good
Glass Double Distillation unit (YCMOU)	2018	48,000	Good
Atomic Absorption Spectrophotometer	2020	17,50,000	Good
Laminar Air Flow (YCMOU)	2021	1,24,915	Good
Rotary Shaking Machine (YCMOU)	2021	1,41,600	Good
Spectrophotometer (YCMOU)	2021	61266	Good
VC Cooler (Fridge) (YCMOU)	2021	40880	Good

**1.8. Details of SAC meeting conducted in the year:**

Date	Name and Designation of Participants	Salient Recommendations	Action taken
		NIL	

## 2. DETAILS OF DISTRICT / JURISDICTION AREA OF KVK

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

S. No	Farming system/enterprise	Names of talukas covered
1	Agriculture + Horticulture	Nashik, Niphad, Dindori, Tryambakeshwar, Peth, Igatpuri, Sinnar, Chandwad
2	Horticulture + High tech Floriculture	Nashik, Niphad, Dindori
3	Agriculture + Horticulture + Dairy	Nashik, Niphad, Dindori, Sinnar, Chandwad
4	Agriculture + Poultry	Tryambakeshwar, Peth, Igatpuri, Chandawad
5	Agriculture + Dairy	Niphad, Dindori

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

#### a. Soil type

S. No.	Agro-climatic Zone (Planning Commission)	Characteristics
	Ghat Zone	Annual rainfall 3000 to 5000 mm., Laterite and non laterite soils with forest cover, Undulating topography
1	Transitional Zone I	Annual rainfall 1250 to 3000 mm., Reddish brown soils of hilly slopes
2	Transitional Zone II	Annual rainfall 700 to 1240 mm., medium black soils, plain zone.
3	Scarcity Zone	Annual rainfall 500to 700 mm., coarse shallow soils, calcareous soils.
4	Ghat Zone	Annual rainfall 3000 to 5000 mm., Lateritic and non lateritic soils with forest cover, Undulating topography

#### b. Topography

S. No.	Agro ecological situation	Characteristics
1	High rainfall, sloppy land, light soils	Hilly tract, Forest cover, lateritic soils
2	High rainfall, Medium soils	Undulating land, paddy, Niger, finger millet are main crops
3	Assured rainfall, Medium soils	Plain zone, Wheat, Soybean is the main crops.
4	Assured irrigation, Medium to heavy soils	Black soils, Grape and vegetable belt
5	Low rainfall, Scarcity area, Light to medium soils	Black soils, Pomegranate, maize are main crops
6	Low rainfall, un-assured rainfall, medium to heavy soils	Deep black soils, Bajra, cotton are main crops

### 2.3. Soil Types

S. N o	Soil type	Characteristics	Area (ha)
1	Laterite & non laterite soils	Well drain, deficient in lime, $P^H$ 5-6, Low in nutrient, high leaching	70400
2	Reddish brown soils	Porous soils, absence in N, P, K, lime and organic matter, $P^H$ 7-7.5, low fertility status, high leaching	496645
3	Medium black soils	Heavy clay texture, $P^H$ 7.5-8.5, deficient in N and P, rich in K, poor aeration.	321760
4	Coarse shallow soils	Light texture, low clay content, $P^H$ 6-7.5, deficient in N,P,K.	647255

#### **2.4. Area, Production and Productivity of major crops cultivated in the area of jurisdiction of KVK (2022)**

S. No	Crop	Area ('00' ha)	Production ('00' MT)	Productivity (Kg/ha)
1	Kharif Rice	924.03	1979	2141
2	Kharif Jowar	20	29	1486
3	Bajra	880	1383	1571
4	Ragi	176	127	720
5	Kharif Maize	2378	10860	4566
6	Other Kharif Cereals	115.22	40	350
<b>7</b>	<b>Total Kharif Cereals</b>	<b>4494</b>	<b>14418</b>	<b>3208</b>
8	Tur	69.47	64	922
9	Mung	182.70	129	705
10	Udil	89.36	51	574
11	Other Kharif Pulses	32.23	20	615
<b>12</b>	<b>Total Kharif Pulses</b>	<b>374</b>	<b>264</b>	<b>706</b>
13	Total Kharif Food grains	4867	14682	3016
14	Kharif Ground Nut	273	314	1151
15	Kharif Sesamum	1.64	0.36	220
16	Nilgerseed	27.53	4	148
17	Kharif Sunflower	0.26	0.07	270
18	Soyabean	862	1611	1869
19	Other Kharif Oilseed	0.5	0.3	550
<b>20</b>	<b>Total Kharif Oilseeds</b>	<b>1164.84</b>	<b>1930</b>	<b>1657</b>
21	Sugarcane	143.66	10775	75
22	Cotton (Lint)	414	1114	457
23	Rabbi Jowar	32.31	22	681
24	Wheat	634.42	1135.62	1790
25	Rabbi Maize	66.24	293.44	4430
26	Other Rabi Cereals	8.93	3.86	432.06
<b>27</b>	<b>Total Rabi Cereals</b>	<b>741.90</b>	<b>1454.91</b>	<b>1961.07</b>
28	Gram	344.91	272.48	790
29	Other Rabi Pulses	34.50	23.35	677
<b>30</b>	<b>Total Rabi Pulses</b>	<b>379.40</b>	<b>295.83</b>	<b>779.73</b>
31	Total Rabi Foodgrain	1121.3	1750.7	1561.35
32	Other Rabi Oilseeds	0.04	0.01	187.35
<b>33</b>	<b>Total Rabi Oilseeds</b>	<b>0.04</b>	<b>0.01</b>	<b>187.35</b>

\*Second Advance Estimate 2021-22 as per final CCE update

**Source:** State Department of Agriculture

## 2.5. Weather data (2022)

MW	Month	Total	Total	Mean	Mean	Mean		Mean		Mean	Progressive		During Month	
		Rainfall	Rainy	Wind	Sunshine	Temperature		Humidity		Pan	Rainfall	Rainy	Highest	Lowest
		mm	Days	Velocity	Hrs	Max	Min	Morn	Even	Evapo	mm	Days	Temp	Temp
1-5	January	0.0	0	2.8	7.9	25.9	8.8	79	48	1.8	0	0	30.0	4.4
5-9	February	0.0	0	2.1	8.5	30.1	8.4	78.3	33.7	3.1	0	0	34.5	4.7
9-13	March	13.2	2	2.1	7.5	34.5	13.6	82.5	37.0	3.6	13.2	2	38.6	8.6
13-18	April	0.0	0	4.4	8.9	38.9	17.7	85.4	31.9	8.5	13.2	2	42.0	10.2
18-22	May	0.0	0	11.7	9.2	37.4	22.4	82.5	32.4	7.2	13.2	2	41.8	19.5
22-26	June	65.2	3	9.3	7.6	34.8	23.1	81.8	48.6	2.4	78.4	5	38.3	21.0
26-31	July	324.0	18	8.8	2.5	28.4	21.7	90.3	75.4	0.3	402.4	23	32.8	20.4
31-35	August	167.4	14	7.2	5.6	29.8	21.6	90.2	73.6	0.3	569.8	37	32.8	19.0
35-39	September	277.8	16	4.7	2.2	28.5	21.0	90.6	76.7	0.4	847.6	53	33.2	18.1
40-44	October	206.3	6	3.7	7.2	30.4	18.2	89.3	59.8	0.7	1053.9	59	33.0	12.0
44-48	November	0.0	0	2.4	8.9	30.2	11.0	85	38	1.3	1053.9	59	32.2	7.0
48-52	December	0.8	0	2.1	6.2	30.2	12.0	91	47	0.8	1054.7	59	31.1	6.3

Source: Wheat Research Station, Kundewadi MPKV, Rahuri

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

Category	Population (No.)	Production (Per unit)	Productivity (Per unit)
<b>Cattle</b>			
<i>Crossbred</i>	136589		11 lit /cow /day
<i>Indigenous</i>	758461	Milk 347824 MT	04-05 lit /cow /day
<b>Buffalo</b>	221234		06 - 10 lit /buffalo /day
<b>Sheep</b>	243373	Milk included already	
<b>Goats</b>	626644	Milk included already	0.3 - 1 lit /goat/day
<b>Pigs</b>	7616		
<i>Crossbred</i>	1399	Meat 45.9405 MT	12-18 kg /pigs
<i>Indigenous</i>	6217		
<b>Rabbits</b>	1425	Meat 780 kg	0.5-1 Kg /rabbit
<b>Poultry</b>	3213582	Egg 2191 lakh	-
<i>Desi</i>	1259418	Meat 420704.79 MT	50 Eggs/year
Hens			
<b>Category</b>		Production (Q.)	Productivity (Per Unit)
Fish (Reservoir)	-	-	-

Ref.-20<sup>th</sup> Animal census (Dept. of Animal Husbandry, Govt. of Maharashtra)

## 2.7. Details of Operational area / Villages

Taluka / Block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
Niphad	Khadak Malegaon, Ugaon, Kotamgaon	Grape, Onion, Tomato, Soybean, Maize, G'nut, Bengal gram, Poultry	<ol style="list-style-type: none"> <li>1. Use of traditional varieties</li> <li>2. Poor storage life of Onion</li> <li>3. Non judicious use of pesticides</li> <li>4. Lack of mechanization</li> <li>5. Grafting failure on grape root stock</li> <li>6. Lack of alternate crop</li> <li>7. Improper use of fertilizers</li> </ol>	<ol style="list-style-type: none"> <li>1. Training on nursery management and grafting in grapes</li> <li>2. Use of Improved varieties in agronomical crops</li> <li>3. Improved cultivation practices to prolong storage life in Onion</li> <li>4. Improved cultivation practices in quality fruit production in Grapes</li> <li>5. Integrated pest management.</li> <li>6. Improved farm machineries</li> <li>7. Economical protective cultivation techniques</li> <li>8. Formation of groups for effective transfer of technologies (TTC's)</li> <li>9. Soil test based fertilizer application</li> </ol>
Trimbak	Chirapali,,mulegaon, Chakore, Thanapada, Jategaon, Behedpada	Paddy, Niger, Fingermillet, Littlemillet, Groundnut,Mango, Chilli, Onion, Garlic	<ol style="list-style-type: none"> <li>1. Pest and diseases in agronomical and vegetable crops</li> <li>2. Unavailability of improved seed in agronomical crops</li> <li>3. FMD, BQ and HS in problems in animals</li> <li>4. Hemoglobin deficiency in pregnant women</li> <li>5. Low yields in traditional poultry breed</li> <li>6. Unbalanced diet in tribal families</li> <li>7. Imbalanced use of fertilizer in finger millet, paddy &amp; onion</li> <li>8. Huge store grain losses</li> <li>9. Lack of proper family nutrition</li> <li>10. Lack of used of fertilizers</li> </ol>	<ol style="list-style-type: none"> <li>1. IPM in agronomical and vegetable crops</li> <li>2. Vegetable nursery management</li> <li>3. Nutrition management through Kitchen gardening</li> <li>4. Improving the poultry birds</li> <li>5. Providing the improved seed</li> <li>6. Health and hygiene in animals</li> <li>7. Improving health of pregnant women.</li> <li>8. Soil test based fertilizer application in finger millet, paddy &amp; onion.</li> <li>9. low cost storage bins</li> <li>10. Nutritional garden</li> <li>11. Introduction of seasonal and perennial horticulture crops</li> </ol>
Sinnar	Moh, Agaskhind, Nimgaon Sinnar	Potato, gram, Soybean,	<ol style="list-style-type: none"> <li>1. Use of traditional varieties</li> <li>2. Non judicious use of pesticides</li> <li>3. Lack of low level mechanization</li> <li>4. Low yields in traditional birds</li> <li>5. FMD, BQ and HS in problems in animals</li> <li>6. Unbalanced diet in tribal families</li> <li>7. Improper use fertilizers</li> </ol>	<ol style="list-style-type: none"> <li>1. Use of Improved varieties in agronomical crops</li> <li>2. Improved farm machineries</li> <li>3. Low cost protective cultivation techniques</li> <li>4. Formation of groups for effective transfer of technologies (TTC's)</li> <li>5. Nutrition management through Kitchen gardening</li> <li>6. Improving the poultry birds</li> <li>7. Health and hygiene in animals</li> <li>8. Soil test based fertilizer application</li> </ol>

Nashik	Sarul, Dugaon	Garlic, Nursery Management, Paddy, Groundnut , Value Addition	<ul style="list-style-type: none"> <li>1. Use of local variety in Garlic</li> <li>2. High cost of groundnut crop related operation</li> <li>3. Low price realization in Rice milling</li> <li>4. Lack of entrepreneurship in vegetable nursery &amp; Value addition.</li> </ul>	<ul style="list-style-type: none"> <li>1. Use of Improved varieties in Garlic.</li> <li>2. Improved farm machineries in Paddy processing.</li> <li>3. Skill development in nursery &amp; Value addition of fruit &amp; vegetable.</li> </ul>
Peth	Kayre, Sadarpada, Zari Ghanshet	Paddy, Niger, Finger millet, Little millet, Groundnut, Mango, Chilli, Onion, Garlic Backyard poultry, Goatary	<ul style="list-style-type: none"> <li>1. Lack of pruning in mango &amp; cashew nut</li> <li>2. Low productivity of poultry birds &amp; goats due to local breeds</li> <li>3. Lack of alternative crop in lean season.</li> <li>4. Use of traditional varieties</li> <li>5. No crop in rabi paddy cropping system.</li> <li>6. Lack of used of fertilizers</li> <li>11. Lack of proper family nutrition</li> <li>12. Lack of awareness of de-silting of water bodies</li> </ul>	<ul style="list-style-type: none"> <li>1.Skill development pruning in mango &amp; cashew nut</li> <li>2.Introducing improved breeds of Backyard poultry &amp; goat</li> <li>3.Plantation of mango &amp; Cashew nut on non cultivated cultivable lands.</li> <li>4.Soil test based fertilizer application</li> <li>5.Nutritional garden</li> <li>6.Introduction of perennial horticulture crops</li> <li>7.De-silting form water bodies through convergence</li> </ul>
Igatpuri	Mengal wadi, Dhamangaon, Pimpalgaon Ghadga	Paddy, Niger, Finger millet, Little millet, Mango, Onion, Vegetables, Backyard poultry, Goatary	<ul style="list-style-type: none"> <li>1. Lack of pruning in mango &amp; cashew nut</li> <li>2. Low productivity of poultry birds &amp; goats due to local breeds</li> <li>4. Lack of alternative crop in lean season.</li> <li>5. Use of traditional varieties</li> <li>6. No crop in rabi paddy cropping system.</li> <li>7. Lack of used of fertilizers</li> <li>13. Lack of proper family nutrition</li> <li>14. Lack of awareness of de-silting of water bodies</li> </ul>	<ul style="list-style-type: none"> <li>1. Skill development pruning in mango &amp; cashew nut</li> <li>2. Introducing improved breeds of Backyard poultry &amp; goat.</li> <li>3. Plantation of mango &amp; Cashew nut on non cultivated cultivable lands.</li> <li>4. Soil test based fertilizer application</li> <li>5. Nutritional garden</li> <li>6. Introduction of perennial horticulture crops</li> <li>7. De-silting form water bodies through convergence</li> </ul>
Chandwad	Bahadurwadi, Jopul	Grape, Onion, Tomato, Maize, G'nut, Bengal gram, Poultry	<ul style="list-style-type: none"> <li>1. Use of traditional varieties</li> <li>2. Poor storage life of Onion</li> <li>3. Non judicious use of pesticides</li> <li>4. Lack of low level mechanization</li> <li>5. Lack of alternate crop</li> <li>Improper use of fertilizers</li> </ul>	<ul style="list-style-type: none"> <li>1. Use of Improved varieties in agronomical crops</li> <li>1. Improved cultivation practices to prolong storage life in Onion</li> <li>2. Integrated pest management.</li> <li>3. Improved farm machineries</li> <li>4. Soil test based fertilizer application</li> <li>5. Introduction of perennial horticulture crop</li> </ul>

## **2.8. Priority thrust areas:**

Crop/Enterprise	Thrust area
Oilseed and Pulses	Improving the yield of oilseed, pulses and cereals by introducing the improved variety
Field Crops	Use of Improved cultivation practices in agronomical crops
Field Crops	Soil test based fertilizer recommendation
Field Crops	Integrated nutrient management
Field Crops	Use of bio-fertilizers for improved crop performance
Grapes	Improved cultivation practices in quality fruit production in Grapes
Onion, Garlic	Improved cultivation practices to prolong storage life in Onion and Garlic
Mango	Introduction of alternative cropping pattern through horticultural crops
Flower crops	Improved management for Quality improvement in flower crops
Fruit and Vegetable	Post harvest management in horticultural crops
Nursery Management	Self-employment through fruit and veg nurseries in grapes & Horticulture crops
Field Crops	Integrated pest management in fruits vegetables, oilseeds and pulses
Vegetable crops	Safe & judicious use of pesticides for residue management
Organic farming	Organic farming, bio-pesticides, bio-fertilizers,
Vermi-compost	Production and supply of Worms, Recycling of Agro waste
Farm Mechanization	Improved farm machineries for labour, cost, time saving and drudgery reduction.
Farm Mechanization	Introduction of the selected improved farm machineries for major crops of the district.
Fruit & vegetable crops	Irrigation & fertilizers management through drip in fruit & vegetable crops
Vegetable and flowers	Protective cultivation of high value vegetable and flowers
Agri Information	Information about various developmental activities of different departments
Tech adoption & Impact	Assessment and impact evaluation of activities of KVK, Awareness of farmers about Internet
Survey Method	Imparting technical skill about PRA survey
Women child care	Introduce Nutritious foods in farmwomen's & school going children's diet.
Nutritional gardening	Popularize organic Nutritional gardening concept.
Women child care	Reduced laborious work through drudgery reduction technologies.
Agro processing	Develop Skill about soybean processing for increase it consumption.
Value addition	Create awareness about vegetable, fruit processing. Develop marketing skills
Backyard Poultry	Increase the productivity of animal & breed up gradation, small enterprise
Live stock health	Built Resistance for the diseases, Improve the health of live stock
Milk production	Clean Milk Production
Goat	Breed up gradation,
Animal nutrition	Nutrition management in animals, introduction and supply of improved fodder sets

### **3. TECHNICAL ACHIEVEMENTS**

#### **3.1. A. Details of target and achievements of mandatory activities**

OFT				FLD			
1		2					
Number of OFTs		Number of farmers		Number of FLDs		Number of farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
08	08	96	122	15	19	600	663

Training				Extension Programmes			
3		4					
Number of Courses		Number of Participants		Number of Programmes		Number of participants	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
120	139	4800	5256	200	235	11500	12309

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
75	50	40000	46399

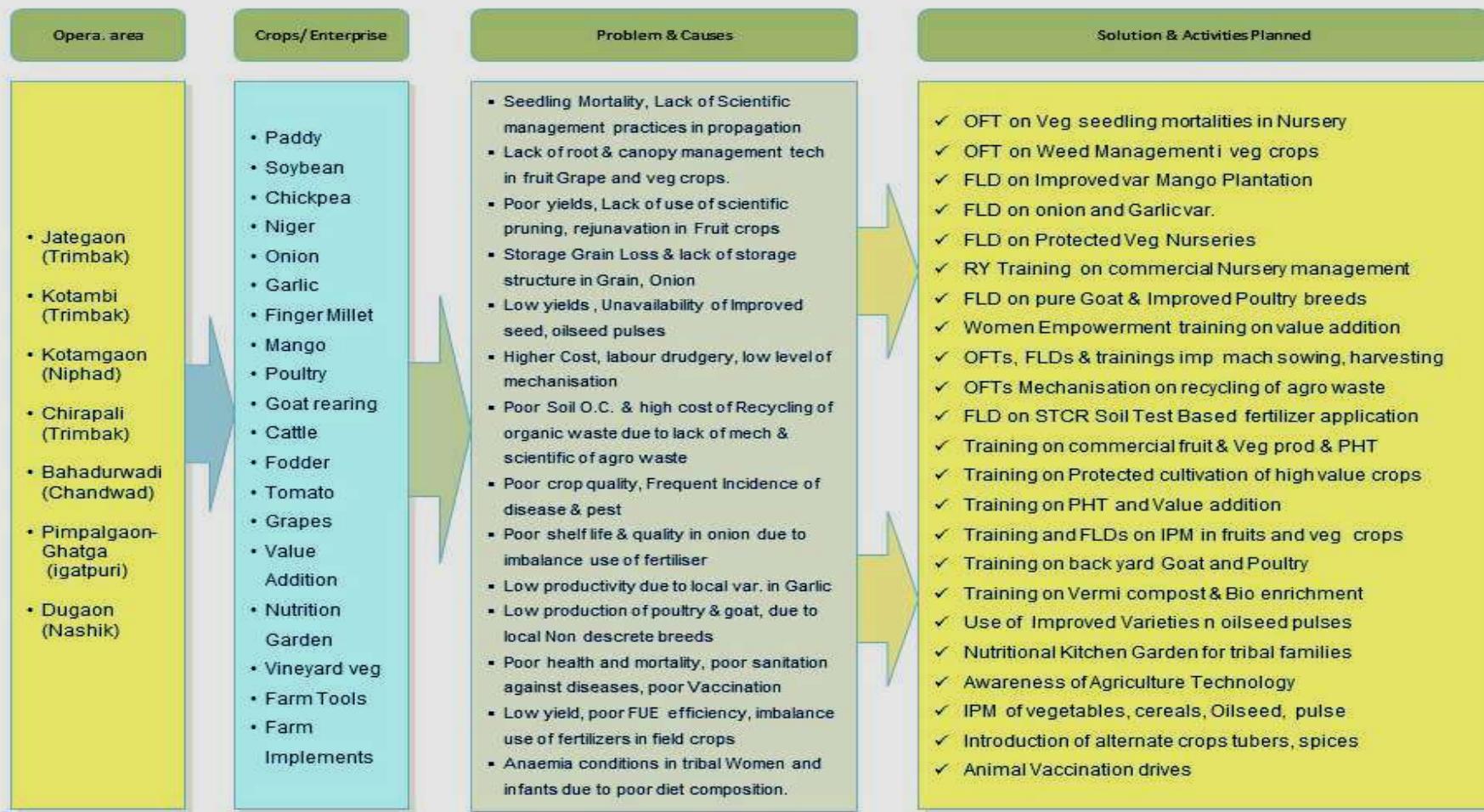
Livestock, poultry strains and fingerlings (No.)		Bio-products (lit)	
7		8	
Target	Achievement	Target	Achievement
500	799	2500	3048

### 3.1. B. Operational areas details during 2021

Major crops & enterprises being practiced in cluster villages	Prioritized problems in these crops/ enterprise	Extent of area (ha/No.) affected by the problem in the district	Names of Cluster Villages identified for intervention	Intervention (OFT, FLD, Training, extension activity etc.)*
<ul style="list-style-type: none"> <li>• Paddy</li> <li>• Soybean</li> <li>• Chickpea</li> <li>• Niger</li> <li>• Finger Millet</li> <li>• Mango</li> <li>• Onion</li> <li>• Garlic</li> <li>• Dolichus lablab</li> <li>• Tomato</li> <li>• Grapes</li> <li>• Vineyard veg</li> <li>• Value Addition</li> <li>• Nutrition Garden</li> <li>• Farm Tools</li> <li>• Farm implements</li> <li>• Poultry</li> <li>• Goat rearing</li> <li>• Cattle</li> <li>• Fodder</li> </ul>	<ul style="list-style-type: none"> <li>• Seedling Mortality, Lack of Scientific management practices in propagation</li> <li>• Lack of root &amp; canopy management tech in fruit Grape and veg crops.</li> <li>• Poor yields, Lack of use of scientific pruning, rejuvenation in Fruit crops</li> <li>• Storage Grain Loss &amp; lack of storage structure in Grain, Onion</li> <li>• Low yields , Unavailability of Improved seed, oilseed pulses</li> <li>• Higher Cost, labour drudgery, low level of mechanisation</li> <li>• Poor Soil O.C. &amp; high cost of Recycling of organic waste due to lack of mechanization &amp; scientific agro waste management</li> <li>• Poor crop quality, Frequent Incidence of disease &amp; pest</li> <li>• Poor shelf life &amp; quality in onion due to imbalance use of fertiliser</li> <li>• Low productivity due to local var. in Garlic</li> <li>• Low production of poultry &amp; goat, due to local Non discrete breeds</li> <li>• Poor health and mortality, poor sanitation against diseases, poor Vaccination</li> <li>• Low yield, poor FUE efficiency, imbalance use of fertilizers in field crops</li> <li>• Anaemia conditions in tribal Women and infants due to poor diet composition.</li> </ul>	8 tahasils in the jurisdiction of KVK, Nashik-I	<ul style="list-style-type: none"> <li>• Behedpada (Trimbak)</li> <li>• Jategaon (Trimbak)</li> <li>• Kotambi (Trimbak)</li> <li>• Kotamgaon (Niphad)</li> <li>• Chirapali (Trimbak)</li> <li>• Hirdi (Trimbak)</li> <li>• Bahadurwadi (Chandwad)</li> <li>• Jopul (Chandwad)</li> <li>• Dugaon (Nashik)</li> <li>• Kadavaipada (Peth)</li> </ul>	<ul style="list-style-type: none"> <li>• OFT on Veg seedling mortalities in Nursery</li> <li>• OFT on Weed Management i veg crops</li> <li>• FLD on Improved var Mango Plantation</li> <li>• FLD on onion and Garlic var.</li> <li>• FLD on Protected Veg Nurseries</li> <li>• RY Training on commercial Nursery management</li> <li>• FLD on pure Goat &amp; Improved Poultry breeds</li> <li>• Women Empowerment training on value addition</li> <li>• OFTs, FLDs &amp; trainings imp mach sowing, harvesting</li> <li>• OFTs Mechanisation on recycling of agro waste</li> <li>• FLD on STCR Soil Test Based fertilizer application</li> <li>• Training on commercial fruit &amp; Veg prod &amp; PHT</li> <li>• Training on Protected cultivation of high value crops</li> <li>• Training on PHT and Value addition</li> <li>• Training and FLDs on IPM in fruits and veg crops</li> <li>• Training on back yard Goat and Poultry</li> <li>• Training on Vermi compost &amp; Bio enrichment</li> <li>• Use of Improved Varieties n oilseed pulses</li> <li>• Nutritional Kitchen Garden for tribal families</li> <li>• Awareness of Agriculture Technology</li> <li>• IPM of vegetables, cereals, Oilseed, pulse</li> <li>• Introduction of alternate crops tubers, spices</li> <li>• Animal Vaccination drives</li> </ul>

\* Supported with problem-cause and interventions diagram

## Problem Cause Diagram



### 3.2. Technology Assessment (Kharif 2022, Rabi 2021-22, Summer 2022)

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	Mushroom	TOTAL
Integrated Nutrient Management	1	-	-	-	-	-	-	-	-	-	1
Varietal Evaluation	-	-	-	-	1	-	-	-	-	1	2
Integrated Pest Management	-	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	-	-	-	-	-	-	-	-	-	-	-
Integrated Disease Management	-	-	-	-	-	-	-	-	-	-	-
Small Scale Income Generation Enterprises	-	-	-	-	-	-	-	-	-	-	-
Weed Management	-	-	-	-	1	-	-	-	-	-	1
Resource Conservation Technology	-	-	-	-	-	-	-	-	-	-	-
Farm Machineries	-	-	-	-	-	1	-	-	-	-	1
Integrated Farming System	-	-	-	-	-	-	-	-	-	-	-
Seed / Plant production	-	-	-	-	-	-	-	-	-	-	-
Value addition	-	-	-	-	-	-	-	-	-	-	-
Drudgery Reduction	1	-	-	-	-	-	-	-	-	-	1
Storage Technique	-	-	-	-	-	-	-	-	-	-	-
Mushroom cultivation	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>2</b>	-	-	-	<b>2</b>	<b>1</b>	-	-	-	<b>1</b>	<b>6</b>

#### A2. Abstract on the number of technologies assessed in respect of livestock enterprises

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Evaluation of Breeds	-	1	-	-	-	1
Nutrition Management	-	-	-	-	-	-
Disease of Management	-	-	-	-	-	-
Value Addition	-	-	-	-	-	-
Production and Management	1	-	-	-	-	1
Feed and Fodder	-	-	-	-	-	-
Small Scale income generating enterprises	-	-	-	-	-	-
<b>TOTAL</b>	<b>1</b>	<b>1</b>	-	-	-	<b>2</b>

## B. Achievements on technologies Assessed

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

<b>Thematic areas</b>	<b>Crop</b>	<b>Name of the technology assessed</b>	<b>No. of trials</b>	<b>Number of farmers</b>	<b>Area in ha (Per trial covering all the Technological Options)</b>
Integrated Nutrient Management	Finge millet	To access the use of urea-DAP briquette technology in pair row planting of Finger Millet	10	10	
Varietal Evaluation	Dolichos lablab Bean	Assessemnt of Dolichos lablab Bean var. Kokan Bhushan and Phule Suruchi after paddy fallow cropping system in tribal area.	20	20	
Integrated Pest Management					
Integrated Crop Management					
Integrated Disease Management					
Small Scale Income Generation Enterprises					
Weed Management	Onion	Assessemnt of Control of weeds by adopting weedicidal combination Oxifluorfen,23.5%EC & Quinalpho ethyl 5% EC in rabi onion	20	20	
Resource Conservation Technology					
Farm Machineries	Grape	Tractor operated pruned Grape Twine mulcher for insitu mucking APRIL 2022	10	10	
Integrated Farming System					
Seed / Plant production					
Value addition					
Drudgery Reduction					
Storage Technique					
Mushroom cultivation					
<b>Total</b>			<b>60</b>	<b>60</b>	

**B.2. Technologies assessed under Livestock & fishery assessment**

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Evaluation of breeds	Poultry	Comparisons of Gramapriya and Black Australorp poultry breeds in Backyard rearing system	10 (Gramapriya - 50 Birds, Black Australorp - 50 Birds)	10
Production and management	Cattle	Use of Di-Calcium Phosphate in Crossbreed cows to reduce repeat breeding with improved production of milk	07 (21 animals)	07
<b>Total</b>			<b>17</b>	<b>17</b>

**B.3 Technologies assessed under other enterprises**

Name of Enterprises	Name of the technology assessed	No. of trials	No. of farmers
Mushroom	Assessment on different varieties of oyster mushroom cultivation	20	20
Apiary			
Vermicompost			
Tailoring			
Nutrition Garden			
Nursery Management			
Production and Management			
Entrepreneurship development			
Energy conservation			
Storage techniques			
House hold food security			
organic farming			
mechanization			
Bee keeping			
Seed production			
post-harvest management			

**B.4. Technologies assessed under Women empowerment assessment**

Name of Enterprises	Name of the technology assessed	No. of trials	No. of farmers
Drudgery Reduction			
Entrepreneurship development			
Health and Nutrition	To assess of bio-fortified Red Rice as supplementary diet to overcome malnutrition for the Adolescence tribal girls	25	25
value addition			
Kitchen gardening			
nutrition security			

## Results of On Farm Trial

### C. 1. Results of Technologies Assessed

OFT-1

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Finger Millet	Rainfed	Low productivity of Finger Millet due to no use of fertilizers	To access the use of urea-DAP briquette technology in pair row planting of Finger Millet	10	1 Traditional planting technique without use of fertilizers 2 Improved pair row planting technique with use of Urea-DAP briquettes	1. Tillers per plant 2. Fingers per earhead 3. Length of finger 4. B:C ratio 5. Yield	Number Number cm kg/h	3.4 9 11 2.23 1850	The yield has increased due to pair row plating technique and use of use of urea-DAP briquettes	NIL	NIL

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	B:C Ratio
13	14	15	16	17	18
Traditional planting technique without use of fertilizers	Local	1125	Kg/ha	14525	1.58
Improved pair row planting technique with use of Urea-DAP briquettes	MPKV, Rahuri	1850	Kg/ha	36675	2.23

**C. 2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details:**

- 1 Title of Technology Assessed : To access the use of urea-DAP briquette technology in pair row planting of Finger Millet
- 2 Problem Definition : The area of Finger Millet cultivation is about 17600 ha in Nashik district. Out of this, 5800 ha area covered in Trambakeshwar taluk under Finger Millet cultivated in kharif season. The productivity found 720kg/ha, which is very less as compared to state (1453kg/ha). Low productivity of Finger Millet due to no use of fertilizers, planting of seedlings without maintaining spacing and no use of plant protection technologies
- 3 Details of technologies selected for assessment : 1 Traditional planting technique without use of fertilizers  
2 Improved pair row planting technique with use of Urea-DAP briquettes
- 4 Source of technology : MPKV, Rahuri
- 5 Production system and thematic area : Rainfed Finger Millet production system in light soil at hilly area with Integrated Nutrient Management
- 6 Performance of the Technology with performance indicators : 

<b>Demo</b>	<b>Local</b>
1.No. of Tillers per plant : 3.4	1.No. of Tillers per plant : 2.6
2. No. of fingers per earhead : 9	2. No. of fingers per earhead : 7
3. Length of finger in cm : 11	3. Length of finger in cm : 7.5
4. B:C ratio : 2.23	4. B:C ratio : 1.58
5. Yield (qt/ha) : 18.50	5. Yield (qt/ha) : 11.25
- 7 Feedback, matrix scoring of various technology parameters done through farmer's participation/other scoring techniques : The pair row plantation helps in aeration between the rows which helps in more shoot development. The yield has increased due to use of urea-DAP briquettes.
- 8 Final recommendation for micro level situation : The use of urea-DAP briquettes has increased yield in pair row planting Finger Millet.
- 9 Constraints identified and feedback for research : Nil
- 10 Process of farmers participation and their reaction : The 10 progressive farmers of Finger Millet has been selected for demonstration of pair row planting technique with use of Urea-DAP briquettes. There were 10 demonstrations conducted at Behedpada Tal. Trambakeshwar in Kharif 2022 season on 4 ha area. The pre-seasonal training on pair row planting technique with use of Urea-DAP briquettes has conducted. The seed of improved variety Phule Nachani, bio-pesticides and bio-fertilizers has distributed among the participants. The field visits arranged for crop inspection and guidance given accordingly. The field day has celebrated at maturity stage of crop and observations of qualitative parameter recorded.

### C. 1. Results of Technologies Assessed

#### Results of On Farm Trial

OFT-2

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Dolichos lablab Bean	Light – medium soils. Rain-fed	Heavy Rainfall, Small farm Holding, Fallow land after paddy	Assesment of Dolichos lablab Bean var. Kokan Bhushan and Phule Suruchi after paddy fallow cropping system in tribal area.	20	T1 –Farmers practice: No crop- Fallow field after Kharif Paddy.  T2- Sowing of Dolichos lablab Bean var. Kokan Bhushan  T3- Dolichos lablab Bean var. Phule Suruchi	1.Yield, 2.Cost of cultivation, 3.Gross income, 4.Net income, 5.B:C ratio,  1.Yield, 2.Cost of cultivation, 3.Gross income, 4.Net income, 5.B:C ratio  1.Yield, 2.Cost of cultivation, 3.Gross income, 4.Net income, 5.B:C ratio	Kg/ha Rs/Ha Rs/ha Rs/ha -  Kg/ha Rs/Ha Rs/ha Rs/ha -  Kg/ha Rs/Ha Rs/ha Rs/ha -	00 00 00 00 -  11583 90500 231660 141160 1.77  13931 90500 250758 160258 2.55	Both varieties assessed are good, high yielding and suitable for climatic and soil condition. If adopted on large scale will be more profitable	-	-

Contd..

Technology Assessed		Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	B:C Ratio
13		14	15	16	17	18
T1 –Farmers practice: No crop- Fallow field after Kharif Paddy.	T2- Sowing of Dolichos lablab Bean var. Kokan Bhushan	MPKV, Rahuri, DBSKKV, Dapoli	00	kg	00	
	T3- Dolichos lablab Bean var. Phule Suruchi		11583	kg	141160	1.77
			13931	kg	160258	2.55

**C. 2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details:**

**OFT-2**

- |           |                                                                                                                          |   |                                                                                                                                                                                                                                                                                                                                            |
|-----------|--------------------------------------------------------------------------------------------------------------------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1</b>  | Title of Technology Assessed                                                                                             | : | Assessemnt of Dolichos lablab Bean var. Kokan Bhushan and Phule Suruchi after paddy fallow cropping system in tribal area.                                                                                                                                                                                                                 |
| <b>2</b>  | Problem Definition                                                                                                       | : | Heavy Rainfall, Small farm Holding, Fallow land after paddy                                                                                                                                                                                                                                                                                |
| <b>3</b>  | Details of technologies selected for assessment                                                                          | : | Dolichos lablab Bean var. Kokan Bhushan and Phule Suruchi                                                                                                                                                                                                                                                                                  |
| <b>4</b>  | Source of technology                                                                                                     | : | MPKV, Rahuri, DBSKV, Dapoli                                                                                                                                                                                                                                                                                                                |
| <b>5</b>  | Production system and thematic area                                                                                      | : | Integrated Crop Production                                                                                                                                                                                                                                                                                                                 |
| <b>6</b>  | Performance of the Technology with performance indicators                                                                | : | Dolichas lab lab Var. Kokan Bhushan gives 15% higher yield over Phule Suruchi with Good market acceptance                                                                                                                                                                                                                                  |
| <b>7</b>  | Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques | : | After Kharif Paddy Farmers kept their land follow and no alternate source of income. Small farmers get alternate source of income from their fallow land and utilize the available moisture .                                                                                                                                              |
| <b>8</b>  | Final recommendation for micro level situation                                                                           | : | Farmers must adopt the alternate source of income after paddy crop in kharif season like dolichas lablab.                                                                                                                                                                                                                                  |
| <b>9</b>  | Constraints identified and feedback for research                                                                         | : | Timely Availability of seed. Need to make available seed for farmers for large scale adoption.                                                                                                                                                                                                                                             |
| <b>10</b> | Process of farmers participation and their reaction                                                                      | : | Selected farmers those cultivating early varieties of paddy in Kharif season. Created awareness to utilize fellow land available moisture to get benefit in rabi and summer season. Very less awareness among the farmers for adoption and utilization of available moisture and take alternate crop as a source of income in rabi season. |

### C. 1. Results of Technologies Assessed

#### Results of On Farm Trial

OFT-3

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justificatio n for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Onion	Light – medium soils. Rain-fed	Weed problem Higher labour cost for weed control	Assesement of Control of weeds by adopting weedicidal combination Oxifluorfen,23.5% EC & Quizalpho ethyl 5% EC in rabi onion	20	Farmers Practice (T1) :Farmers Practice : 3-4 hand weddings  Assessed Practice (T2) : Recommended Practice : Oxifluorfen,23.5%EC @1 ml/Lit + Quizolofopethyl 5% EC @2ml/Lit water after 20 days of transplanting + one hand weeding 35 days after transplanting  Assessed Practice (T3) Recommended Practice : Oxifluorfen,23.5%EC @1 ml/Lit + Quizolofopethyl 5% EC @2ml/Lit water after 25 days of transplanting + one hand weeding 45 days after transplanting	1.Yield, 2.Cost of cultivation, 3.Gross income, 4.Net income, 5.B:C ratio,  1.Yield, 2.Cost of cultivation, 3.Gross income, 4.Net income, 5.B:C ratio  1.Yield, 2.Cost of cultivation, 3.Gross income, 4.Net income, 5.B:C ratio	Kg/ha Rs/Ha Rs/ha Rs/ha Kg/ha Rs/Ha Rs/ha Rs/ha Kg/ha Rs/Ha Rs/ha Rs/ha	2919 56296 205411 80645 3.68 3075 51468 216048 92566 4.19 3155 50702 221795 97163 4.37	Farmers found effective result of weed development which saves two weeding which help to minimize labour cost. Controlled population of weed help to get good and satisfactory yield and quality in Rabi Onion.	-	-

**Contd..**

<b>Technology Assessed</b>	<b>Source of Technology</b>	<b>Production</b>	<b>Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)</b>	<b>Net Return (Profit) in Rs. / unit</b>	<b>B:C Ratio</b>
<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>
Farmers Practice (T1) :Farmers Practice : 3-4 hand weedicings	MPKV, Rahuri	2919	Kg/ha	80645	3.68
Assessed Practice (T2) :.Recommended Practice : Oxifluorfen,23.5%EC @1 ml/Lit + Quizolofopethyl 5% EC @2ml/Lit water after 20 days of transplanting + one hand weeding 35 days after transplanting Assessed Practice		3075	Kg/ha	92566	4.19
Assessed Practice (T3) Recommended Practice : Oxifluorfen,23.5%EC @1 ml/Lit + Quizolofopethyl 5% EC @2ml/Lit water after 25 days of transplanting + one hand weeding 45 days after transplanting		3155	Kg/ha	97163	4.37

**C. 2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details:**

**OFT-3**

- 1 Title of Technology Assessed : Assessment of Control of weeds by adopting weedicidal combination Oxifluorfen,23.5%EC & Quizalpho ethyl 5% EC in rabi onion
- 2 Problem Definition : Heavy Rainfall, Small farm Holding, Fallow land after paddy
- 3 Details of technologies selected for assessment : To Assess economical impact and performance of weedicidal combination Oxifluorfen,23.5%EC & Quizalpho ethyl 5% EC on late Rabi onion.
- 4 Source of technology : MPKV, Rahuri
- 5 Production system and thematic area : Integrated Weed Management
- 6 Performance of the Technology with performance indicators : Timely application of weedicides in Rabi onion crop followed by manual weeding help to control the weed population.
- 7 Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques : Observations and data collected on 1.Yield,2.Cost of cultivation, 3.Gross income,4.Net income, 5.B:C ratio, given Farmers feedback .
- 8 Final recommendation for micro level situation : Use the weedicidal combination Oxifluorfen,23.5%EC & Quizalpho ethyl 5% EC followed by light weeding
- 9 Constraints identified and feedback for research : Need to conduct research on How to improve the effectiveness of weedicide as well as any issue regarding residual problem and soil health management.
- 10 Process of farmers participation and their reaction : Selected farmers who are cultivating late Rabi/Summer Onion from last three years with available irrigation facility.

### C1. Results of Technologies Assessed

#### OFT-4

Crop/ enterprise	Farmin g situati on	Problem definition	Title of OFT	No. of trial s	Technolog y Assessed	Paramet ers of assessm ent	Data on the parameter				Results of assessment		Feedbac k from the farmer	Any refineme nt needed	Justificatio n for refine ment																								
1	2	3	4	5	6	7	8				9		10	11	12																								
Mechanizatio n in mulching operation in Grape	Irrigat ed	Grape cultivation involves high labour and cost for removal of pruned twines laying of external organic material bed mulching	Tractor operat ed pruned Grape Twine mulcher for insitu muchin g APRIL 2022	10	Tractor operated Side Discharge Flail Mulcher for pruned Twine insitu mulching	Labo ur Outp ut, Cost	<table border="1"> <thead> <tr> <th>Para meter</th> <th>Dem o</th> <th>Chec k</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Labour, Nos,</td> <td>6</td> <td>76</td> <td>(-)92%</td> </tr> <tr> <td>Output, Ha/day</td> <td>2.25</td> <td>0.43</td> <td>(+)423 %</td> </tr> <tr> <td>Cost, Rs.Ha</td> <td>610 0</td> <td>2940 0</td> <td>(-)79%</td> </tr> </tbody> </table>				Para meter	Dem o	Chec k	%	Labour, Nos,	6	76	(-)92%	Output, Ha/day	2.25	0.43	(+)423 %	Cost, Rs.Ha	610 0	2940 0	(-)79%	<table border="1"> <thead> <tr> <th>Para meter</th> <th>% sav ing</th> </tr> </thead> <tbody> <tr> <td>Labour, Nos,</td> <td>(-)92%</td> </tr> <tr> <td>Output, Ha/day</td> <td>(+)423%</td> </tr> <tr> <td>Cost, Rs.Ha</td> <td>(-)79%</td> </tr> </tbody> </table>		Para meter	% sav ing	Labour, Nos,	(-)92%	Output, Ha/day	(+)423%	Cost, Rs.Ha	(-)79%	Saving in the labor, time and cost for pruned Twine removal and mulchin g. Best suited for insitu and fast recycling of farm organic waste	Adjustabl e side mulch discharge chute will be suitable for varied row spacing	Planta tion with varies row spacing are practice d for differen t soils and varietie s
Para meter	Dem o	Chec k	%																																				
Labour, Nos,	6	76	(-)92%																																				
Output, Ha/day	2.25	0.43	(+)423 %																																				
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Para meter	% sav ing																																						
Labour, Nos,	(-)92%																																						
Output, Ha/day	(+)423%																																						
Cost, Rs.Ha	(-)79%																																						

Contd..

Technology Assessed		Source of Technology		Production	unit	Net Return (Profit) in Rs. / ha	BC Ratio
13	14	15	16	17	18		
Tech option 1 (Farmer's practice): Manual pruned grape twine removal from field and external organic trash mulching manually	Traditional manual removal of pruned twines	NA	NA	NA	NA		
Technology option 2 locally available Tractor PTO operated stationary shredder	AICRP, FIM MPKV, Rahuri recommended direct seeder	NA	NA	NA	NA		
Technology option 3: New Tractor operated Side Discharge flail mulcher for pruned Grape Twine insitu mulching	AICRP, FIM MPKV, Rahuri recommended direct seeder	NA	NA	NA	NA		

**C2. Details of each On Farm Trial****OFT-4**

- 1 Title of Technology Assessed : Introduction of Tractor operated pruned Grape Twine mulcher for insitu mulching
- 2 Problem Definition : Grape cultivation involves high labour and cost for removal of pruned twines, laying of external organic mulching. Grape is a commercial crop of the District and occupies prominent position in its shares in the district economy. However, this crop needs many crop practices with large labour requirement. April pruning and its removal and addition of external organic mulch is now a regular practice to better crop and O. C. in soil. Hence need insitu addition of own farm waste through mechanization. This also bears large custom hiring potential.
- 3 Details of technologies selected for assessment : almost all the pruned twine removal is done manually .These twines are normally decomposed for next season or burnt.  
Technology option 1 (Farmer's practice): Manual pruned grape twine removal from field and external organic trash mulching manually.  
Technology option 2: locally available Tractor PTO operated stationary shredder, Technology option 3: New Tractor operated Side Discharge flail mulcher for pruned Grape Twine insitu mulching
- 4 Source of technology : AICRP, FIM MPKV, Rahuri recommended direct seeder
- 5 Production system and thematic area : Horticulture, Agricultural mechanisation
- 6 Performance of the Technology with performance indicators : Large saving in the labour requirement 92%, machine with increased output by 423% and cost saving by 79% compared to the manual removal of pruned Twines. Helps fast decomposing and saves extra cost for addition of external organic trash mulch manually.
- 7 Feedback, matrix scoring of various technology parameters done through farmer's participation/other scoring techniques :
- 8 Final recommendation for micro level situation : Tractor Operated Side discharge Fail mulcher is Suitable to replace major operation of pruned twine removal in grapes with up scaling potential through custom hiring.
- 9 Constraints identified and feedback for research : No major Constraint observed on operation front. However adjustable side discharge shall be additional facility to cater varied spacing. Cost of the machine need to be subsidies
- 10 Process of farmers participation and their reaction : Grape being a major crop of the district & large quantum especially small farmers are engaged in cultivation. This crop has been selectively mechanized and fetched high cultivation cost. Hence, farming, socioeconomic conditions and need were assessed for the crop in selected villages. As per the felt need, the village farmers groups were actively involved in the assessment of the machine for first year. The Manufacturer was also involved in the trials to ascertain the technicalities in the operations and minor modifications if sought by the farmer to suit the local conditions. The farmers are very much satisfied with its present performance and its see its up scaling.

### C. 1. Results of Technologies Assessed

#### Results of On Farm Trial

OFT-5

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Adolescence girl	-	Malnourishment of infants , toddler, adolescence girls & women in tribal area due to lack of iron ,calcium, protein rich food	Assess of Bio fortified Red Rice in daily consumption to overcome the malnutrition for the Adolescent girl	25	Farmers practice- Regular diet	1.Weight kg – Initial Wt (kg)	42.044	Weight of adolescent girls had increased 2.49 % and Hemoglobin had increased 1.7 % compared to the other girls	New variety of bio fortified red rice is proving to be helpful in increasing the weight and hemoglobin of our daughters.		
						Final Wt (kg)	42.490				
					Technology assessed –T1 + 50gm/day Bio-Fortified Red Rice (3 months)	1.Weight kg – Initial Wt (kg)	42.042				
						Final Wt (kg)	43.090				
					2. Hemoglobin (%)	Before (Hb)	8.2				
						After (Hb)	9.9				

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	B:C Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice): Regular diet	-				
Technology option 2 : T1 + 50gm/day Bio-Fortified Red Rice	NAU, Navsari (GNR-4) 2018				
Technology option 3					

**C. 2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details:**

**OFT-5**

- |           |                                                                                                                        |   |                                                                                                                                                                                                              |
|-----------|------------------------------------------------------------------------------------------------------------------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1</b>  | Title of Technology Assessed                                                                                           | : | Assess of Bio fortified Red Rice in daily consumption to overcome the malnutrition for the Adolescent girl                                                                                                   |
| <b>2</b>  | Problem Definition                                                                                                     | : | Malnourishment of infants ,toddler, adolescence girls & women in tribal area due to lack of iron ,calcium, protein rich food                                                                                 |
| <b>3</b>  | Details of technologies selected for assessment                                                                        | : | Bio-Fortified Red Rice                                                                                                                                                                                       |
| <b>4</b>  | Source of technology                                                                                                   | : | NAU, Navsari (GNR-4) 2018                                                                                                                                                                                    |
| <b>5</b>  | Production system and thematic area                                                                                    | : | Women and Child Nutrition                                                                                                                                                                                    |
| <b>6</b>  | Performance of the Technology with performance indicators                                                              | : | Due to the use of Bio fortified red rice, there was a weight gain of 2.49 % in the underweight adolescent girls. Also their Hemoglobin had increased by 1.7 % as compared to other girls.                    |
| <b>7</b>  | Feedback, matrix scoring of various technology parameters done through farmer's participation/other scoring techniques | : | New variety of bio fortified red rice is proving to be helpful in increasing the weight and hemoglobin of our daughters. The parameter considered for this is weight and hemoglobin.                         |
| <b>8</b>  | Final recommendation for micro level situation                                                                         | : | Such high nutritious and iron rich bio fortified red rice must be provided to all the adolescence girl in tribal areas                                                                                       |
| <b>9</b>  | Constraints identified and feedback for research                                                                       | : | Less awareness, Illiteracy, low income of family and high cost of bio fortified red rice.                                                                                                                    |
| <b>10</b> | Process of farmers participation and their reaction                                                                    | : | Girls were selected after the discussions with ICDS (Zillah Parishad) Nasik from tribal area were mal nutrition prominent. Mal nutrition gets reduced by adopting the consumption of bio fortified red rice. |

### C. 1. Results of Technologies Assessed

#### Results of On Farm Trial

**OFT-6**

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Oyster Mushroom	-	1. Lack of knowledge about utilization of farm residue for mushroom cultivation 2. Less knowledge about different varieties of oyster mushroom	Assessment on different varieties of oyster mushroom cultivation	20	Farmers practice- T1 Pleurotus Sajor Caju	1. Production kg/bag (5 kg wet paddy straw)	1.4kg	Pleurotus Blue has high yield and less duration compared to Pleurotus Florida and Pleurotus Sajor Caju	Mushrooms are cultivated in less space with low cost and have more yields with good income from available waste raw material.		
						2.Duration/days	42				
					Technology assessed – T2 Pleurotus Florida	1. Production kg/bag (5 kg wet paddy straw)	1.5kg				
						2.Duration/days	40				
					Technology assessed – T3 Pleurotus Blue	1. Production kg/bag (5 kg wet paddy straw)	2kg				
						2.Duration/days	39				

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	B:C Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice): Pleurotus Sajor Caju	DMR ,Solan (HP)	70 Kg	Kg/ 50 beds	11500	4.6
Technology option 2: Pleurotus Florida	DMR ,Solan (HP)	75 Kg	Kg/ 50 beds	12500	5.0
Technology option 3 :Pleurotus Blue	DMR ,Solan (HP)	100 Kg	Kg/ 50 beds	17500	6.7

**C. 2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details:**

**OFT-6**

- |           |                                                                                                                        |   |                                                                                                                                                                                                                                                                                                         |
|-----------|------------------------------------------------------------------------------------------------------------------------|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1</b>  | Title of Technology Assessed                                                                                           | : | Assessment on different varieties of oyster mushroom cultivation                                                                                                                                                                                                                                        |
| <b>2</b>  | Problem Definition                                                                                                     | : | 1.Lack of knowledge about utilization of farm residue 2.Less knowledge about different varieties of oyster mushroom                                                                                                                                                                                     |
| <b>3</b>  | Details of technologies selected for assessment                                                                        | : | Cultivatin of Pleurotus Sajor Caju, Pleurotus Florida, Pleurotus Blue mushroom on paddy straw.                                                                                                                                                                                                          |
| <b>4</b>  | Source of technology                                                                                                   | : | DMR, Solan                                                                                                                                                                                                                                                                                              |
| <b>5</b>  | Production system and thematic area                                                                                    | : | Income Generation Activity                                                                                                                                                                                                                                                                              |
| <b>6</b>  | Performance of the Technology with performance indicators                                                              | : | Quantity of the mushroom cultivated and time required for cultivation with similar inputs like raw materials and environmental condition.                                                                                                                                                               |
| <b>7</b>  | Feedback, matrix scoring of various technology parameters done through farmer's participation/other scoring techniques | : | Pleurotus Blue has high yield and less duration compared to Pleurotus Florida and Pleurotus Sajor Caju and taste of this mushroom is good.                                                                                                                                                              |
| <b>8</b>  | Final recommendation for micro level situation                                                                         | : | All above mentioned varieties of mushroom were cultivated in dark room with 25 -30 <sup>0</sup> C room temperature and 80-85 % relative humidity. The same raw material is used for all mushroom beds. Watering was also kept same for all varieties of mushroom beds.                                  |
| <b>9</b>  | Constraints identified and feedback for research                                                                       | : | Unawareness about mushroom its types and used, Marketing and awareness to customer. Unavailability of the resources and environmental condition.                                                                                                                                                        |
| <b>10</b> | Process of farmers participation and their reaction                                                                    | : | 1.Awareness lectures among the SHGs and farmers.<br>2. Training session for cultivation of mushroom to interested farmers.<br>3.Helping them during cultivation, harvesting and marketing. Through this process other farmers are attracted because of high yield and income from agricultural residue. |

### C. 1. Results of Technologies Assessed

#### Results of On Farm Trial

OFT-7

Crop/ enterpris e	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinemen t needed	Justificatio n for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Cattle	Intensiv e farming	1.Low milk yield, 2. Repeat breeding & 3. Retention of placenta due to imbalanced minerals	Use of Di- Calcium Phosphat e in Crossbre ed cows to reduce repeat breeding with improved productio n of milk	07 (21 anim als)	T1 - Farmers practice/anim al - 30 kg Green fodder/day + 5-6 kg Kadabi/day + 300gm concentrate per lit. of milk + 30 gm Mineral mix.	1. Conception % 2. Average Milk yield litre/cow/lactation 3. Cost on feeding (Rs.) 4. B:C ratio	57.14 4254  78345/- 1.85	With use of Di-Calcium phosphate the conception rate and milk production performanc es of cows, both showing significant results.	Di-Calcium phosphate is easy to feed to animals...b ut availability of the same is not convenient.  -  -		
					T2 - Recommended technology/animal - 30 kg Green fodder/day + 5-6 kg Kadabi/day + 400gm concentrate per lit. of milk + 50 gm Mineral mix.	1. Conception % 2. Average Milk yield litre/cow/lactation 3. Cost on feeding (Rs.) 4. B:C ratio	71.43 5388  90561 2.02				
					T3 - Technology Assessed/animal - T2 + 50 gm extra Mineral mix. (Total 100 gm) + 100 gm Di Calcium phosphate	1. Conception % 2. Average Milk yield litre/cow/lactation 3. Cost on feeding (Rs.) 4. B:C ratio	85.71 6154  92037 2.27				

**Contd..**

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs./ cow	B:C Ratio
13	14	15	16	17	18
T1 - Farmers practice/animal - 30 kg Green fodder/day + 5-6 kg Kadabi/day + 300gm concentrate per lit. of milk + 30 gm Mineral mix.	IVRI Izzatnagar, Bareilly	4254	litre/cow/lactation	66291/-	1.85
T2 - Recommended technology/animal - 30 kg Green fodder/day + 5-6 kg Kadabi/day + 400gm concentrate per lit. of milk + 50 gm Mineral mix.		5388	litre/cow/lactation	92631/-	2.02
T3 - Technology Assessed/animal - T2 + 50 gm extra Mineral mix. (Total 100 gm) + 100 gm Di-Calcium phosphate		6154	litre/cow/lactation	117199/-	2.27

**C. 2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details:**

**OFT-7**

- 1 Title of Technology Assessed : Use of Dicalcium Phosphate in Crossbreed cows to reduce Repeat breeding with improved production of Milk.
- 2 Problem Definition : 1. Low milk yield, 2. Repeat breeding & 3. Retention of placenta due to imbalanced minerals
- 3 Details of technologies selected for assessment : Use of Di-Calcium phosphate as an additional supplement to cows
- 4 Source of technology : IVRI Izzatnagar, Bareilly
- 5 Production system and thematic area : Production and Management
- 6 Performance of the Technology with performance indicators : In Farmers practice (T1) - Conception rate 57.14 %, Milk production 4254 litre/cow/lactation while B:C ration is 1.85  
In Recommended practice (T2) - Conception rate 71.43 %, Milk production 5388 litre/cow/lactation while B:C ration is 2.02  
In Assessed technology (T3) - Conception rate 45.71 %, Milk production 6154 litre/cow/lactation while B:C ration is 2.27
- 7 Feedback, matrix scoring of various technology parameters done through farmer's participation/other scoring techniques : Di-Calcium phosphate is easy to feed to animals...but availability of the same is not convenient.
- 8 Final recommendation for micro level situation : With use of Di-Calcium phosphate the conception rate and milk production performances of cows, both showing significant results.
- 9 Constraints identified and feedback for research : Di-Calcium phosphate is not available everywhere easily.
- 10 Process of farmers participation and their reaction : Di-Calcium phosphate should be available at any chemist.

### C. 1. Results of Technologies Assessed

#### Results of On Farm Trial

OFT-8

Crop/ enterpris e	Farming situation	Problem definitio n	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the paramete r	Results of assessment	Feedback from the farmer	Any refinemen t needed	Justificatio n for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Poultr y	Backyar d system	Low income potential of local Poultry breeds	Comparison s of Gramapriya and Black Australorp poultry breeds in Backyard rearing system with local breeds	10 (Gramapri ya - 50 Birds, Black Australor p - 50 Birds compared with local 50 birds)	T1- Farmers practice - Use of Local Poultry breed	1. Weight gain/bird - Kg (3.5 months age) 2. Cost on feeding/bird (Rs.) 4. B:C ratio	0.716  142/-  1.30	Black Australorp birds are beneficial than Gramapri ya and local ones.	Black Australorp is phenotypicall y same to desi birds with higher weight gains and best meat taste.	-	-

**Contd..**

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	B:C Ratio
13	14	15	16	17	18
T1-Farmers practice - Use of Local Poultry breed	CPDO, Mumbai	0.716	Kg/bird (3.5 months age)	42/- Rs./bird	1.30
T2- Improved technology - Use of Gramapriya improved poultry breed		0.988	Kg/bird (3.5 months age)	67/- Rs./bird	1.43
T3 - Improved technology - Use of Black Australorp improved poultry breed		1.198	Kg/bird (3.5 months age)	115.76/- Rs./bird	1.72

**C. 2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details:**

**OFT-8**

- 1 Title of Technology Assessed : Comparisons of Gramapriya and Black Australorp poultry breeds in Backyard rearing system with local breeds
- 2 Problem Definition : Low income potential of local Poultry breeds
- 3 Details of technologies selected for assessment : Use of Gramapriya and Black Australorp poultry breeds in backyard system.
- 4 Source of technology : CPDO, Mumbai
- 5 Production system and thematic area : Evaluation of Breed
- 6 Performance of the Technology with performance indicators : In Farmers practice (T1) - Weight gain/bird - 0.716 Kg (3.5 months age) while B:C ration is 1.30  
In Recommended practice (T2) - Weight gain/bird - 0.988 Kg (3.5 months age) while B:C ration is 1.43  
In Assessed technology (T3) - Weight gain/bird - 1.198 Kg (3.5 months age) while B:C ration is 1.72
- 7 Feedback, matrix scoring of various technology parameters done through farmer's participation/other scoring techniques : Black Australorp is phenotypically same to desi birds with higher weight gains and best meat taste.
- 8 Final recommendation for micro level situation : Black Australorp birds are beneficial than Gramapriya and local ones.
- 9 Constraints identified and feedback for research : Brooding and Vaccination of birds should be done by experts and such birds must be available to farmers for rearing.
- 10 Process of farmers participation and their reaction : Black Australorp is phenotypically same to desi birds with higher weight gains and best meat taste.

### 3.3. FRONTLINE DEMONSTRATION

#### A. Follow-up for results of FLDs implemented during previous years

List of technologies demonstrated during previous year and popularized during 2022 and recommended for large scale adoption in the district

S. No	Crop/ Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
01	Finge rmillet- STCR	INM	STCR Based fertilizer application	Front line demonstration, Field Day, Training	01	20	4
02	Paddy -STCR	INM	STCR Based fertilizer application	Front line demonstration, Field Day, Training	01	30	6
03	Onion	Crop Production	Agrifound Light Red	Front line demonstration, Field Day, Training	05	135	25
04	Garlic	Crop Production	Yamuna Safed	Front line demonstration, Field Day, Training	02	85	6
05	Onion - STCR	INM	STCR Based fertilizer application	Front line demonstration, Field Day, Training	01	20	4

B. Details of FLDs implemented during 2022(**Kharif 2022, Rabi 2021-22, Summer 2022**) (Information is to be furnished in the following **three tables** for each category i.e. cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.)

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
<b>Cereals</b>										
1	Paddy	INM	Fourfold Technology	Kharif 2022	10	10	50	-	50	-
2	Paddy- STCR	INM	STCR Based fertilizer application	Kharif 2022	6	6	30	-	30	-
3	Fingermillet- STCR	INM	STCR Based fertilizer application	Kharif 2022	4	4	20	-	20	-
<b>Oilseeds</b>										
1	Soybean	ICM	Variety	Kharif 2022	20	20	-	50	50	-
<b>Pulses</b>										
1	Chickpea	ICM	Variety	Rabi 2021-22	10	10	-	25	25	-
2	Blackgram	ICM	Variety	Kharif 2022	10	10	25	-	25	
<b>Horticulture</b>										
1	Onion -STCR	INM	STCR Based fertilizer application	Rabi 2021	4	4	20	-	20	-
2	Onion	Crop Production	Variety: Agrifound Light Red	Rabi 2021	10	10	82	00	82	
3	Garlic	Crop Production	Variety: Yamuna Safed	Rabi 2021	0.4	0.4	56	00	56	
4	Mango	Fruit orchard	Variety :Kesar	Kharif 2022	02	02	50	00	50	

**Details of farming situation**

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Paddy	Kharif 2022	Rainfed	Light Medium	to Low	Low	Medium	Fallow	25.07.22	25.11.22	2169.9	44
Soybean	Kharif 2022	Rainfed	Medium heavy	to Low	Low	Medium	Chickpea	25.06.22	15.10.22	769.3	42
Chickpea	Rabi 2021-22	Rainfed	Medium heavy	to Low	Low	Medium	Soybean	15.11.21	25.03.22	70	5
Blackgram	Kharif 2022	Rainfed	Light medium	to Low	Low	Medium	-	10.07.22	10.09.22	2169.9	44
Finger millet - STCR	Kharif 2023	Irrigated	Sloppy,Light	Low	Low	high	Fallow	July 2022	Nov 2022	706.2	55
Paddy - STCR	Kharif 2023	Irrigated	Light to medium	Low	Low	high	Onion	July 2022	Nov 2022	706.2	55
Onion - STCR	Rabi 2022	Irrigated	Light to medium	Low	Low	high	Paddy	Dec 2021	April 2022	706.2	55
Onion	Rabi 2021	Irrigated	Light to medium	Low	Low	high	Paddy	Dec 2021	April 2022	706.2	55
Garlic	Rabi 2021	Irrigated	Light to medium	Low	Low	high	Paddy	Dec 2021	April 2022	706.2	55
Mango	Kharif 2022	Irrigated	Light to medium	Low	Low	high	Fellow land /farm bunds	June 2022	May 2025	706.2	55

### Technical Feedback on the demonstrated technologies

S. No	Feed Back
Paddy: Fourfold Technology	<ul style="list-style-type: none"> <li>The row to row and plant to plant distance maintained at 15-25cm, which helps good aeration and intercultural operation.</li> <li>The ash of rice husk and rice straw utilized in nursery and rice field which enhances the physical properties of soil.</li> <li>Green manuring of sunhemp supplied nitrogen to plants and enhances the physical properties of soil.</li> <li>The use of urea-DAP briquettes released nutrients slowly which fulfilled need of nutrition of plant up to growing stage</li> </ul>
Soybean : Variety- Phule Sangam	<ul style="list-style-type: none"> <li>The variety matured in 105-110 days with 30-35 qt/ha yield.</li> <li>The shape of seed found to be round with medium size and yellow in colour.</li> <li>The average of pods observed to be 47 per plant with 2.5 seeds per pod.</li> <li>It is found to be moderate resistance to stem fly, defoliators, pod borer, leaf folder and Bacterial Pustule, Charcoal Rot.</li> <li>The average protein percentage recorded 41 with 21 percent oil content.</li> </ul>
Chickpea : Variety Phule Vikram + ICM	<ul style="list-style-type: none"> <li>The variety matured in 105-110 days with 16-18 qt/ha yields in rainfed situation.</li> <li>The variety yields 35-40 qt/ha in irrigated situation and 20-22 qt/ha in late sown situation.</li> <li>The pods grow erected so it can be harvested by combine harvester.</li> <li>It is found to be resistance to wilt disease.</li> <li>The average pod size is medium.</li> </ul>
Blackgram : Variety- AKU-10-1	<ul style="list-style-type: none"> <li>The variety matured in 70-75 days with 10-11 qt/ha yields.</li> <li>Tolerant to Mugbean Yellow Mosaic Virus (MYMV) and powdery mildew,</li> </ul>
Paddy-STCR	<ul style="list-style-type: none"> <li>The paddy yield has increased with STCR technology</li> </ul>
Finger Millet-STCR	<ul style="list-style-type: none"> <li>The Finger Millet yield has increased with STCR technology</li> </ul>
Onion- STCR	<ul style="list-style-type: none"> <li>The maximum yield level could not achieve due to light to medium type of soil in Rabi onion.</li> </ul>
Onion	<ul style="list-style-type: none"> <li>Good attractive colour</li> <li>Big bulb size</li> <li>Higher yield</li> <li>Low % of joint onion</li> <li>Good Shelf life</li> </ul>
Garlic	<ul style="list-style-type: none"> <li>Good attractive colour</li> <li>Big bulb size</li> <li>High pungency</li> </ul>
Mango	<ul style="list-style-type: none"> <li>Higher survival Rate</li> </ul>

### **Farmers' reactions on specific technologies**

S. No	Feed Back
1. Paddy: Fourfold Technology	<ul style="list-style-type: none"> <li>• The spacing between row and plant gives more aeration which helps in maximizing more shoots development.</li> <li>• The planting technique is tedious and time consuming, but can adopt easily with practicing.</li> <li>• The urea-DAP briquettes helps to enhance yield.</li> <li>• The physical property enhanced due to use of green manuring.</li> </ul>
2. Soybean : Variety- Phule Sangam	<ul style="list-style-type: none"> <li>• The variety can serve with moisture condition</li> <li>• The variety gives more yield with use of recommended use of fertilizers.</li> <li>• The variety moderately resists to pod borer and root rot</li> </ul>
3. Chickpea : Variety Phule Vikram + ICM	<ul style="list-style-type: none"> <li>• The bio-fertilizer, integrated approach of nutrient management and pest, disease management enhanced yield</li> </ul>
4. Blackgram : Variety- AKU- 10-1	<ul style="list-style-type: none"> <li>• The variety can not sustain in heavy rainfall</li> </ul>
5. Paddy-STCR	<ul style="list-style-type: none"> <li>• Saving in fertilizer and increased in yield</li> </ul>
6.Finger Millet-STCR	<ul style="list-style-type: none"> <li>• Increase in tillering so yield was increased</li> </ul>
7. Onion- STCR	<ul style="list-style-type: none"> <li>• Soil test based fertilizer application increased yield</li> </ul>
7.Onion variety ALR	<ul style="list-style-type: none"> <li>• Onion variety Agri found Light Red given higher yield than local variety.</li> <li>• Average bulb size is good. Less percentage of joint onions.</li> <li>• Bulbs are bigger in shape with tight skin and light red colour.</li> <li>• Higher Storage life given Good Rate in Off Season.</li> </ul>
8.Garlic variety Yamuna safed (G-9)	<ul style="list-style-type: none"> <li>• Garlic variety Yamuna safed (G-284) is attractive white colour with bold bulb size.</li> <li>• Good market rate.</li> <li>• Higher yield over to local variety.</li> <li>• Resistance to disease and pests. Higher Storage life</li> </ul>

**Extension and Training activities under FLD**

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
	<b>Agronomy</b>				
<b>1</b>	<b>Field days</b>				
	Paddy	01	09.11.2022	40	
	Soybean	01	11.10.2022	42	
	Chickpea	01	31.01.2022	28	
	Blackgram	01	19.10.2022	46	
<b>2</b>	<b>Farmers Training</b>				
	Paddy	02	27.05.2022, 05.06.2022	101	
	Soybean	04	12.04.22, 28.06.22, 29.07.22, 22.08.22	181	
	Chickpea	04	10.10.21, 14.10.21, 24.11.21, 26.11.21	156	
	Blackgram	01	21.06.2022	46	
<b>3</b>	<b>Media coverage</b>				
	Paddy	02	07.10.2022, 20.10.2022	42	
	Soybean	01	05.05.2022	0	
	Chickpea	03	29.10.2021, 30.10.2021, 05.11.2021	51	
	Blackgram	01	21.06.2022	46	
<b>4</b>	<b>Training for extension functionaries</b>				
	Paddy	03	19.05.2022, 16.06.2022, 26.07.2022	95	
	Soybean	03	16.03.2022, 30.05.2022, 20.07.2022	94	
	Chickpea	01	15.09.2021	30	
	<b>Soil Science</b>				
<b>1</b>	Training for farmers				
	Paddy – STCR	01	21/06/22	43	
	Finger Millet –STCR	01	05/07/22	34	
<b>2</b>	Method demonstration				
	Onion -STCR	01	15/11/21	07	
<b>3</b>	Exposure visit				
	Onion-STCR	01	23/02/22	31	
<b>4</b>	Scientific visit				
	Paddy-STCR	01	19/10/22	23	
	Finger millet - STCR	01	19/10/22	23	
	Onion -STCR	01	08/03/22	19	
<b>5</b>	Field days				
	Paddy – STCR	01	09/11/22	16	
	Finger Millet –STCR	01	09/11/22	16	
	Onion -STCR	01	20/04/22	27	
	<b>Horticulture</b>				
<b>1.</b>	Field days				
	Onion & Garlic	02	20/04/22	46	
	<b>Farmers Training</b>				
	Onion	02	22/10/2021	54	
	Garlic	01	29/10/2021	25	
<b>3</b>	<b>Media coverage : Radio Talk</b>				
<b>4</b>	<b>Training for extension functionaries</b>				
<b>5</b>	<b>Method demonstration</b>				
<b>6</b>	Exposure Visit Onion Garlic Research Station	01	23-24/02/22	20	

## C. Performance of Frontline demonstrations

### Frontline demonstrations on oilseed crops

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)			% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)				
						Demo				Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)	
						High	Low	Average										
Soybean																		
	ICM	Variety	Phule Sangam	25	10	45.00	27.50	30.6	23.1	32.47	54150	168300	114150	3.11	48150	115500	67350	2.40

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

\*\* BCR= GROSS RETURN/GROSS COST

### Frontline demonstration on pulse crops

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)			% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)				
						Demo				Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)	
						High	Low	Average										
Blackgram																		
	ICM	Variety	AKU-10-1	25	10	8.75	7.5	8.1	5.6	44.64	25720	48600	22880	1.89	23040	30800	7760	1.34
Chickpea																		
	ICM	Variety	Phule Vikram	25	10	20	12.5	15.1	10.55	43.13	37539	85050	47511	2.26	29490	53750	24260	1.82

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

\*\* BCR= GROSS RETURN/GROSS COST

**FLD on Other crops**

Category & Crop	Thematic Area	Name of the technology	No. of Farmers	Area (ha)	Yield (q/ha)					% Change in Yield	Other Parameters		Economics of demonstration (Rs./ha)					Economics of check (Rs./ha)				
					Demo			Check	Demo		Check	Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C )	Gross Cost	Gross Return	Net Return	BCR (R/C )	
					High	Low	Average															
Cereals																						
Paddy																						
Paddy	INM	Fourfold Technology	50	10	50	35	39.30	30.45	28.74	1. No. of tillers: 27 2. Length of earhead: 16 cm	1. No. of tillers: 18 2. Length of earhead: 13 cm	39150	90160	51010	2.30	32970	63945	30976	1.94			
Paddy-STCR	INM	STCR technology	30	6	52.5	45	48.51	37.73	28.57	No.of tillers – 13	No.of tillers – 10	71519	130995	59476	1.83	66543	101880	35336	1.53			
Millets																						
Finger millet																						
Finger millet - STCR	INM	STCR technology	20	4	17.5	12	15.48	9.5	63.02	No. of Fingers – 5	No.of tillers – 2	18300	46462	28162	2.53	17058	28500	11441	1.67			
Vegetables																						
Onion																						
Onion-STCR	INM	STCR technology	20	4	110	95	98	85.25	14.95	Weight of bulb - 127gm	Weight of bulb- 91gm	49959	147000	97040	2.94	59070	127875	68805	2.16			
Onion	Crop Production	Variety ALR	82	10	320	250	276	216	27.78	Bulb Weight - 148 gm Dimeter of bulb – 5.32 cm	Bulb Weight - 118 gm Dimeter of bulb – 5.2 cm	53926	199759	79247	1.47	58111	193551	70922	3.7			
<b>Spices &amp; condiments</b>																						
Garlic																						
Garlic	Crop Production	Variety Yamuna Safed (G-284)	80	0.4	68	42	57	50	14	Weight of bulb -68 gm Diameter of bulb – 3.9 cm No of Cloves-25	Weight of bulb-41gm Diameter of bulb – 2.1 cm No of Cloves-18	247447	684894	437447	1.77	205026	420647	215621	2.76			

### Frontline Demonstration on Nutri cereals

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)				
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)	
						High	Low	Average			Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)	
NIL																			

### FLD on Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No.of Units (Animal/ Poultry/ Birds, etc)	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Cattle																	
	Feed management	Improved fodder variety - Gunwant	10	5000	1211 ql/ha	912 ql/ha	32.79	Cost of production, Gross Income	Cost of production, Gross Income	17654	128657	111003	7.29	16954	96675	79721	5.70
Poultry																	
	Poultry farming	Introduction of Black Australorp breed for backyard.	25	475	1.258 Kg/Bird	0.736 Kg/Bird	70.92	Cost of production, Gross Income	Cost of production, Gross Income	161	276.76	115.76	1.72	142	184	42	1.30
Sheep & Goat																	
	Goat farming	Pure Osmanabadi Goats for higher productions and upgradation of local breeds	10	11 (10 females+1 males common)	28.34 Kg	18.26 Kg	55.20	Cost of production, Gross Income	Cost of production, Gross Income	2684	7652	4968	2.85	2888	4931	2043	1.71

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

\*\* BCR= GROSS RETURN/GROSS COST

### FLD on Other enterprises

Category	Name of the technology demonstrated	No. of Farmer	No.of units	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.) or Rs./unit				Economics of check (Rs.) or Rs./unit			
				Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Oyster Mushroom																
NIL																

### FLD on Women Empowerment

Category	Name of technology	No. of demonstrations	Name of observations	Demonstration	Check
Super Grain Bag	To demonstration of Save Grain Bags to prevent store grain pests during storage	50	1. Percentage of grain damage 2. Shelf life of grain	9 % Increase	26% Decrease

**FLD on Farm Implements and Machinery**

Name of the implement	Crop	Technology demonstrated	No. of Farmer	Area (ha)	Major parameters	Field observation (output/man hour)		% change in major parameter	Labor reduction (man days)				Cost reduction (Rs./ha or Rs./Unit etc.)			
						Demo	Check		Land preparation	Sowing	Weeding	Total	Land preparation	Labour	Irrigation	Total
BBF Planter	Soybean	BBF Planter for insitu moisture conservation in Kharif	10	04	Yield (Q/ha)	21.3	18.10	(+) 17.68		04			04	Rs.580/ ha		Rs.580/ ha
						Cost of sowing (Rs /ha)	2840	3420	(-)16.90							
						Seed rate(Kg/ha)	45	68	(-)23							
Vertical conveyor reaper	paddy	Merchandised Harvesting of paddy for marginal farmers	10	04	Labour (nos.)	2.00	8.00	(-)71.43			06 (Harvesting)		06	Rs.1810 /ha		Rs.1810/ha
						Output (ha/day)	1.95	0.49	(+)297							
						Cost (Rs./ha)	1140	2950	(-)61.35							
Groundnut Decorticator	Ground nut	To study the efficiency of Groundnut Decorticator	30	70 hrs	Labour	2	5	(-)60%			(for decortication ) 03		(for decortication ) 03			
						Time	48kg/h	31kg/h	(-)54%							
						Cost	22/q	99/q	(-)77.7%					Rs.77/q		Rs.77/q
Vaibhav Sickles	Paddy		50	2 ha	Area covered by harvesting /day	0.80 ha	0.5 ha	(+)60%								
						Cost of operation Rs/ha	1400	1900	(-)26.31%					For Harvesting Rs.500/ha		(For Harvesting) 500 Rs/Ha
						Labour day/ha	7	11	(-)36%		(for Harveting) 4	(for Harveting) 4				

\*\*\*Saving is small due to higher cost of implement & operation compared to traditional method. However, the output is higher with better crop stand.

### FLD on Other Enterprise: Kitchen Gardening

Nutrition garden components	Thematic area	Area (sq mt)	No. of Farmer	No. of Units	Yield (Kg)- supply of vegetables, fruits, etc from KG in the year		% change in yield	Household size (number)		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demonstration	Check*		Demo	Check	Gross Cost	Gross Return/ Savings *	Net Return	BCR (R/C)	Gross Cost	Gross Return/ Savings *	Net Return	BCR (R/C)
Vegetable seed Kit	Household food security by kitchen gardening and nutrition gardening	100	30	30	250	155	61	50	50	1300	5100	3800	3	1000	2400	1400	1.4

\*check maybe family adopting different Nutrition garden model/ no adoption of Nutrition garden model

Savings from produce of Nutrition garden used for home consumption

**3.4. Training Programmes(Online programmes if any should be included under On Campus category)**

**Farmers' Training including sponsored training programmes (on campus)**

Thematic area	No. of courses	Participants									
		Others			SC/ST			Grand Total			
		Male	Female	Total	Male	Female	Total	Male	Female	Total	
I Crop Production	-	-	-	-	-	-	-	-	-	-	
<b>Total</b>	-	-	-	-	-	-	-	-	-	-	
II Horticulture											
a) Vegetable Crops											
Post Harvest Management	2	17	9	26	0	0	0	17	9	36	
Processing & Value Addition	1	4	3	7	2	1	3	6	4	0	
<b>Total (a)</b>	<b>3</b>	<b>21</b>	<b>12</b>	<b>33</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>23</b>	<b>13</b>	<b>36</b>	
b) Fruits	-	-	-	-	-	-	-	-	-	-	
c) Ornamental Plants	-	-	-	-	-	-	-	-	-	-	
d) Plantation crops											
Processing and value addition	6	34	39	73	7	6	13	41	45	86	
<b>Total (d)</b>	<b>6</b>	<b>34</b>	<b>39</b>	<b>73</b>	<b>7</b>	<b>6</b>	<b>13</b>	<b>41</b>	<b>45</b>	<b>86</b>	
e) Tuber crops	-	-	-	-	-	-	-	-	-	-	
f) Spices	-	-	-	-	-	-	-	-	-	-	
g) Medicinal and Aromatic Plants											
Post harvest technology and value addition	1	8	3	11	2	6	8	10	9	19	
<b>Total (g)</b>	<b>1</b>	<b>8</b>	<b>3</b>	<b>11</b>	<b>2</b>	<b>6</b>	<b>8</b>	<b>10</b>	<b>9</b>	<b>19</b>	
<b>Grand Total (a to g)</b>	<b>10</b>	<b>63</b>	<b>54</b>	<b>117</b>	<b>11</b>	<b>13</b>	<b>24</b>	<b>74</b>	<b>67</b>	<b>141</b>	
III Soil Health and Fertility Management											
Production and use of organic inputs	1	25	0	25	0	0	0	25	0	25	
<b>Total</b>	<b>1</b>	<b>25</b>	<b>0</b>	<b>25</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>25</b>	<b>0</b>	<b>25</b>	
IV Livestock Production and Management											
Poultry Management	2	17	3	20	116	85	201	133	88	221	
Animal Nutrition Management	1	14	11	25	8	6	14	22	17	39	
<b>Total</b>	<b>3</b>	<b>31</b>	<b>14</b>	<b>45</b>	<b>124</b>	<b>91</b>	<b>215</b>	<b>155</b>	<b>105</b>	<b>260</b>	
V Home Science/Women empowerment											
Value addition	6	55	26	81	45	155	200	100	181	281	
Income generation activity for women	1	0	0	0	1	51	52	1	51	52	
<b>Total</b>	<b>7</b>	<b>55</b>	<b>26</b>	<b>81</b>	<b>46</b>	<b>206</b>	<b>252</b>	<b>101</b>	<b>232</b>	<b>333</b>	
VI Agril. Engineering	-	-	-	-	-	-	-	-	-	-	
VII Plant Protection	-	-	-	-	-	-	-	-	-	-	
VIII Fisheries	-	-	-	-	-	-	-	-	-	-	
IX Production of Inputs at site	-	-	-	-	-	-	-	-	-	-	
X CapacityBuilding and Group Dynamics											
Entrepreneurial development of farmers/youths	1	11	18	29	4	7	11	15	25	40	
<b>Total</b>	<b>1</b>	<b>11</b>	<b>18</b>	<b>29</b>	<b>4</b>	<b>7</b>	<b>11</b>	<b>15</b>	<b>25</b>	<b>40</b>	
XI Agro-forestry	-	-	-	-	-	-	-	-	-	-	
<b>GRAND TOTAL</b>	<b>22</b>	<b>185</b>	<b>112</b>	<b>297</b>	<b>185</b>	<b>317</b>	<b>502</b>	<b>370</b>	<b>429</b>	<b>799</b>	

**Farmers' Training including sponsored training programmes (off campus)**

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>I Crop Production</b>										
Integrated Crop Management	5	4	0	4	154	39	193	158	39	197
Integrated nutrient management	1	18	0	18	3	0	3	21	0	21
<b>Total</b>	<b>6</b>	<b>22</b>	<b>0</b>	<b>22</b>	<b>157</b>	<b>39</b>	<b>196</b>	<b>179</b>	<b>39</b>	<b>218</b>
<b>II Horticulture</b>										
<b>a) Vegetable Crops</b>										
Cultivation & management	1	12	8	20	7	2	9	19	10	29
<b>Total (a)</b>	<b>1</b>	<b>12</b>	<b>8</b>	<b>20</b>	<b>7</b>	<b>2</b>	<b>9</b>	<b>19</b>	<b>10</b>	<b>29</b>
<b>b) Fruits</b>	-	-	-	-	-	-	-	-	-	-
Layout and Management of Orchards	1	0	0	0	22	5	27	22	5	27
Cultivation of Fruit	3	2	1	3	133	25	158	135	26	161
Plant propagation techniques	1	0	0	0	22	0	22	22	0	22
<b>Total (b)</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>177</b>	<b>30</b>	<b>207</b>	<b>179</b>	<b>31</b>	<b>210</b>
<b>c) Ornamental Plants</b>	-	-	-	-	-	-	-	-	-	-
<b>d) Plantation crops</b>										
Processing and value addition	1	2	1	3	45	12	57	47	13	60
<b>Total (d)</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>45</b>	<b>12</b>	<b>57</b>	<b>47</b>	<b>13</b>	<b>60</b>
<b>e) Tuber crops</b>	-	-	-	-	-	-	-	-	-	-
<b>f) Spices</b>	-	-	-	-	-	-	-	-	-	-
<b>g) Medicinal and Aromatic Plants</b>	-	-	-	-	-	-	-	-	-	-
<b>Grand Total (a to g)</b>	<b>7</b>	<b>16</b>	<b>10</b>	<b>26</b>	<b>229</b>	<b>44</b>	<b>273</b>	<b>245</b>	<b>54</b>	<b>299</b>
<b>III Soil Health and Fertility Management</b>										
Integrated Nutrient Management	3	101	0	101	68	9	77	169	9	178
Production and use of organic inputs	1	32	0	32	0	0	0	32	0	32
<b>Total</b>	<b>4</b>	<b>133</b>	<b>0</b>	<b>133</b>	<b>68</b>	<b>9</b>	<b>77</b>	<b>201</b>	<b>9</b>	<b>210</b>
<b>IV Livestock Production and Management</b>										
Dairy Management	3	30	7	37	35	21	56	65	28	93
Poultry Management	1	18	3	21	11	0	11	29	3	32
Animal Nutrition Management	4	36	9	45	34	7	41	70	16	86
Disease Management	1	18	11	29	9	3	12	27	14	41
Feed & fodder technology	-	-	-	-	-	-	-	-	-	-
Production of quality animal products	2	24	14	38	35	18	53	59	32	91
<b>Total</b>	<b>11</b>	<b>126</b>	<b>44</b>	<b>170</b>	<b>124</b>	<b>49</b>	<b>173</b>	<b>250</b>	<b>93</b>	<b>343</b>
<b>V Home Science/Women empowerment</b>										
Household food security by kitchen gardening and nutrition gardening	2	0	0	0	5	66	71	5	66	71
Designing and development for high nutrient efficiency diet	1	0	0	0	0	24	24	0	24	24
Processing and cooking	1	0	0	0	0	46	46	0	46	46
Value addition	4	8	19	27	35	113	148	43	132	175
Women and child care	1	0	0	0	14	17	31	14	17	31
Income Generation Activity for Women	1	0	0	0	0	41	41	0	41	41
<b>Total</b>	<b>10</b>	<b>8</b>	<b>19</b>	<b>27</b>	<b>54</b>	<b>307</b>	<b>361</b>	<b>62</b>	<b>326</b>	<b>388</b>
<b>VI Agril. Engineering</b>										
Farm Machinery and its maintenance	1	0	0	0	18	0	18	18	0	18
In situ Moisture Con.	2	26	0	26	32	9	41	58	9	67
<b>Total</b>	<b>3</b>	<b>26</b>	<b>0</b>	<b>26</b>	<b>50</b>	<b>9</b>	<b>59</b>	<b>76</b>	<b>9</b>	<b>85</b>
<b>VII Plant Protection</b>	-	-	-	-	-	-	-	-	-	-
<b>VIII Fisheries</b>	-	-	-	-	-	-	-	-	-	-
<b>IX Production of Inputs at site</b>	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	-	-	-	-	-	-	-	-	-	-
<b>X Capacity Building and Group Dynamics</b>										
Group dynamics	2	0	0	0	39	31	70	39	31	70
Entrepreneurial development of farmers/youths	1	0	0	0	21	22	43	21	22	43
<b>Total</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>60</b>	<b>53</b>	<b>113</b>	<b>60</b>	<b>53</b>	<b>113</b>
<b>XI Agro-forestry</b>										
<b>GRAND TOTAL</b>	<b>44</b>	<b>331</b>	<b>73</b>	<b>404</b>	<b>742</b>	<b>510</b>	<b>1252</b>	<b>1073</b>	<b>583</b>	<b>1656</b>

**Farmers' Training including sponsored training programmes – CONSOLIDATED (On + Off campus)**

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
<b>I Crop Production</b>										
Integrated Crop Management	5	4	0	4	154	39	193	158	39	197
Integrated nutrient management	1	18	0	18	3	0	3	21	0	21
<b>Total</b>	<b>6</b>	<b>22</b>	<b>0</b>	<b>22</b>	<b>157</b>	<b>39</b>	<b>196</b>	<b>179</b>	<b>39</b>	<b>218</b>
<b>II Horticulture</b>										
<b>a) Vegetable Crops</b>										
Post Harv Mgmt	2	17	9	26	0	0	0	17	9	36
Cultivation & management	1	12	8	20	7	2	9	19	10	29
<b>Total (a)</b>	<b>4</b>	<b>33</b>	<b>20</b>	<b>53</b>	<b>9</b>	<b>3</b>	<b>12</b>	<b>42</b>	<b>23</b>	<b>65</b>
<b>b) Fruits</b>										
Layout and Management of Orchards	1	0	0	0	22	5	27	22	5	27
Cultivation of Fruit	3	2	1	3	133	25	158	135	26	161
Plant propagation techniques	1	0	0	0	22	0	22	22	0	22
<b>Total (b)</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>177</b>	<b>30</b>	<b>207</b>	<b>179</b>	<b>31</b>	<b>210</b>
<b>c) Ornamental Plants</b>										
<b>d) Plantation crops</b>										
Processing and value addition	7	36	40	76	52	18	70	88	58	146
<b>Total (d)</b>	<b>7</b>	<b>36</b>	<b>40</b>	<b>76</b>	<b>52</b>	<b>18</b>	<b>70</b>	<b>88</b>	<b>58</b>	<b>146</b>
<b>e) Tuber crops</b>										
<b>f) Spices</b>										
<b>g) Medicinal and Aromatic Plants</b>										
Post harvest technology and value addition	1	8	3	11	2	6	8	10	9	19
<b>Total (g)</b>	<b>1</b>	<b>8</b>	<b>3</b>	<b>11</b>	<b>2</b>	<b>6</b>	<b>8</b>	<b>10</b>	<b>9</b>	<b>19</b>
<b>Grand Total (a to g)</b>	<b>17</b>	<b>79</b>	<b>64</b>	<b>143</b>	<b>240</b>	<b>57</b>	<b>297</b>	<b>319</b>	<b>121</b>	<b>440</b>
<b>III Soil Health and Fertility Management</b>										
Integrated Nutrient Management	3	101	0	101	68	9	77	169	9	178
Production and use of organic inputs	2	57	0	57	0	0	0	57	0	57
<b>Total</b>	<b>5</b>	<b>158</b>	<b>0</b>	<b>158</b>	<b>68</b>	<b>9</b>	<b>77</b>	<b>226</b>	<b>9</b>	<b>235</b>
<b>IV Livestock Production and Management</b>										
Dairy Management	3	30	7	37	35	21	56	65	28	93
Poultry Management	3	35	6	41	127	85	212	162	91	253
Animal Nutrition Management	5	50	20	70	42	13	55	92	33	125
Disease Management	1	18	11	29	9	3	12	27	14	41
Production of quality animal products	2	24	14	38	35	18	53	59	32	91
<b>Total</b>	<b>14</b>	<b>157</b>	<b>58</b>	<b>215</b>	<b>248</b>	<b>140</b>	<b>388</b>	<b>405</b>	<b>198</b>	<b>603</b>
<b>V Home Science/Women empowerment</b>										
Household food security by kitchen gardening and nutrition gardening	2	0	0	0	5	66	71	5	66	71
Designing and development for high nutrient efficiency diet	1	0	0	0	0	24	24	0	24	24
Processing and cooking	1	0	0	0	0	46	46	0	46	46
Value addition	10	63	45	108	80	268	348	143	313	456
Women and child care	1	0	0	0	14	17	31	14	17	31
Income Generation Activity for Women	2	0	0	0	1	92	93	1	92	93
<b>Total</b>	<b>17</b>	<b>63</b>	<b>45</b>	<b>108</b>	<b>100</b>	<b>513</b>	<b>613</b>	<b>163</b>	<b>558</b>	<b>721</b>
<b>VI Agril. Engineering</b>										
Farm Machinery and its maintenance	1	0	0	0	18	0	18	18	0	18
Insitu Moisture Con.	2	26	0	26	32	9	41	58	9	67
<b>Total</b>	<b>3</b>	<b>26</b>	<b>0</b>	<b>26</b>	<b>50</b>	<b>9</b>	<b>59</b>	<b>76</b>	<b>9</b>	<b>85</b>
<b>X Capacity Building and Group Dynamics</b>										
Group dynamics	2	0	0	0	39	31	70	39	31	70
Entrepreneurial development of farmers/youths	2	11	18	29	25	29	54	36	47	83
<b>Total</b>	<b>4</b>	<b>11</b>	<b>18</b>	<b>29</b>	<b>64</b>	<b>60</b>	<b>124</b>	<b>75</b>	<b>78</b>	<b>153</b>
<b>GRAND TOTAL</b>	<b>66</b>	<b>516</b>	<b>185</b>	<b>701</b>	<b>927</b>	<b>827</b>	<b>1754</b>	<b>1443</b>	<b>1012</b>	<b>2455</b>

**Training for Rural Youths including sponsored training programmes (On campus)**

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
Nursery Management of Horticulture crops	3	62	12	74	36	6	42	98	18	116
Seed production	2	74	25	99	22	7	29	96	32	128
Mushroom Production	3	24	8	32	4	66	70	28	74	102
Bee-keeping	2	24	27	51	0	3	3	24	30	54
Value addition	1	5	6	11	2	1	3	7	7	14
Production of quality animal products	1	24	11	35	17	9	26	41	20	61
Sheep and goat rearing	1	10	1	11	13	1	14	23	2	25
Para extn workers	4	126	57	183	0	0	0	126	57	183
Soil Health Mgmt	1	34	3	37	4	4	8	38	7	45
<b>TOTAL</b>	<b>18</b>	<b>383</b>	<b>150</b>	<b>533</b>	<b>98</b>	<b>97</b>	<b>195</b>	<b>481</b>	<b>247</b>	<b>728</b>

**Training for Rural Youths including sponsored training programmes (Off campus)**

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
Protected cultivation of vegetable crops	1	10	4	14	4	2	6	14	6	20
Post Harvest Technology	1	42	28	70	16	7	23	58	35	93
Production of quality animal products	1	0	0	0	38	13	51	38	13	51
Sheep and goat rearing	3	25	3	28	85	41	126	110	44	154
<b>TOTAL</b>	<b>6</b>	<b>77</b>	<b>35</b>	<b>112</b>	<b>143</b>	<b>63</b>	<b>206</b>	<b>220</b>	<b>98</b>	<b>318</b>

**Training for Rural Youths including sponsored training programmes – CONSOLIDATED (On + Off campus)**

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
Nursery Management of Horticulture crops	3	62	12	74	36	6	42	98	18	116
Protected cultivation of vegetable crops	1	10	4	14	4	2	6	14	6	20
Seed production	2	74	25	99	22	7	29	96	32	128
Mushroom Production	3	24	8	32	4	66	70	28	74	102
Bee-keeping	2	24	27	51	0	3	3	24	30	54
Value addition	1	5	6	11	2	1	3	7	7	14
Small scale processing	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	1	42	28	70	16	7	23	58	35	93
Production of quality animal products	2	24	11	35	55	22	77	79	33	112
Dairying	0	0	0	0	0	0	0	0	0	0
Sheep and goat rearing	4	35	4	39	98	42	140	133	46	179
Para extn workers	4	126	57	183	0	0	0	126	57	183
Soil Health Mgmt	1	34	3	37	4	4	8	38	7	45
<b>TOTAL</b>	<b>24</b>	<b>460</b>	<b>185</b>	<b>645</b>	<b>241</b>	<b>160</b>	<b>401</b>	<b>701</b>	<b>345</b>	<b>1046</b>

**Training programmes for Extension Personnel including sponsored training (on campus)**

Area of training	No. of Courses	No. of Participants									
		General/ Others			SC/ST			Grand Total			
		M	F	T	M	F	T	M	F	T	
Productivity enhancement in field crops	9	112	58	170	65	23	88	177	81	258	
Protected cultivation technology	7	155	41	196	13	6	19	168	47	215	
Production and use of organic inputs	1	1	1	2	6	36	42	7	37	44	
Care and maintenance of farm machinery and implements	1	24	5	29	0	0	0	24	5	29	
Capacity building for ICT application	1	18	15	33	0	0	0	18	15	33	
Micro Irrigation/irrigation	1	15	4	19	3	2	5	18	6	24	
Nursery Management	1	3	2	5	9	18	27	12	20	32	
Value Addition	4	17	24	41	46	87	133	63	111	174	
<b>TOTAL</b>	<b>25</b>	<b>345</b>	<b>150</b>	<b>495</b>	<b>142</b>	<b>172</b>	<b>314</b>	<b>487</b>	<b>322</b>	<b>809</b>	

**Training programmes for Extension Personnel including sponsored training (off campus)**

Area of training	No. of Courses	No. of Participants									
		General/ Others			SC/ST			Grand Total			
		M	F	T	M	F	T	M	F	T	
Productivity enhancement in field crops	1	20	1	21	18	0	18	38	1	39	
Integrated Nutrient management	6	129	56	185	0	0	0	129	56	185	
Women and Child care	1	0	7	7	0	21	21	0	28	28	
Capacity building for ICT application	2	64	19	83	0	0	0	64	19	83	
Management in farm animals	2	42	3	45	30	1	31	72	4	76	
Household food security	1	1	2	3	0	40	40	1	42	43	
Crop Production	4	50	30	80	23	15	38	73	45	118	
Nursery Management	3	69	21	90	25	13	38	94	34	128	
Processing and Value addition	4	59	17	76	24	42	66	83	59	142	
<b>TOTAL</b>	<b>24</b>	<b>434</b>	<b>156</b>	<b>590</b>	<b>120</b>	<b>132</b>	<b>252</b>	<b>554</b>	<b>288</b>	<b>842</b>	

**Training programmes for Extension Personnel including sponsored training CONSOLIDATED (On + Off campus)**

Area of training	No. of Courses	No. of Participants									
		General/ Others			SC/ST			Grand Total			
		M	F	T	M	F	T	M	F	T	
Productivity enhancement in field crops	10	132	59	191	83	23	106	215	82	297	
Integrated Nutrient management	6	129	56	185	0	0	0	129	56	185	
Protected cultivation technology	7	155	41	196	13	6	19	168	47	215	
Production and use of organic inputs	1	1	1	2	6	36	42	7	37	44	
Care and maintenance of farm machinery and implements	1	24	5	29	0	0	0	24	5	29	
Women and Child care	1	0	7	7	0	21	21	0	28	28	
Capacity building for ICT application	3	82	34	116	0	0	0	82	34	116	
Management in farm animals	2	42	3	45	30	1	31	72	4	76	
Household food security	1	1	2	3	0	40	40	1	42	43	
Nursery Management	4	72	23	95	34	31	65	106	54	160	
Micro Irrigation/irrigation	1	15	4	19	3	2	5	18	6	24	
Value Addition	4	17	24	41	46	87	133	63	111	174	
Crop Production	4	50	30	80	23	15	38	73	45	118	
Processing and Value addition	4	59	17	76	24	42	66	83	59	142	
<b>TOTAL</b>	<b>49</b>	<b>779</b>	<b>306</b>	<b>1085</b>	<b>262</b>	<b>304</b>	<b>566</b>	<b>1041</b>	<b>610</b>	<b>1651</b>	

### Sponsored training programmes

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
<b>Crop production and management</b>										
Productivity enhancement in field crops	10	132	59	191	83	23	106	215	82	297
Integrated Crop Management	1	8	0	8	34	24	58	42	24	66
Micro Irrigation Technology	1	15	4	19	3	2	5	18	6	24
<b>Total</b>	<b>12</b>	<b>155</b>	<b>63</b>	<b>218</b>	<b>120</b>	<b>49</b>	<b>169</b>	<b>275</b>	<b>112</b>	<b>387</b>
<b>Production and value addition</b>										
Fruit Plants										
Cultivation of fruit	2	5	1	6	99	12	111	104	13	117
Fruit Layout & Mgmt of Orchards	1	0	0	0	22	5	27	22	5	27
Fruit Plant prop tech	1	0	0	0	22	0	22	22	0	22
Ornamental plants	-	-	-	-	-	-	-	-	-	-
Spices crops	-	-	-	-	-	-	-	-	-	-
Others										
Crop Production	4	50	30	80	23	15	38	73	45	118
Nursery Mgmt	4	72	23	95	34	31	65	106	54	160
Protected Cultivation Of Vegetable Crop	4	63	18	81	17	8	25	80	26	106
Med & Aro Post harvest Technology & value add	1	8	3	11	2	6	8	10	9	19
Plantation Crop Processing & value addition	11	87	59	146	80	42	122	167	101	268
Vegetable cultivation & Management	1	12	8	20	7	2	9	19	10	29
Vegetable Post Harvest Mgmt	2	17	9	26	0	0	0	17	9	26
Post Harvest Technology	1	42	28	70	16	7	23	58	35	93
Fruit & Vegetable Processing Technology	1	4	3	7	2	1	3	6	4	10
<b>Total</b>	<b>33</b>	<b>360</b>	<b>182</b>	<b>542</b>	<b>324</b>	<b>129</b>	<b>453</b>	<b>684</b>	<b>311</b>	<b>995</b>
<b>Soil health and fertility management</b>										
Integrated Nutrient Management	7	230	56	286	0	0	0	230	56	286
Production and use of organic inputs	2	57	0	57	0	0	0	57	0	57
<b>Total</b>	<b>9</b>	<b>287</b>	<b>56</b>	<b>343</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>287</b>	<b>56</b>	<b>343</b>
<b>Post harvest technology and value addition</b>	-	-	-	-	-	-	-	-	-	-
<b>Farm machinery</b>										
Improved Farm Machinery & Implements	1	24	5	29	0	0	0	24	5	29
Protected Cultivation Technology	3	80	21	101	0	0	0	80	21	101
<b>Total</b>	<b>4</b>	<b>104</b>	<b>26</b>	<b>130</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>104</b>	<b>26</b>	<b>130</b>
<b>Livestock and fisheries</b>										
Animal Nutrition Management	1	13	0	13	1	0	1	14	0	14
Animal Disease Management	1	18	11	29	9	3	12	27	14	41
Management In Farm Animals	2	42	3	45	30	1	31	72	4	76
Production Of Animal Product	3	48	25	73	63	22	85	111	47	158
<b>Total</b>	<b>7</b>	<b>121</b>	<b>39</b>	<b>160</b>	<b>103</b>	<b>26</b>	<b>129</b>	<b>224</b>	<b>65</b>	<b>289</b>
<b>Home Science</b>										
Value Addition	10	87	55	142	98	243	341	185	298	483
<b>Total</b>	<b>10</b>	<b>87</b>	<b>55</b>	<b>142</b>	<b>98</b>	<b>243</b>	<b>341</b>	<b>185</b>	<b>298</b>	<b>483</b>
<b>Agricultural Extension</b>										
Capacity building for ICT application	3	82	34	116	0	0	0	82	34	116
<b>Total</b>	<b>3</b>	<b>82</b>	<b>34</b>	<b>116</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>82</b>	<b>34</b>	<b>116</b>
<b>GRAND TOTAL</b>	<b>78</b>	<b>1196</b>	<b>455</b>	<b>1651</b>	<b>645</b>	<b>447</b>	<b>1092</b>	<b>1841</b>	<b>902</b>	<b>2743</b>

**Details of vocational training programmes carried out by KVKS for rural youth (4 or more days)**

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
<b>Crop production and management</b>										
Nursery Management of Horticultural Crop	1	16	4	20	13	1	14	29	5	34
Value addition	1	5	6	11	2	1	3	7	7	14
<b>Total</b>	<b>2</b>	<b>21</b>	<b>10</b>	<b>31</b>	<b>15</b>	<b>2</b>	<b>17</b>	<b>36</b>	<b>12</b>	<b>48</b>
<b>Post harvest technology and value addition</b>	-	-	-	-	-	-	-	-	-	-
<b>Livestock and fisheries</b>										
Sheep and goat rearing	1	10	1	11	13	1	14	23	2	25
<b>Total</b>	<b>1</b>	<b>10</b>	<b>1</b>	<b>11</b>	<b>13</b>	<b>1</b>	<b>14</b>	<b>23</b>	<b>2</b>	<b>25</b>
<b>Income generation activities</b>										
Seed production	1	54	13	67	8	3	11	62	16	78
Mushroom Production	1	4	3	7	0	42	42	4	45	49
<b>Total</b>	<b>2</b>	<b>58</b>	<b>16</b>	<b>74</b>	<b>8</b>	<b>45</b>	<b>53</b>	<b>66</b>	<b>61</b>	<b>127</b>
<b>Agricultural Extension</b>	-	-	-	-	-	-	-	-	-	-
<b>Grand Total</b>	<b>5</b>	<b>89</b>	<b>27</b>	<b>116</b>	<b>36</b>	<b>48</b>	<b>84</b>	<b>125</b>	<b>75</b>	<b>200</b>

### 3.5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services (Other than KMAS)	23	458	0	458
Diagnostic visits	12	211	8	219
Field Day	9	294	2	296
Group discussions	3	14	15	29
KisanGosthi	5	287	11	298
Film Show	-	-	-	-
Self -help groups	-	-	-	-
KisanMela	6	1607	79	1686
Exhibition	5	2423	45	2468
Scientists' visit to farmers field	28	487	27	514
Plant/animal health camps	1	134	0	134
Farm Science Club	-	-	-	-
Ex-trainees Sammelan	-	-	-	-
Farmers' seminar/workshop	35	1007	406	1413
Method Demonstrations	2	35	0	35
Celebration of important days	11	1164	114	1278
Special day celebration	1	39	0	39
Exposure visits	6	97	6	103
Others (pl.specify)	-	-	-	-
Farmers visit to kvk	69	1945	429	2374
Special Events	9	360	66	426
Lecture Delivered	10	522	17	539
<b>Total</b>	<b>235</b>	<b>11084</b>	<b>1225</b>	<b>12309</b>

Note- Advisory services includes social media, website, telephonic calls etc.

#### Details of other extension programmes:

Particulars	Number
Electronic Media (CD./DVD)	4
Extension Literature	2
Newspaper coverage	12
Popular articles	1
Radio Talks	8
TV Talks	1
Animal health camps (Number of animals treated)	272
Social Media (No. of platforms Used)	4
Others (pl. specify)	0
<b>Total</b>	<b>304</b>

**3.6 Online activities during year 2022**

S. No .	Activity Type	Mode of implementation (Video conferencing / Audio Conferencing / Facebook Live / YouTube Live/ Zoom/ Google meet/ Webex etc.)	Title of Program	No. of Programmes	No. of Participants/ Views
A	Farmers training				
1.		Online	Capsicum production under protected condition	1	24
2.		Online	Cucumber production under protected condition	1	22
3.		Online	Dehydration of fruits & Vegetables	3	62
4.		Online	training on Horticulture Nursery Management	1	48
5.		Online	Fruit & Vegetable Processing technology	9	147
6.		Online	Training on fingermillet processing	3	104
7.		Online	Importance of Nutri Millets in human diet and its varies recipes	1	58
8.		Online	Training on Good Horticulture Practises for Better Marketing	1	27
9.		Online	Use of Bio fertilizer, Bio pesticides in crop production & multiplication in field	1	25
<b>Total</b>				<b>21</b>	<b>517</b>
B	Farmers scientist's interaction programme				
<b>Total</b>					
C	Farmers seminars				
1.		Online	Opportunities in fruit & Vegetable processing and value addition	11	634
2.		Online	Engineers Day celebration.. Opportunities in Agriculture for engineering interventions .	1	45
3.		Online	Lecture Fruit, Vegetable processing & Marketing	1	28
4.		Online	Strawberry production and post harvest management	1	62
<b>Total</b>				<b>14</b>	<b>769</b>
D	Expert lectures				
1		Online	Online programme on Quality Parameter of media used for propagation of nursery plants	1	19
2		Online	Use of bio agents in Pomegranate fruit crop	1	25
<b>Total</b>				<b>2</b>	<b>44</b>
E	Any other (Pl. specify)				
<b>Grand Total (A+B+C+D+E)</b>				<b>37</b>	<b>1330</b>

### 3.7.PRODUCTION OF SEED/PLANTING MATERIAL AND BIO-PRODUCTS

#### Production of seeds by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Quantity of seed (q)	Value (Rs)	Number of farmers
<b>Oilseeds</b>						
	Soybean	Phule Sangam		50	400000	Will be provided in Kharif 2023
<b>Total</b>				<b>50</b>	<b>400000</b>	

#### Production of planting materials by the KVK

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Fruits	Mango	Kesar		31038	2483040	Prepared in Kharif 2022 & will be sold during May-June 2023
	Mango	Ratna		4692	375360	
	Mango	Sindhu		1404	112320	
	Mango	Hapus		239	19120	
	Mango	Pairi		647	51760	
	Mango	Banganpalli		1346	107680	
	Mango	Dudhpedha		308	24640	
	Guava	L-49		3015	180900	
	Licthi	Sahi		244	6100	
	Jackfruit	Kappa		538	26900	
Ornamental plants	Areca Palm			900	27000	
Medicinal and Aromatic	Tulsi			100	3000	
Plantation	Coconut			428	42800	
Forest Species	Ashoka			1000	30000	
	Silver oak			500	15000	
<b>Total</b>				<b>46399</b>	<b>3505620</b>	

#### Production of Bio-Products

Bio Products	Name of the bio-product	Quantity	Value (Rs.)	No. of Farmers
		Kg/Lit		
<b>Bio- Fertilizers</b>	Yash-Rhizojapo	8	1600	
	Yash- Rhizolego	13	2600	
	Yash-Azeto	165.5	33100	
	Yash-PSB	347	69400	
	Yash-KMB	346.5	69300	
	Yash-Aceto	1	200	
	Yash-Azospi	77	15400	
	Yash-Biozinc	14	2800	
	Yash-Pseudo	327	65400	
	Yash-Bacillus	149	29800	
<b>Bio- Fungicides</b>	Yash-Trichoplain	800.5	160100	
	Yash-Trichotriple	1	200	
	Yash-Trichoplus	00	00	
	Yash-Beaveria	326	65200	
	Yash-Vertim	369	73800	
<b>Bio- pesticides</b>	Yash-Pacilo	70	14000	
	Yash- Metarhzium	25.5	5100	
	Yash-Namoria	8	1600	
		<b>3048</b>	<b>609600</b>	

**Production of livestock materials**

Particulars of Live stock	Name of the animal / bird / aquatics	Name of the breed	Type of Produce	unit (no./ lit/kg)	Quantity	Value (Rs.)	No. of Farmers
<b>Goat</b>							
	Osmanabadi	Osmanabadi	Meat	710 Kg	27	248500	25
<b>Poultry</b>							
Broilers	Backyard Poultry	Black Australorp	Meat	781 nos.	781 nos.	54670	177
<b>Total</b>						<b>303170</b>	<b>202</b>

#### **4. Literature Developed/Published (with full title, author & reference)**

**A. KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.): -**

**B. Literature developed/published**

Item	Title	Authors name	Number
Research papers			
Technical reports			
News letters			
Technical bulletins			
Popular articles	KVK Nursery: Providing guanine planting material to farmers	Dr. Niteen Thoke	1
Extension literature	Use of Bio-control agents for crop protection	Mr. Mangesh Vyawahare	1
	Use of Bio-Fertilizers for crop production	Mr. Mangesh Vyawahare	1
<b>TOTAL</b>			<b>3</b>

#### **C. Details of Electronic Media Produced**

S. No.	Type of media (CD / VCD / DVD/ Audio-Cassette)	Title of the programme	Number
1.	HD Short Film	Bee keeping enterprise at KVK	1
2.	HD Short Film	Goat and Poultry enterprise at KVK	1
3.	HD Short Film	Bio-agent production at KVK	1
5.	HD Short Film	Hi-tech Fruit Nursery at KVK	1

#### **D. Details of Social Media Platforms Created / Used**

S. No.	Type of social media platform	No of events (uploaded video/post/story etc.)	Title of social media	Number of Followers/Subscribers
1	YouTube Channel (no of video uploaded)	10-Video	YouTube	102 Subscribers
2	Facebook page/ Account (no of Post)	138 Post	Facebook	102 Followers
3	Mobile Apps	-	-	-
4	WhatsApp groups	18	WhatsApp	1937
5	Twitter Account	17 Tweets, 26 Retweets	Twitter	78 Followers

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

... Attached as Annexure

#### **E. Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year**

Village Behedpada from Tryambakeshwar taluk is having their *Bhajani Mandal*. Almost all the farmers participate in the *bhajans*. As per demand from the villagers, KVK provided mike and speakers to the *Bhajani mandal* with the help of donors. KVK convinced the Bhajani mandal members to aware other farmers about the KVK programmes, improved technology and importance of various improved technologies being implemented by the KVK during their gathering for *Bhajans*. It is very effective way to reach every farmer from the village. This platform has proved very effective for convincing the farmers for active participation of farmers in KVK programmes.

#### **F. Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs)**

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
01	Tulsi	Tulsi leaves	For treating throat infection
02	Neem	Neem leaves	Neem leaves are burnt to prevent mosquitoes
03	Mahua	Mahua flowers	To treat the cough

**5.1. Indicate the specific training need analysis tools/methodology followed for**

**A. Practicing Farmers**

- a)PRA survey
- b) Problem identified from Matrix
- c) Field level observations
- d) Farmer group discussions

**B. Rural Youth**

- a) PRA survey
- b) Problem identified from Matrix
- c) Field level observations
- d) Farmer group discussions

**C. In-service personnel**

- a)Discussion with the officials and filed staff
- b) As per the demand and schedule from RAMETI

**5.2. Indicate the methodology for identifying OFTs/FLDs**

**For OFT:**

- i) PRA
- ii) Problem identified from Matrix
- iii) Field level observations
- iv) Farmer group discussions

**For FLD:**

- i) New variety/technology
- ii) Poor yield at farmers level
- iii) Existing cropping system

**5.3. Field activities**

**i. Name of villages identified/adopted with block name (from which year) –**

Behedpada, Tal. Tryamabakeshwar (2021), Kadavaipada, Tal. Peth (2022)

**ii. No. of farm families selected per village : 50 Families/ Village**

**iii. No. of survey/PRA conducted : 1**

**iv. No. of technologies taken to the adopted villages: 11**

**v. Name of the technologies found suitable by the farmers of the adopted villages:**

Four Fold Technology, Bengalgram Cultivar Digvijay, Improved Onion Variety - NHRDF RED -3, Improved Garlic variety NHRDF RED -3, STCR in Paddy, STCR in Fingermillet, STCR in Onion, Vertical conveyor reaper, Pure Goat Breed- Osmanabadi, Goats feeding concentrates, Improved Desi Breed- Black Astralop., Mushroom production

**vi. Impact (production, income, employment, area/technological– horizontal/vertical)**

**vii. Constraints if any in the continued application of these improved technologies- Nil**

## 6. LINKAGES

### A. Functional linkage with different organizations

Sr.	Name of organization	Nature of Linkage
1.	Dept. of Agriculture	KVK Organized various training programmes for extension functionaries of the department in collaboration with the Department of Agriculture, ATMA programme.
2.	MPKV, Rahuri	Supply of seed material for FLD (O & P)
3.	Dr. B. S. K K Vidyapeeth, Dapoli	Supply of grafts, seedling of coconut, Sapota, etc.
4.	AIR, Nashik	Broadcasting various agricultural programmes for farmers
5.	NHRDF, Nashik	Supply of seed of latest variety of onion, garlic, and technical knowhow for establishing soil testing laboratory and training to farmers from outside states.
6.	News paper	Publicity to KVK activities, publishing the popular articles
7.	YCMOU, Nashik	Agricultural programmes through distance mode of education, financial help as & when required for the development of KVK.
8.	Dept. AH, Nashik	Data regarding Animals and training to farmers and youths
9.	NHM	Finance for establishing Hi- tech training cum demonstration projects
10.	CRIDA, Hyderabad	Source for improved technology in farm implements and machineries
11.	CIAE, Bhopal	Source for improved technology in farm implements and machineries/ Front line demonstration programmes.
12.	IISR, Bangalore	New techniques and OFT / FLD
13.	PD, Biocontrol Bangalore	Bio-control agents
14.	IARI Delhi	Bio-control agents
15.	MANAGE, Hyderabad	Management training HRD, Technical Scrutaining of ACAB participants
16.	NARM, Hyderabad	Training in advance techniques for HRD, FET
17.	CPDO, Mumbai	Authentic source for traditional poultry birds
18.	NCL, Pune	For mother culture of biofertilizers
19.	Dept. Fishery	Technical information and data of fisheries
20.	Dept. of Forest	Medicinal plant
21.	FDCM, Nashik	Social forestry development
22.	NIN, Hyderabad	Human Nutrition technology
22.	NHB	Workshop, Seminars, Training, Joint inspection of Subsidy scheme project , vegetable Nursery accreditation.
23	RAMETI	For training to extension functionaries
24	MCAER Pune	Tribal Nutrition program
25	Bosch trust	Tribal training program
27	Udyogwardhini Nashik	Online Training programme on fruit & Vegetable Processing
28	Shri Guruji Seva Prakalp Nashik	Farmers Training , field & diagnostic visit
29	ATMA, Nashik	participation in meeting, conducting training programmes and demonstration

### B. List 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.)
NIL			

### C. Details of linkage with ATMA

a) Is ATMA implemented in your district : Yes

#### If yes, role of KVK in preparation of SREP of the district

- Training to AES teams,
- AES-wise PRA survey of representative villages,
- AES-wise GAP and SWOT analysis,
- Overall preparation of SREP report

### Coordination activities between KVK and ATMA

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	No of Farmers attending
01	Meetings		7	1	252
02	Research projects				
03	Training programmes		4	1	217
04	Demonstrations				
05	Extension Programmes				
	KisanMela				
	Technology Week				
	Exposure visit				
	Exhibition		1	0	1124
	Soil health camps				
	Animal Health Campaigns				
	Others (Pl. specify)				
	Kisan Goshti		1	0	57
	Farmers Seminar		1		140
06	Publications				
	Video Films				
	Books				
	Book chapter				
	Extension Literature			2	512
	Pamphlets				
	Others (Pl. specify)				
07	Other Activities (Pl.specify)				
	Watershed approach				
	Integrated Farm Development				
	Agripreneurs development				

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

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

**E. Nature of linkage with National Fisheries Development Board**

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

**F. Details of linkage with RKVY**

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

**G. Details of linkage with PKVY (Paramparagat Krishi Vikas Yojana)**

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

**H. Details of linkage with NFSM**

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
1	CFLD Oilseed	Funding from NFSM through ATARI	215138	150000	65138/- against last year negative balance
2	CFLD Pulses	Funding from NFSM through ATARI	105032	180000	Closing balance (-)74968/-

**I. Details of linkage with SMAF (Sub-mission on Agroforestry)**

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

## **7. Convergence with other agencies and departments:**

Developmental programmes viz. Demonstrations, Training programmes, diagnostic visits, lecture delivered as experts, etc arranged with line departments and NGOs viz. State Department of Agriculture, ATMA, NHB, NHRDF, Zilla Parishad, Udyogvardhini, etc.

## **8. Innovative Farmers Meet**

Sl.No.	Particulars	Details
	Have you conducted Farm Innovators meet in your district?	No
	Brief report in this regard	

## **9. Farmers Field School (FFS)**

S. No	Thematic area	Title of the FFS	Budget proposed in Rs.	Expenditure	Brief report
			NIL		

### **10.1. Technical Feedback of the farmers about the technologies demonstrated and assessed:**

Technology Demonstrated	Feed Back
Onion variety ALR	Onion variety Agri found Light Red given higher yield than local variety. Average bulb size is good. Less percentage of joint onions. Bulbs are bigger in shape with tight skin and light red colour. Higher Storage life given Good Rate in Off Season.
Garlic variety Yamuna safed (G-9)	Garlic variety Yamuna safed (G-284) is attractive white colour with bold bulb size. Good market rate. Higher yield over to local variety. Resistance to disease and pests. Higher Storage life
1. Paddy: Fourfold Technology	The row to row and plant to plant distance maintained at 15-25cm, which helps good aeration and intercultural operation. The ash of rice husk and rice straw utilized in nursery and rice field which enhances the physical properties of soil. Green manuring of sunhemp supplied nitrogen to plants and enhances the physical properties of soil. The use of urea-DAP briquettes released nutrients slowly which fulfilled need of nutrition of plant up to growing stage
2. Soybean : Variety- Phule Sangam	The variety matured in 105-110 days with 30-35 qt/ha yield. The shape of seed found to be round with medium size and yellow in colour. The average of pods observed to be 47 per plant with 2.5 seeds per pod. It is found to be moderate resistance to stem fly, defoliators, pod borer, leaf folder and Bacterial Pustule, Charcoal Rot. The average protein percentage recorded 41 with 21 percent oil content.
3. Chickpea : Variety Phule Vikram + ICM	The variety matured in 105-110 days with 16-18 qt/ha yields in rainfed situation. The variety yields 35-40 qt/ha in irrigated situation and 20-22 qt/ha in late sown situation. The pods grow erect so it can be harvested by combine harvester. It is found to be resistance to wilt disease. The average pod size is medium.
4. Blackgram : Variety- AKU- 10-1	The variety matured in 70-75 days with 10-11 qt/ha yields. Tolerant to Mugbean Yellow Mosaic Virus (MYMV) and powdery mildew,

### **10.2. Technical Feedback from the KVK Scientists (Subject wise) to the research Institutions/universities:**

Technology Demonstrated	Feed Back
Introduction of Tractor operated pruned Grape Twine mulcher for in-situ mulching	Adjustable side discharge shall be additional facility to cater varied spacing. Cost of the machine need to be subsidies

**11. Technology Week celebration during 2022: No**

**12. Interventions on drought mitigation (if the KVK included in this special programme)**

**A. Introduction of alternate crops/varieties**

State	Crops/cultivars	Area (ha)	Number of beneficiaries
		NIL	

**B. Major area coverage under alternate crops/varieties**

Crops	Area (ha)	Number of beneficiaries
	NIL	

**C. Farmers-scientists interaction on livestock management**

State	Livestock components	Number of interactions	No. of participants
Maharashtra	Goat farm management	10	523
	Poultry farm management (Commercial Broiler+ Commercial Layer+ Backyard)	15	621
	Dairy farm management	01	32
<b>Total</b>		<b>26</b>	<b>1176</b>

**D. Animal health camps organized**

State	Number of camps	No.of animals	No.of farmers
Maharashtra	1	36	22
<b>Total</b>	<b>1</b>	<b>36</b>	<b>22</b>

**E. Seed distribution in drought hit states (Seed distribution/sold by KVK)**

State	Crops	Quantity (qtl)	Coverage of area (ha)	Number of farmers
	Soybean	1250	20	50
	Chickpea	500	10	25
	Blackgram	125	10	25
<b>Total</b>		<b>1875</b>	<b>40</b>	<b>100</b>

**F. Large scale adoption of resource conservation technologies**

State	Crops/cultivars and gist of resource conservation technologies introduced	Area (ha)	Number of farmers
Maharashtra	Broad bed furrow sowing techniques in soybean in Kharif season to conserve moisture in deficit rainfall	250 ha	200
<b>Total</b>		<b>250 ha</b>	<b>200</b>

**G. Awareness campaign**

State	Meetings		Gosthies		Field days		Farmers fair		Exhibition		Film show	
	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers
Maharashtra	-	-	04	251	09	296	-	-	04	2388	-	-

## 13. IMPACT

### A. Impact of KVK activities (Not to be 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)
Onion	115	74	70922	79247
Garlic	95	65	400000	572400
Blackgram	25	43	30800	48600
Chickpea	25	48	53750	85050
Paddy	50	82	63945	90160
Finger millet	20	57	28500	46462
Poultry farming	25	68	3680	5520
Goat farming	10	84	4931	7652

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

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

... Attached as Annexure

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

## 14. Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
Jan 2022	1	14	-
Feb 2022	5	234	-
March 2022	57	127	-
April 2022	1	36	-
May 2022	23	89705	-
Jun 2022	37	174403	-
Jul 2022	29	164528	-
Aug 2022	6	8879	-
Sept 2022	3	5006	-
Oct 2022	2	44	-
Nov.2022	4	80	-
Dec.2022	3	74	-

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	Total
KVK, Nashik-I	Text only	-	-	-	-	171	-	171
	Voice only	-	-	-	-	-	-	-
	Voice & Text both	-	-	-	-	-	-	-
	<b>Total Messages</b>	-	-	-	-	<b>171</b>	-	<b>171</b>
	<b>Total farmers Benefitted</b>	-	-	-	-	<b>443130</b>	-	<b>443130</b>

## 15. PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl. No	Demo Unit	Year of Est.	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Vermi-compost	2000	60x35 ft 35 x 35f		Vermin - compost	50 Tons	1.25 Lakhs	Used at KVK farm	Used at KVK farm
2	Nursery	2001	2 ha	Fruit crops	grafts	46399	8 lakh	2830339	
3	Apiculture	2021	0.2 ha	<i>Apis cerana,</i> <i>Apis mellifera</i>	Pollination	-	30000	Pollination purpose	Improvement in production & quality of produce at KVK farm & on campus training

### B. 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	
<b>Fruits</b>									
Mango	29.6.96	June 23	3.8	kesar, Ratna Sindhu	Fruits	50	70000	1.5 lakh	
Sapota	26.6.96	May 23	0.8	Kallipa	Fruits	30	20000	1.2	
Guava	30.6.96	July 23	0.8	Sardar	Fruits	5	35000	15000	
Aonla	11.8.95	April 23	0.8	6 Var	Fruit	30	15000	60000	
Litchi	9.7.99	May 23	0.8	China/sahi	Fruits	10	22000	1 lakh	
Jack fruit	5.7.2001	June 23	Border	Local Kapa	fruits	100	35000	1 Lakh	

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

Sl. No.	Bio Products	Name of the Product	Qty (Ltr)	Amount (Rs.)		Remarks
				Cost of inputs	Gross income	
1	<b>Bio- Fertilizers</b>	Yash-Rhizojapo	8	800	1600	
		Yash- Rhizolego	13	1300	2600	
		Yash-Azeto	165.5	16550	33100	
		Yash-PSB	347	34700	69400	
		Yash-KMB	346.5	34650	69300	
		Yash-Aceto	1	100	200	
		Yash-Azospi	77	7700	15400	
		Yash-Biozinc	14	1400	2800	
2	<b>Bio- Fungicides</b>	Yash-Pseudo	327	32700	65400	
		Yash-Bacillus	149	14900	29800	
		Yash-Trichoplain	800.5	80050	160100	
		Yash-Trichotriple	1	100	200	
		Yash-Trichoplus	00	00	00	
3	<b>Bio- pesticides</b>	Yash-Beaveria	326	32600	65200	
		Yash-Vertim	369	36900	73800	
		Yash-Pacilo	70	7000	14000	
		Yash- Metarhizium	25.5	2550	5100	
		Yash-Namoria	8	800	1600	
<b>Total</b>				<b>3048</b>	<b>609600</b>	

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

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1	Poultry	Black Australorp	Meat	781 Nos.	15620	54670	Distributed for FLD
2	Goat	Osmanabadi	Meat	18 Nos.	6426	103800*	Reared for on campus Training & FLD

**E. Utilization of hostel facilities**

Accommodation available (No. of beds): 35

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
January 2022	35	02	
February 2022	32	02	
March 2022	-	-	
April 2022	126	08	
May 2022	-	-	
June 2022	-	-	
July 2022	51	02	
August 2022	219	11	
September 2022	210	17	
October 2022	24	02	
November 2022	74	09	
December 2022	24	02	

**F. Database management**

S. No	Database target	Database created
1	110 Cases of Doubling Farmers Income	Yes
2	Database for the Kisan Sarthi Portal	Yes

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

Amount sanction (Rs.)	Expenditure (Rs.)	Details of infrastructure created / micro irrigation system etc.	Activities conducted					Quantity of water harvested in '000 litres	Area irrigated / utilization pattern
			No. of Training programs	No. of Demonstra tion s	No. of plant materials produced	Visit by farmer (No.)	Visit by official (No.)		
			NA						

**H. Performance of Nutritional Garden at KVK farm**

If Nutritional Garden developed at KVK farm/Village Level? Yes  
 If yes,

**Nutritional Garden developed at KVK farm**

Area under nutritional garden (ha)	Component of Nutritional Garden	No. of species / plants in nutritional garden	No. of farmers visited
01	Vegetable crops	07	1255
	Fruit crops	10	

**Nutritional Garden developed at Village Level (Area under nutritional garden)**

No. of Villages covered	Component of Nutritional Garden	No. of species / plants in nutritional garden	No. of farmers covered
9	Vegetable crops	13	100
2	Fruit crops	1	50

**H. Details of Skill Development Trainings organized**

S.No.	Name of KVKs/SAUs/ICAR Institutes	Name of QP/Job role	Duration (hrs)	No. of participants					
				SCs/STs		Others		Total	
				Male	Female	Male	Female	Male	Female
NA									

## 17. FINANCIAL PERFORMANCE

### A. 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	Punjab National Bank	YCMOU,Nashik	930100	Finance Officer, YCMOU	9301000100000060	422024014	PUNB0930100
With KVK				NIL			

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

Sr. No .	Particulars	Sanctioned (till 31 March 2023)	Released	Expenditure
<b>A. Recurring Contingencies</b>				
1	<b>Pay &amp; Allowances</b>	223.11	223.11	222.32256
2	<b>Traveling allowances</b>			0.41750
3	<b>Contingencies</b>			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)			3.01250
B	POL, repair of vehicles, tractor and Equipments			
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)			
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			
G	Training of extension functionaries			
H	Maintenance of buildings			
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
<b>TOTAL (A)</b>		<b>234.78</b>	<b>234.78</b>	<b>233.99256</b>
<b>B. Non-Recurring Contingencies</b>				
1	<b>Works</b>			
2	<b>Equipments including SWTL &amp; Furniture</b>	4.85	4.85	4.843
3	<b>Vehicle (Four wheeler/Two wheeler, please specify)</b>			
4	<b>Library (Purchase of assets like books &amp; journals)</b>			
<b>TOTAL (B)</b>		<b>4.85</b>	<b>4.85</b>	<b>4.843</b>
<b>C. REVOLVING FUND</b>			<b>27.80286</b>	<b>24.36205</b>
<b>GRAND TOTAL (A+B+C)</b>		<b>239.63</b>	<b>267.43286</b>	<b>263.19761</b>

### C. Status of revolving fund (Rs. in lakh) for the Four years

Year	Opening balance as on 1 <sup>st</sup> April	Income during the year	Expenditure during the year	Net balance in hand as on 1 <sup>st</sup> April of each year (i.e. Closing on 31st March)
April 2018 to March 2019	14.34374	37.48252	15.10924	36.71702
April 2019 to March 2020	36.71	26.83	20.1	43.44
April 2020 to March 2021	43.44	9.68	22.33	30.79
April 2021 to March, 2022	30.79	29.87	24.94	35.72
April 2022 to March 2023	35.72	27.80286	24.36205	39.16

**17. Details of HRD activities attended by KVK staff during year**

Name of the staff	Designation	Title of the training programme	Institute where attended	Mode (Online/ Offline)	Dates
Dr. Prakash Kadam	SMS Agronomy	Pulses as the climate smart crops for resource conservation and economic intensification/diversification of cropping systems	Staff training at IIPR Kanpur	Offline	02-11/03/2022
Mr. Hemraraj Rajput	SMS Horticulture	Online training on "Post-Harvest Management and Storage Techniques	NIPHM, Hyderabad	Online	07-11/03/2022
Dr. Shyam Patil	SMS Vet Sci	Feeding systems of cattles in Panjarpol Ahmednagar	Panjarpol Ahmednagar	Offline	16-17/08/2022
Mrs. Archna Mohod	SMS Home Science	Training on Gender Sanctification under SMART project	RAMETI, Pune	Offline	23-25/02/2022
Mrs. Archna Mohod	SMS Home Science	Promotion of Biofortification for Ensuring Nutritional Security	PAMETI, MANAGE Ludhiana Punjab	Online	27-29/07/2022
Mrs. Archna Mohod	SMS Home Science	Post Harvest Management & storage techniques	NIPHM Hyderabad	Online	07-11/03/2022
Mr. Mangesh Vyavahare	Programme Assistant (Lab)	Brain storming session on natural farming.	Department of Agriculture, Pune	Online	30/08/2022

**18. Details of progress in Doubling Farmers Income (DFI) villages adopted by KVKs**

Name of the village	Total No. of families surveyed	Key interventions implemented	No. of farmers covered in each intervention	Change in income (Rs/unit)	
				Before (base year)	After (current year)
Jategaon, Tal Tryambak Moh, Tal. Sinnar Dugaon, Tal. Nashik Ugaon, Tal. Niphad	110	Demonstration of improved technology wrt crops, machinery, Vegetable Nursery, Mushroom, livestock breeds, and as Integrated Farming mode	25	54941	112560

**19. Details of activities planned under NARI /PKVY / TSP / KKA, etc.**

S. No.	Name of the programme	No. of villages adopted	Key activities performed	No. of activities carried out	No. of families covered
1.	TSP	02	FLD, OFT, Trainings, Extension Activities	107	100
2.	PKVY	01	Organic Farming	02	50

## 20. Details of Progress of ARYA Project

Name of Enterprise	No of Training Conducted	No of Beneficiaries	No of Extension Activities	No of Beneficiaries	No of Unit established	Change in income		No. Of Groups Formed
						Before	After	
Horticulture Nursery for Tribal Youths as income Generating Unit	02	45	4	195	04	54000	225000	2
Promotion and Establishment of Mushroom production unit as a small enterprise	09	209	10	419	22	48000	108000	7
Promotion and Establishment of Osmanabadi Goat units as an alternative agribusiness	02	112	5	164	05	50000	66500	5

## 21. Details of SAP

S. No.	Types of major Activity conducted- SwachhtaPakhwada, Cleaning, Awareness Workshop, Microbial based Agricultural Waste Management by Vermicomposting etc.	No. of Programmes conducted	No. of Participants
01	<ul style="list-style-type: none"> <li>• Adoption of villages for Microbial based Agricultural Waste Management using Vermi compost.</li> <li>• Awareness programme about Swachhta.</li> <li>• Crop Residue Management</li> <li>• Demonstration of technologies on waste and wealth.</li> <li>• Cleaning of villages programme with farmers.</li> <li>• Orientation of school children on various topics like hygiene, sanitation, cleanliness.</li> <li>• Cleaning of offices and campus and disposal of scraps, space freed, etc.</li> <li>• Demonstration on recycling of agrowaste by tractor operated grape twine mulcher</li> <li>• Awareness programme on use of bio fertilizer in organic farming and enrichment of compost</li> </ul>	06	1580

**Details of SAP**

Sr. No	Name of KVK	Date	Activity	No of VIPs	No of Farmers	Others	Total
1.	Nashik-I	Apr-22	Demonstration on recycling of agrowaste by tractor operated grape twine mulcher	0	28	-	28
2.	Nashik-I	May-22	Demonstration on recycling of agrowaste by tractor operated grape twine mulcher	0	28	-	28
3.	Nashik-I	Aug-22	Awareness programme on role of bio fertilizer in organic farming	0	233	-	233
4.	Nashik-I	Sep-22	Awareness programme on use of bio fertilizer in organic farming and enrichment of compost	0	191	-	191
5.	Nashik-I	Oct-22	1. Adoption of villages for Microbial based Agricultural Waste Management using Vermi compost. 2. Awareness programme about Swachhta. 3. Crop Residue Management 4. Demonstration of technologies on waste and wealth. 5. Cleaning of villages programme with farmers. 6. Orientation of school children on various topics like hygiene, sanitation, cleanliness. 7. Cleaning of offices and campus and disposal of scraps, space freed, etc.	14	998	-	1012
6.	Nashik-I	Nov-22	Awareness programme on use of bio fertilizer & bio pesticides in crop production & multiplication in field to Agriculture assistant, Mushroom Trainee, Agriculture student	-	88	-	88

**21. Books published 2022-23**

Title of the Book	Authors	ISBN No (Optional) / Pages No	Description/review of the book (one paragraph/sentence)
		NIL	

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

## APR SUMMARY

(Note: While preparing summary, please don't add or delete any row or columns)

### 1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	66	1504	1055	2559
Rural youths	24	701	345	1046
Extension functionaries	49	1041	610	1651
Sponsored Training *	78	1841	902	2743
Vocational Training *	05	125	75	200
<b>Total</b>	<b>139</b>	<b>3246</b>	<b>2010</b>	<b>5256</b>

\* included in trainings for Farmers & farm women, Rural youths and Extension functionaries

### 2. Frontline demonstrations

Crops/Enterprise	No. of Farmers	Area(ha)	Units/Animals
Oilseeds	50	20	
Pulses	50	20	
Cereals	100	20	
Vegetables	158	14.4	
Other crops (Fruit)	50	02	1000 Seedlings
Other crops (Fodder)	10	-	5000 Seedlings
<b>Total</b>	<b>418</b>	<b>76.4</b>	
Livestock & Fisheries	35	-	486
Other enterprises (Mechanization)	100	10	
Other enterprises (Super Grain Bag)	50		50
Other enterprises (Kitchen Garden)	30	01	
<b>Total</b>	<b>215</b>	<b>11</b>	
<b>Grand Total</b>	<b>633</b>	<b>87.4</b>	

### 3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
<b>Technology Assessed</b>			
Crops	04	60	60
Livestock	02	17	17
Various enterprises	02	45	45
<b>Total</b>	<b>08</b>	<b>122</b>	<b>122</b>
<b>Technology Refined</b>			
Crops	-	-	-
Livestock	-	-	-
Various enterprises	-	-	-
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Grand Total</b>	<b>8</b>	<b>122</b>	<b>122</b>

#### 4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	235	12309
Other extension activities	08	304
<b>Total</b>	<b>243</b>	<b>12613</b>

#### 5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marketing	Awareness	Other enter.	Total
KVK, Nashik-I	Text only	-	-	-	-	171	-	171
	Voice only	-	-	-	-	-	-	-
	Voice & Text both	-	-	-	-	-	-	-
<b>Total Messages</b>		-	-	-	-	<b>171</b>	-	<b>171</b>
<b>Total farmers Benefitted</b>		-	-	-	-	<b>443130</b>	-	<b>443130</b>

#### 6. Seed & Planting Material Production

	Quintal/Number	Value (Rs.)
Seed (q)	50	400000
Planting material (No.)	46399	3505620
Bio-Products (lit)	3048	609600
Livestock Production (No.)	799	303170
Fishery production (No.)	-	-

#### 7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value (Rs.)
Soil (294)	294	116000
Water (12)	12	1800
Plant	-	-
<b>Total</b>	<b>306</b>	<b>117800</b>

#### 8. HRD and Publications

Sr. No.	Category	Number
1	Abstract	0
2	Workshops	39
3	Conferences	01
4	Meetings	28
5	Trainings for KVK officials	06
6	Visits of KVK officials	26
7	Book published	0
8	Training Manual	01
9	Book chapters	0
10	Booklet	0
11	Leaflets/ Folder/ Pamphlet	03
12	Research papers	0
13	Technical Bulletin	0
14	Popular article	01
15	Lead papers	0
16	Seminar papers	0
17	Extension folder	02
18	Proceedings	0
19	Award & recognition	0
20	On-going research projects	0

**Annexure – I: Discipline-wise training programmes**

Date	Client	Title of training Programme	Duration in days	Venue	Number of other participants			Number of SC.ST			Total number of participants				
					M	F	T	M	F	T	M	F	T		
<b>Crop Production</b>															
27/05/22	PF	Training on Planting techniques in paddy	1	Off	4	0	4	31	24	55	35	24	59		
21/06/22	PF	Advance technology in Black gram Production	2	Off	0	0	0	31	13	44	31	13	44		
05/07/22	PF	Training on Four fold technology in Paddy	2	Off	0	0	0	32	1	33	32	1	33		
05/07/22	PF	Training on pair row plantation technique in Finger Millet	2	Off	0	0	0	32	1	33	32	1	33		
29/07/22	PF	Soybean Production Technology	2	Off	18	0	18	3	0	3	21	0	21		
16/11/22	PF	Chickpea Production Technology	1	Off	0	0	0	28	0	28	28	0	28		
		<b>Total (6)</b>			<b>10</b>	<b>0</b>	<b>22</b>	<b>157</b>	<b>39</b>	<b>196</b>	<b>179</b>	<b>39</b>	<b>218</b>		
<b>Horticulture</b>															
17/01/22	PF	Fruit & Vegetable Processing technology	6	Online	3	7	10	0	0	0	3	7	10		
27/01/22	PF	Dehydration of fruits & Vegetables	2	Online	8	11	19	3	4	7	11	15	26		
18/02/22	PF	Fruit & Vegetable Processing technology	5	Online	3	4	7	0	0	0	3	4	7		
01/03/22	PF	Training on fruits and vegetable dehydration	3	Online	12	6	18	2	1	3	14	7	21		
15/03/22	PF	Post harvest amagement, processing technology in Mango	2	Off	2	1	3	45	12	57	47	13	60		
18/04/22	PF	Fruit & Vegetable Processing technology	6	Online	4	3	7	2	1	3	6	4	10		
17/05/22	PF	Fruit & Vegetable Processing technology	7	Online	8	3	11	2	6	8	10	9	19		
11/06/22	PF	Mango Plantation Technology	1	Off	0	0	0	37	13	50	37	13	50		
25/06/22	PF	Commercial Vegetable production technology	1	Off	12	8	20	7	2	9	19	10	29		
01/07/22	PF	Fruit & Vegetable Processing technology	5	Online	3	4	7	0	0	0	3	4	7		
08/07/22	PF	Fruit plantation technology	1	Off	0	0	0	22	5	27	22	5	27		
12/07/22	PF	Dehydration of fruits and vegetable	2	Online	5	7	12	2	1	3	7	8	15		
27/09/22	PF	Training on Mango grafting & nursery management	3	Off	0	0	0	22	0	22	22	0	22		
09/11/22	PF	Fruit & Vegetable Processing technology	7	Online	10	6	16	0	0	0	10	6	16		
24/11/22	PF	Training cum workshop Mango production technology	1	Off	2	1	3	68	12	80	70	13	83		
29/11/22	PF	Training cum workshop Mango production technology	1	Off	0	0	0	28	0	28	28	0	28		
06/12/22	PF	Fruit & Vegetable Processing technology	7	Online	7	3	10	0	0	0	7	3	10		
		<b>Total (17)</b>			<b>60</b>	<b>0</b>	<b>79</b>	<b>64</b>	<b>143</b>	<b>240</b>	<b>57</b>	<b>297</b>	<b>319</b>	<b>121</b>	<b>440</b>
<b>Veterinary Sci.</b>															
19/01/22	PF	Clean Milk production	2	Off	0	0	0	22	14	36	22	14	36		
09/02/22	PF	Remedies to minimize the Infertility in Cows & Buffaloes	2	Off	0	0	0	24	7	31	24	7	31		
04/03/22	PF	Diet management for quality development of Calf	2	Off	9	4	13	5	0	5	14	4	18		
24/04/22	PF	Healthy development of Milch animals for higher productivity	2	Off	13	0	13	1	0	1	14	0	14		
26/04/22	PF	Improved Desi breeds in backyard poultry system for better productivity	1	On	9	3	12	38	44	82	47	47	94		
12/05/22	PF	Urea Treatment of raw quality roughages for increasing its nutritive quality	2	Off	14	5	19	4	0	4	18	5	23		
31/05/22	PF	Prifitable Backyard Poultry farming with Improved Desi breeds	2	On	8	0	8	78	41	119	86	41	127		
11/06/22	PF	Introduction of Black Australorp for Backyard Poultry	2	Off	18	3	21	11	0	11	29	3	32		
05/07/22	PF	Heat identification in Cattle for successful conception.	2	Off	16	7	23	5	0	5	21	7	28		
16/07/22	PF	Vaccination, its importance and schedules in bovines	2	Off	18	11	29	9	3	12	27	14	41		
12/09/22	PF	Management of FMD in farm animals	2	Off	14	0	14	8	7	15	22	7	29		

22/09/22	PF	Duck and Loveirds rearing	2	Off	0	0	0	27	18	45	27	18	45
11/11/22	PF	Milk Processing Techniques for increasing its shelf-life.	2	Off	24	14	38	8	0	8	32	14	46
27/12/22	PF	Nutritive upgradation of raw quality feed with higher Palatability for Animals	2	On	14	11	25	8	6	14	22	17	39
		<b>Total (14)</b>	<b>27</b>		<b>157</b>	<b>58</b>	<b>215</b>	<b>248</b>	<b>140</b>	<b>388</b>	<b>405</b>	<b>198</b>	<b>603</b>
<b>AgriL. Engineering</b>													
05/11/22	PF	Vertical Conveyor Reaper for paddy harvesting	1	Off	0	0	0	18	0	18	18	0	18
09/11/22	PF	Jalshakti Abhiyan. Water Conservation Techniques in crop production for increasing crop productivity	1	Off	0	0	0	32	9	41	32	9	41
10/11/22	PF	Jalshakti Abhiyan. Water Conservation Techniques in crop production for increasing crop productivity	1	Off	26	0	26	0	0	0	26	0	26
		<b>Total (3)</b>	<b>3</b>		<b>26</b>	<b>0</b>	<b>26</b>	<b>50</b>	<b>9</b>	<b>59</b>	<b>76</b>	<b>9</b>	<b>85</b>
<b>Home Science</b>													
04/01/22	PF	Training on oyster mushroom cultivation and its recipes	1	Off	0	0	0	0	41	41	0	41	41
19/01/22	PF	Processing on oyster mushroom and its various products	1	Off	0	0	0	0	17	17	0	17	17
07/02/22	PF	Training on Health Hygien and Sanitation	1	Off	0	0	0	14	17	31	14	17	31
12/03/22	PF	Training on aonla and its various products	1	Off	1	1	2	1	31	32	2	32	34
06/04/22	PF	Cultivation and Processing on oyster mushroom and its various products	2	On	0	0	0	1	51	52	1	51	52
22/04/22	PF	Training on fingermillets processing	1	Online	13	2	15	4	21	25	17	23	40
26/04/22	PF	Processing on karwand and its various product	1	On	8	4	12	9	38	47	17	42	59
17/05/22	PF	Low cost techniques for drinking water pirification	2	Off	0	0	0	0	24	24	0	24	24
23/05/22	PF	Training on fingermillet processing	1	Online	0	0	0	0	19	19	0	19	19
10/05/22	PF	Training on pre planning for nutrition garden	1	Off	0	0	0	2	18	20	2	18	20
27/06/22	PF	Training on fruit and vegetable processing	1	Online	23	2	25	11	13	24	34	15	49
07/07/22	PF	Training and Demonstration on Nutrition Garden	2	Off	0	0	0	3	48	51	3	48	51
21/07/22	PF	Processing on ragi biscuits,soya paneer and Drumstick paratha	3	Off	0	0	0	0	46	46	0	46	46
04/08/22	PF	Training and processing on fruit and vegetable	1	On	0	0	0	0	32	32	0	32	32
10/11/22	PF	Training on fingermillets processing	1	Off	2	3	5	2	19	21	4	22	26
24/11/22	PF	Training and Processing on fruits and vegetable processing	1	Off	5	15	20	32	46	78	37	61	98
07/12/22	PF	Training on fingermillets processing	1	On	11	18	29	21	32	53	32	50	82
		<b>Total (17)</b>	<b>22</b>		<b>63</b>	<b>45</b>	<b>108</b>	<b>100</b>	<b>513</b>	<b>613</b>	<b>163</b>	<b>558</b>	<b>721</b>
<b>Agri Extension</b>													
20/01/22	PF	Management of group within the village	1	Off	0	0	0	17	12	29	17	12	29
15/02/22	PF	Composting of agrowaste and enrichment by use of biofertilizers	2	Off	0	0	0	21	22	43	21	22	43
27/04/22	PF	Developmental activities of KVK	2	Off	0	0	0	22	19	41	22	19	41
13/09/22	PF	Bee Keeping Techniques	1	On	11	18	29	4	7	11	15	25	40
		<b>Total (4)</b>	<b>6</b>		<b>11</b>	<b>18</b>	<b>29</b>	<b>64</b>	<b>60</b>	<b>124</b>	<b>75</b>	<b>78</b>	<b>153</b>
<b>Soil Science</b>													
10/06/22	PF	Training on use of bio fertilizer & bio pesticide in organic farming	1	Off	101		101			0	101	0	101
21-06-22	PF	STCR technology in Paddy	1	Off			0	34	9	43	34	9	43
05/07/22	PF	STCR Technology in Finger millet	1	Off			0	34		34	34	0	34
12/08/22	PF	Use of Bio fertilizer, Bio pesticides in organic farming	1	Off	32		32			0	32	0	32
24/08/22	PF	Use of Bio fertilizer, Bio pesticides in crop production & multiplication in field	1	Online	25		25			0	25	0	25
		<b>Total (5)</b>	<b>5</b>		<b>158</b>	<b>0</b>	<b>158</b>	<b>68</b>	<b>9</b>	<b>77</b>	<b>226</b>	<b>9</b>	<b>235</b>
		<b>Grand Total (66)</b>	<b>133</b>		<b>516</b>	<b>185</b>	<b>701</b>	<b>927</b>	<b>827</b>	<b>1754</b>	<b>1443</b>	<b>1012</b>	<b>2455</b>

**Discipline-wise training programmes : Rural Youth**

Date	Client	Title of training Programme	Discipline	Duration in days	Venue	Number of other participants			Number of SC.ST			Total number of participants				
						M	F	T	M	F	T	M	F	T		
						54	13	67	8	3	11	62	16	78		
02/04/22	RY	Seed production technology on oilseed and pulses	Agronomy	5	On	54	13	67	8	3	11	62	16	78		
22/08/22	RY	Awareness of scientific seed production	Agronomy	1	On	20	12	32	14	4	18	34	16	50		
24/02/22	RY	Opportunities in fruit & Vegetable processing and value addition	Horticulture	1	Off	42	28	70	16	7	23	58	35	93		
06/04/22	RY	training on Horticulture Nursery Management	Horticulture	3	Online	30	4	34	10	4	14	40	8	48		
21/04/22	RY	Protected Cultivation of Horticulture Crops	Horticulture	1	Off	10	4	14	4	2	6	14	6	20		
22/08/22	RY	Horticulture Nursery Management	Horticulture	5	On	16	4	20	13	1	14	29	5	34		
05/09/22	RY	Fruit & Vegetable Processing technology	Horticulture	8	Online	5	6	11	2	1	3	7	7	14		
28/01/22	RY	Commercial Goat Farming	Veterinary Sc.	2	Off	14	1	15	18	2	20	32	3	35		
04/02/22	RY	Commercial Goat Farming	Veterinary Sc.	2	Off	11	2	13	19	0	19	30	2	32		
25/07/22	RY	Livestock Management SCP program.	Veterinary Sc.	2	Off	0	0	0	38	13	51	38	13	51		
23/08/22	RY	Commercial Goat Rearing	Veterinary Sc.	2	Off	0	0	0	48	39	87	48	39	87		
20/09/22	RY	Animal Husbandry business potentials for Rural Youths	Veterinary Sc.	2	On	24	11	35	17	9	26	41	20	61		
22/11/22	RY	Commercial Goat Farming	Veterinary Sc.	5	On	10	1	11	13	1	14	23	2	25		
24/08/22	RY	Controlled Climate systems in Nursery management	Agril. Engineering	1	On	16	4	20	13	1	14	29	5	34		
20/09/22	RY	Training on Mushroom Cultivation and its processing	Home Science	3	On	19	5	24	4	1	5	23	6	29		
23/11/22	RY	Training on mushroom Cultivation and its various product	Home Science	4	On	4	3	7	0	42	42	4	45	49		
12/12/22	RY	Training on oyster mushroom cultivation and its various product	Home Science	2	On	0	0	0	0	23	23	0	23	23		
09/03/22	RY	Bee Keeping Techniques	Agril. Extension	1	On	24	0	24	0	0	0	24	0	24		
10/05/22	RY	Bee Keeping Techniques	Agril. Extension	1	On	0	27	27	0	3	3	0	30	30		
22/08/22	RY	Different Extension Methodologies for para extension workers	Agril. Extension	2	On	22	30	52	0	0	0	22	30	52		
24/08/22	RY	Different Extension Methodologies for para extension workers	Agril. Extension	2	On	46	0	46	0	0	0	46	0	46		
06/09/22	RY	Different Extension Methodologies for para extension workers	Agril. Extension	2	On	41	20	61	0	0	0	41	20	61		
17/10/22	RY	Different Extension Methodologies for para extension workers	Agril. Extension	2	On	17	7	24	0	0	0	17	7	24		
27/09/22	RY	Soil testing and fertilizer use	Soil Science	2	On	34	3	37	4	4	8	38	7	45		
		<b>Total (24)</b>				<b>61</b>		<b>459</b>	<b>185</b>	<b>644</b>	<b>241</b>	<b>160</b>	<b>401</b>	<b>700</b>	<b>345</b>	<b>1045</b>

**Discipline-wise training programmes : Extension Functionaries**

Date	Client	Title of training Programme	Discipline	Duration in days	Venue	Number of other participants			Number of SC.ST			Total number of participants		
						M	F	T	M	F	T	M	F	T
16/03/22	EF	Scenerio of oilseeds and soybean production technology	Agronomy	2	Off	20	1	21	18	0	18	38	1	39
19/05/22	EF	Paddy production technology	Agronomy	1	On	10	2	12	17	3	20	27	5	32
26/05/22	EF	Maize production technology	Agronomy	1	On	14	2	16	9	1	10	23	3	26
30/05/22	EF	Soybean Production Technology	Agronomy	1	On	11	3	14	9	2	11	20	5	25
02/06/22	EF	Redgram Production Technology	Agronomy	1	On	11	2	13	5	1	6	16	3	19
16/06/22	EF	Importance of nutri-cereals in human diet	Agronomy	1	On	7	6	13	6	2	8	13	8	21
20/07/22	EF	Soybean Production Technology to FFS conductor	Agronomy	1	On	17	6	23	4	3	7	21	9	30
26/07/22	EF	Paddy Production Technology to FFS conductor	Agronomy	1	On	10	24	34	2	6	8	12	30	42
28/07/22	EF	Redgram Production Technology to FFS conductor	Agronomy	1	On	15	8	23	3	2	5	18	10	28
07/09/22	EF	Training programme on Chickpea Production Technology	Agronomy	1	On	17	5	22	10	3	13	27	8	35
14/09/22	EF	Training programme on Organic farming	Agronomy	1	On	1	1	2	6	36	42	7	37	44
15/12/22	EF	Training on different liquid fertilizers grade and its application through fertigation methods	Agronomy	1	On	15	4	19	3	2	5	18	6	24
11/01/22	EF	Capsicum production under protected condition	Horticulture	1	Online	12	4	16	5	3	8	17	7	24
12/01/22	EF	Cucumber production under protected condition	Horticulture	1	Online	14	5	19	3			17	5	22
03/02/22	EF	Training on Nutritional Garden planning and cultivation	Horticulture	1	Off	0	7	7	0	21	21	0	28	28
07-06-22	EF	High Density Plantation Technology for Mango, Guava, Custard Apple	Horticulture	1	Off	5	10	15	4	1	5	9	11	20
08-06-22	EF	Horticulture Nursery Management	Horticulture	1	Off	22	7	29	11	3	14	33	10	43
09/06/22	EF	High Density Plantation Technology for Mango, Guava, Custard Apple	Horticulture	1	Off	20	6	26	10	3	13	30	9	39
29-06-22	EF	Training on pomegranate, Banana & Sapota production Technology	Horticulture	1	Off	18	5	23	5	3	8	23	8	31
13/07/22	EF	Horticulture Nursery Management	Horticulture	2	Off	22	7	29	4	2	6	26	9	35
13/09/22	EF	Opportunities in Fruit and Vegetable processing	Horticulture	1	On	3	2	5	9	18	27	12	20	32
14/09/22	EF	Horticulture Nursery management	Horticulture	1	On	3	2	5	9	18	27	12	20	32
03/10/22	EF	Training on spice : Production technology of turmeric and PHT of Onion, Garlic, Ginger , Turmeric	Horticulture	1	Off	22	3	25	10	2	12	32	5	37
22/11/22	EF	Training on Hitech Vegetable Nursery Management	Horticulture	1	On	27	5	32	5	3	8	32	8	40
24/11/22	EF	Training cum workshop Mango production technology	Horticulture	1	Off	7	9	16	4	8	12	11	17	28
28/11/22	EF	Opportunities in Agro processing for women enterpreneuers	Horticulture	1	Off	15	8	23	7	3	10	22	11	33
24/12/22	EF	Training on Horticulture Nursery and high density fruit crops Management	Horticulture	1	Off	25	7	32	10	8	18	35	15	50
25/08/22	EF	Commercial Goat and Poultry Farming	Veterinary Sc.	1	Off	24	0	24	16	0	16	40	0	40
04/11/22	EF	Profitable Goat Management in free range system	Veterinary Sc.	2	Off	18	3	21	14	1	15	32	4	36
19/06/22	EF	Protected cultivation and precision farming opportunities	Agril. Engineering	1	On	26	12	38	0	0	0	26	12	38
15/07/22	EF	Practical aspects of controlled climate plant propagation and Nursery management	Agril. Engineering	1	On	32	5	37	0	0	0	32	5	37

22/11/22	EF	Protected Cultivation, Errection & irrigation systems	Agril. Engineering	1	On	22	4	26	0	0	0	22	4	26	
07/12/22	EF	Protected Cultivation, Errection & irrigation systems	Agril. Engineering	1	On	22	6	28	0	0	0	22	6	28	
21/12/22	EF	Mechanisation to improve Pricision and Operational Efficiencies	Agril. Engineering	1	On	24	5	29	0	0	0	24	5	29	
03/02/22	EF	Training on Nutritional supplement for family and income generation through nutrition gardening	Home Science	1	Off	1	2	3	0	40	40	1	42	43	
25/03/22	EF	Lecture delivered on Fingermillets processing	Home Science	1	Online	2	8	10	10	20	30	12	28	40	
17/06/22	EF	Training on importance of nutri cereals in human diet	Home Science	1	Off	21	6	27	7	2	9	28	8	36	
13/09/22	EF	Training on Fingermillets processing	Home Science	1	On	1	1	2	6	36	42	7	37	44	
11/10/22	EF	Training and Demonstration on Soybean and its recipies	Home Science	1	Off	1	0	1	0	35	35	1	35	36	
14/10/22	EF	Importance of Nutri Millets in human diet and its varies recipes	Home Science	1	Online	11	13	24	21	13	34	32	26	58	
11/06/22	EF	Use of different extension tools for TOT	Agril. Extension	1	Off	30	15	45	0	0	0	30	15	45	
07/07/22	EF	Use of different extension tools for TOT and PRA tools for program planning	Agril. Extension	2	Off	34	4	38	0	0	0	34	4	38	
29/11/22	EF	Different Extension Methodologies	Agril. Extension	1	On	18	15	33	0	0	0	18	15	33	
11/04/22	EF	Physical, Chemical, Biologal properties of soil & its improvement Plant nutrients its role & deficiency sytomes	Soil Science	1	Off	18	3	21				0	18	3	21
13/06/22	EF	Use bio fertilizer & bio pesticide in organic farming	Soil Science	1	Off	34	13	47				0	34	13	47
27-06-22	EF	Training on INM in horticulture crop	Soil Science	1	Off	13	6	19				0	13	6	19
12/07/22	EF	Use of Bio fertilizer, Bio pesticides in Maize crop	Soil Science	1	Off	16	12	28				0	16	12	28
02/12/22	EF	Soil testing and fertilizer use	Soil Science	1	Off	30	18	48				0	30	18	48
15/12/22	EF	Importance of soil sampling, water analysis, plant nutrients, organic manures and bio fertilizers in crop production	Soil Science	1	Off	18	4	22				0	18	4	22
		<b>Total (49)</b>		<b>53</b>		<b>779</b>	<b>306</b>	<b>1085</b>	<b>262</b>	<b>304</b>	<b>566</b>	<b>1041</b>	<b>610</b>	<b>1651</b>	

## Bio Agent Enriched Composting for Every Farming Family

*...Way towards Natural Farming*

### Situation analysis/Problem statement:

Tribal livelihoods in the Nashik district have been characterized with the undulated patchy lands, uncertain irrigation facilities. These are family centric small scale farm enterprises & lacks economy of scale. Perceptions that agriculture is an economically unviable proposition are more relevant especially for tribal agriculture resulting in distress migrations from rural to urban areas in the district.

Krishi Vigyan Kendra has adopted Behedpada village of Tryambakeshwar taluk. It is a 50 families' tribal village having Paddy based farming system. Besides, Paddy farmers are engaged in cultivating Finger millet, Niger, Onion and other vegetable crops. However there was no practice of scientific composting and its use for crops.

Almost every family had their own dumping area for the day-to-day animal waste. The decomposition time was 6 months to 1 year and the quality of FYM also was not good. Farmers periodically harvest the compost for application to the crops. But, it was observed that there was huge nutrient loss due to non scientific practice.

### Plan, Implement and Support:

- KVK with group discussion with the farmers, decided to have scientific compost production units for every family.
- KVK provided 50 compost beds to 50 tribal families of Behedpada for scientific composting.
- Initially, 3 training programmes were conducted to give technical know-how in bio-agent enriched compost preparations.
- This was supported with method demonstrations on 'how to install the beds' and 'how to fill the beds'.
- Every bed was covered with local sheds made from locally available material to avoid direct contact of sunlight and rains.
- KVK provided Azotobacter, PSB, KMB, Trichoderma culture from its own Bio-agent production laboratory to every family.
- Enrichment of the compost and fastening the decomposition process was the idea behind providing the culture.

### Output:

- Every farmer is now preparing the compost with animal and farm waste.
- The composting process is going year the round with one cycle of 4 month.
- Farmers are storing the compost in bags if there is no requirement by the crop or off crop period.
- Farmers are harvesting 3 cycles of the bio agent enriched compost in a year.
- Farmers are harvesting bio agent enriched compost, 1 ton every cycle and 3 tons annually

**Outcome and Impact:**

- Village Behedpada collectively preparing 150 tons of bio agent enriched compost worth Rs. 4.50 lakh every year.
- This has facilitated farmers in availability bio agent enriched compost for natural farming practices to supplement the nutritional requirements of the crops and control diseases organically.



## Mushroom cultivation for Livelihood Diversification

### Background:

Tribal livelihoods in the Nashik district have been characterized with the undulated patchy lands, uncertain irrigation facilities with crops such as paddy, finger millets and Onion. These are family centric small scale farm enterprises & lacks economy of scale. Perceptions that agriculture is an economically unviable proposition are more relevant especially for tribal agriculture resulting in distress migrations from rural to urban areas in the district.

The typical work of the female agricultural laborer or cultivator is limited to less skilled jobs, such as sowing, transplanting, weeding and harvesting, that often fit well within the framework of domestic life and child-rearing. Many women also participate in agricultural work as unpaid subsistence labor. The percentage of women who depend on agriculture for their livelihood is as high as 84%.

### Intervention:

Krishi Vigyan Kendra planned and implemented Oyster Mushroom production technology training programmes especially for the tribal women. Major objective behind this was to provide suitable and sustainable agro-entrepreneurship to the tribal women so that they can earn money while performing their regular activities. KVK selected Oyster mushroom because Oyster mushroom are most preferred ones among the edible mushrooms due to their ability to produce quickly and productively in various media, their versatility and absolute ease of cultivating and their nutritional value especially as a source of protein. Crop residues of their own farm can be used as media for growing the mushroom.

Technical knowhow in cultivating mushroom, method demonstrations on sterilizing the media, filling polythene bags, spawn placement skills were provided by KVK to the women. Besides cultivation aspects, KVK is imparting training for processing and value addition of mushroom. The tribal women provided with polythene bags, quality spawn of oyster mushroom to start mushroom production. KVK especially focused on women group, so that they can collectively grow and market it.

### Process and technology:

KVK organizes 3 days residential vocational training programmes. Training on technical aspects of cultivation, hands on practice on filling the beds and preparation of various products/ recipe of mushroom are imparted. The details of last 3 years is as under

Year	2020	2021	2022	Total
No. of trainings	6	7	9	<b>22</b>
No. of trainee	153	175	209	<b>537</b>
No. of Groups established units	3	5	7	<b>15</b>
No. of individuals established units	5	6	15	<b>26</b>

Since last 3 years total 22 training programmes were conducted by KVK covering 537 tribal women farmers. The trainee women established the mushroom units individually and in groups as well. Total 15 women groups established mushroom production unit of 200 beds per batch, wherever, 26 units of average 100 bed per batch capacity were established on individual basis.

**Impact:**

Impact of the trainings and demonstration has been measured on two parameters viz. economic gain and employment generation

The economic gain of the programme is shown in following table

Particulars	One batch	One year (3 batches)
Avg. size of unit (No. of beds)	200	600
Cost of cultivation	10000	30000
Avg. Production (Kg)	400	1200
Rate per Kg	250	250
Total Income (Rs.)	1,00,000	3,00,000

The size of mushroom unit is of 200 beds, thus one group of women are cultivating mushroom on 600 beds. They are marketing the produce in their own villages @ Rs. 250 per Kg. The cost incurred per bed was noticed to be Rs. 50 including the inputs and labour charges. Overall, one women group is earning Rs. 3 lakh per year thus, gaining net profit of Rs. 2.7 lakh per year.

Mushroom cultivation is being practiced by 76 women in group. Moreover, 26 women are cultivating the mushroom as independent enterprise. Oyster mushroom cultivation has been proved to be a very promising, technically and economically feasible additional source of income for the tribal women from Nashik district.

