Annual Progress Report 2024

Annual Report 2024

KRISHI VIGYAN KENDRA

Yashwantrao Chavan
Maharashtra Open University, Nashik

I N D E X

ICAR-ATARI, Pune
DETAILS OF ANNUAL PROGRESS REPORT OF KVKs DURING 2024
(January 2024 to December 2024)

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)
	Office	FAX		
Krishi Vigyan Kendra, Yashwantrao Chavan Maharashtra Open University, Nashik - 422 222	(0253) 2231714, 2231715, 2230698	-	kvknashik@rediffmail.com	www.kvknashik.org Hits:33435 During 2024& Cumulative Total:155738

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

Address	Telephone		E mail	Website address
	Office	FAX		
Yashwantrao Chavan Maharashtra Open University, 'Dnyangangotri',Near Gangapur Dam,Nashik-422 222	+91 253-2230459, +91 253-2230024, +91 253-2230025, +91 253-2230027, +91 253-2230028	0253-2230470	registrar@ycmou.digitaluniversity.ac	https://ycmou.ac.in&http://ycmou.digitaluniversity.ac

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	9423479336	niteenjay76@gmail.com

1.4. Date and Year of sanction: 1 October, 1994 (Others- OEI)

1.5. Staff Position (as on December, 2024)

Sl.	Sanctioned post	Name of the incumbent	Mobile No.	Discipline	If Permanent, Please indicate		Date of joining	If Temporary, pl. indicate the consolidated amount paid (Rs./month)
					Current			
					Pay Band	G. Pay		
1.	Senior Scientist and Head	Dr. Niteen J. Thoke	9423479336	Agril. Extension	131400-217100	-	15.11.2022	Permanent
2.	Subject Matter Specialist	Mr. Rajaram B. Patil	9422283360	Agril. Engineering	78800-209200	-	01.03.1996	Permanent
3.	Subject Matter Specialist	Mr. Hemraj M. Rajput	9422773602	Horticulture	78800-209200	-	16.12.1998	Permanent
4.	Subject Matter Specialist	Dr. Prakash K. Kadam	9403774762	Agronomy	78800-209200	-	10.08.2006	Permanent
5.	Subject Matter Specialist	Mrs. Archana C. Mohod	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.	Subject Matter Specialist	-	-	-	-	-	-	**Vacant**
8.	Programme Assistant	Mr. Mangesh T. Vyavahare	9403774763	Agril. Chemistry	56100-177500	-	01.06.2007	Permanent
9.	Computer Programmer	Mr. Harshal P. Kale	9403696802	Computer	44900-142400	-	18.07.2014	Permanent
10.	Farm Manager	Mr. Sandip C. Bhagwat	9422707292	Horti.	67700-208700	-	26.03.2003	Permanent
11.	Accountant/Superintendent	Mr. Nikhil M. Shinde	7020747829	Mechanical	35400-112400	-	17.11.2022	Permanent
12.	Stenographer (Retd. On 31/07/2024)	Mrs. Vanita S. Rodge	9403774656	-	38600-122800	-	01.07.1995	Permanent
13.	Driver 1	Mr. Satish L. Sakhare	9403774657	-	44900-142400	-	01.10.1998	Permanent
14.	Driver 2	Mr. Dattu B. Madhe	9403774658	-	21700-69100	-	11.08.1999	Permanent
15.	Supporting staff 1	Mr. Rakesh B. Nikam	9403774659	-	19900-63200	-	01.07.1995	Permanent
16.	Supporting staff 2	Mr.Vinod N. 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 DemonstrationUnit	03.20
3.	Under Crops	0.60
4.	Horticulture	20.00
5.	Pond	0.40
6.	Others if any (Specify)	-

1.7.Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Year	Plinth area (Sq. m)	Exp. (Rs.)	Starting year	Plinth area (Sq. m)	Status of construction
1.	Administrative Building	ICAR	July 1998	694	2650758	-	-	--
2.	Farmers Hostel	ICAR	July 1998	305	1600575	-	-	-
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	-	-	-
10	Sell Contour	-	-	-	-	-	-	-
11	Demo unit	ICAR	June 1996	800	100000	-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Running	Present status
Ferguson Tractor No. MH 15 BW 3455	2009	600000	4990.2	Due for replacement
Mahindra Jeep : BoleroMH 15 HM 0056	2021	795290	66090	Good condition

C) Equipment & 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
23rd June 2025	1. Hon'ble Prof. Sanjeev Sonawane, Vice Chancellor, YCMOU, Nashik and Chairman, KVK 2. Dr. Shakir Ali, Principal Scientist, ICAR-ATARI, Pune, 3. Shri. Abhimanyu Kashid, DSAO, Nashik and Director, ATMA 4. Shri. Amit Patil, Senior Scientist and Head (I/C), KVK, Malegaon 5. Dr. R.V Patil, Incharge, MPKV-Grape and Onion Research Station, Pimpalgaon (B) 6. Dr. S. R. Pardeshi, Regional Agriculture Research Station, Igatpuri 7. Sri. Nadkumar Morankar, Representative, Agriculture Development Officer, Zilla Prishad, Nashik 8. Dr. Shrirang Wagh, Assistant Director, RAMETI, Nashik 9. Shri. Dattu Rambhau Dhage, Progessive Farmer, Belgaon Dhaga, Tal. and Dist. Nashik 10. Shri. Yashwant Gavande, Progessive Farmer,Gavandpada, Tal. Peth and Dist. Nashik 11. Shri. Sandip Jadhav, Progessive Farmer, Jopul, Tal. Chandwad, Dist. Nashik 12. Mrs. Maya Khotare, Progessive Farmer, Hirdi, Tal. Traymbkeshwar, Dist. Nashik 13. Mrs. Chetana Pawar, Progessive Farmer, Nashik 14. Dr. Niteen J. Thoke, Sr. Scientist & Head, KVK, YCMOU, Nashik	**Hon'ble Prof. Dr. Sanjeev Sonawane, Vice Chancellor**	
		ATR should hyper link details of action taken in power point presentation while presenting ATR	Action taken will be hyperlinked in next SAC
		KVK should document ARYA Entrepreneur' Success Story with the help of the AVC department	KVK has documented 4 enterprises in the form of success stories
		KVK should demonstrate ICAR-DOGR' Bhima Purple/ Bhima Shakti variety of Onion	KVK planned and demanded the seed of Bhima Shakti cultivar, but seed was not available with ICAR-DOGR
		Besides technical knowhow, KVK should extend all kind of support to trainees for entrepreneurship development	KVK has supported the farmers, farm women and rural youths with the critical inputs like seed, bio-agents, spawn, poultry birds, goats, etc.
		A separate meeting should be held regarding natural farming inviting expert farmers, officials and scientists to design pathway for large scale promotion of natural farming	KVK is working as nodal training institute for imparting trainings on natural farming to the agricultural officers and the farmers under Dr. PDNFM and NNFM. This year KVK has conducted 30 training programmes on natural farming.
		KVK should provide guidance to the farmers on export of agricultural produce	KVK has conducted awareness programmes on export of agricultural produce especially horticultural crops
		Establish farm implements center to promote mechanization in agriculture. KVK should promote custom hiring approach	Established 'TSP farmer's community implement utility center'. Provided Paddy reapers (3), Spiral seperators (7), and Groundnut decorticators (18) for community use on custom hiring basis.
		KVK and line department in collaboration should promote use of biological agents to control wilt disease in vegetable crops	Provide 'Trichoderma' culture to the farmers to control wilt. Besides, KVK has supplied 6592.5 litres of bio-agents to ATMA for further supply to farmers
		Dr. Tushar Athare, Scientist, ATARI, Zone VIII, Pune	
		Two separate accounts for Salary and Contingency should get open at University and KVK level	Two separate accounts for Salary and Contingency has been open at University level
		KVK should take follow-up regarding custom hiring in adopted tribal villages	Established 'TSP farmer's community implement utility center'. Provided Paddy reapers (3), Spiral seperators (7), and Groundnut decorticators (18) for community use on custom hiring basis.
		Success stories should be documented in AV form	Documented Transplanting of Coconut trees, Transferring Honey bees in the box (editing)
		Mushroom activity should be promoted to stop temporary migration in tribal areas	KVK is working on Mushroom in 3 mode; i.e. Included mushroom under ARYA, TSP and OFT. Established mushroom units in tribal areas especially for tribal women, more than 100 functional units
		Dr. Rajeev Kale, Senior Scientist, ICAR-Directorate of Onion & Garlic Research, Rajgurunagar	
		Onion varieties developed by DOGR, Rajgurunagar should be taken for FLD.	KVK planned and demanded the seed of Bhima Shakti cultivar, but seed was not available with ICAR-DOGR
		Dr. Sachin Hire, MPKV-Officer In-charge, Pomegranate Research and Technology Transfer Center, Lakhamapur, Tal Satana	
		KVK should emphasis on post harvest technology practices for fruits and vegetables	The university has sanction separate building for 3 labs of KVK. Worked for Hi-tech PHT lab. Moreover, submitted proposal for advanced machineries from CSR. KVK is already engage in imparting awareness trainings on PHT.
		Shri. Rajendra Nikam, Director, ATMA	
		KVK should make available cycle weeders for farmers.	Local manufacturers has been suggested to farmers for easy availability
		KVK should demonstrate hand operated dibbling machine for precision in planting and reduction in labour requirement	Implemented OFT on hand dibblers in Sinnar tahsil. Provided 2 dibblers for Soybean and Maize crop

Contd..

		Shri. Jagdish Patil, Deputy Director of Agriculture, Nashik	
		KVK should promote Honey bee keeping	Conducted 4 vocational training programmes 7 days each with financial assistance from NBB.
		KVK should arrange study tour at "Saraja Dairy Farm - Gir cow Sanvardhan Kendra" situated at village Tarsali, Taharabad, Tal. Satana.	Planned this year
		Shri. Krishna Shinde, Transmission Executive, All India Radio, Nashik	
		KVK should promote the advances in agriculture for farmers through AIR, Nashik	6 radio talks have been broadcasted on AIR, Nashik
		Shri. Abhijit Ghumre, Sub-Divisional Agriculture Officer, Nashik	
		KVK should promote, supply, and disseminate its bio lab products as mother culture in the district, which can support Dr. Punjabrao Deshmukh Natural Farming Mission	KVK has supplied 6593 liters of bio-agents. Also imparted 30 training programmes under Dr.PDNFM. Provided knowledge & skills for multiplication of the culture to the farmers.
		KVK should plan for production of micro-nutrients and supply to the farmers at reasonable rates. Start license process for micro-nutrient production and sell.	License process for micro-nutrient production and sell is at final stage. File for final approval is with Director, Agriculture
		Shri. Yashwant Gavande, Farmer Representative	
		Also, KVK should promote cultivation of Jamun and Jackfruit crops.	KVK has created awareness on Jackfruits plantation on bunds and demo plantation on farm. Provided 463 plants to farmers.
		Mrs. Maya Khotare, Farmer Representative	
		KVK should provide training to farm women on new technology in Finger millet and Little millet for better production.	KVK has already implemented OFT on finger millet on paired row planting technique with use of urea briquette.
		Shri. Dattu Dhage, Farmer Representative	
		KVK should maintain organic farming plot on its farm for demonstration purpose.	KVK is maintaining organic plots of Mango, Guava, Jackfruit
		Promote mango crop plantation in tribal areas and support farmers with guanine planting material supply from KVK' hi-tech nursery.	Provided 26181 Nos. of mango grafts. Every year 1000 mango grafts are provided to tribal farmers from KVK under FLD program.
		Shri. Sandip Jadhav, Farmer Representative	
		KVK should arrange study tour at Manubhai Patel' Madhavi Goshala, Palanpur, Gujarat to study local cow breeds.	Planned this year
		KVK should train farmers for mass multiplication of bio agents, so that farmers can reduce the cost of purchasing bio-agents.	KVK has developed mass multiplication of bio-agents process. Farmers are preparing 20 litres from 1 litre of bio-agents.

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
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. No	Soil type	Characteristics	Area in 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 (2024)

Area in "00" ha, Production in "00" Tonnes, Productivity in Kg /ha.

S	Dist.	Kh Rice			Kh Jowar			Bajra			Ragi			Kh Maize			Other Kh Cereals		
		A	P	Py	A	P	Py	A	P	Py	A	P	Py	A	P	Py	A	P	Py
1	Nashik	932.33	1320.39	1416.23	5.76	1.23	213.50	551.21	262.18	475.65	170.13	166.57	979.10	2498.57	2324.17	930.20	113.99	61.69	541.20
		Total Kh Cereals			Tur			Kh.Mung			Kh.Udid			Other Kh Pulses			Total Kh Pulses		
		4271.98	4136.24	968.22	46.58	14.92	320.30	162.18	33.00	203.50	52.71	29.10	552.00	14.82	7.02	473.80	276.29	84.04	304.18
		Total Kh Foodgrains			Kh Gr.Nut			Kh Sesamum			Nigerseed			Kharif Sunflower			Kh Soybean		
		4548.27	4220.28	927.89	184.17	126.87	688.90	0.05	0.02	379.58	18.69	3.54	189.20	0.02	0.003	171.34	1204.62	633.03	525.50
		Other kh. Oilseed			Total Kh Oilseeds			Sugarcane (Crushing)			Cotton (Lint)			Rabi Jowar			Wheat		
		0.32	0.15	455.20	1407.87	763.61	542.39	128.23	10734.13	83.71	407.55	301.62	125.81	71.28	53.20	746.32	413.06	984.33	2383.00
		Rabi Maize			Other Rabi cereals			Total Rabi cereals			Gram			Other Rabi Pulses			Total Rabi Pulses		
		91.17	269.10	2951.70	0.26	0.14	520.69	575.77	1306.76	2269.58	251.63	169.40	673.22	24.64	13.14	533.07	276.27	182.54	660.72
		Total Rabi Foodgrain			Safflower			Linseed			Rabi Sesamum			Rabi Sunflower			Other Rabi Oilseeds		
		852.04	1489.30	1747.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.02	295.94
		Total Rabi Oilseeds			Tobacco			Summer Rice			Summer Maize			Summer Jowar			Summer Bajra		
		0.05	0.02	295.94				0.10	0.34	3363.45	18.38	42.79	2328.28	0.10	0.08	831.42	10.22	9.30	910.00
		Other Su. Cereals			Total Su. Cereals			Summer Moong			Summer Udid			Other Su. Pulses			Total Su. Pulses		
		0.02	0.02	1021.76	28.82	52.53	1822.93	0.02	0.004	184.19	0.12	0.06	538.91	0.09	0.04	479.50	0.22	0.11	484.33
		Total Su. Foodgrain			Summer Groundnut			Summer Sunflower			Summer Sesamum			Summer Soybean			Other Su. Oilseeds		
		29.04	52.64	1812.67	13.36	19.91	1490.76	0.12	0.08	655.35	0.00	0.00	0.00	0.08	0.12	1500.00	0.00	0.00	0.00
		Total Su. Oilseeds			Total Cereals			Total Pulses			Total Foodgrains			Total Oilseeds			Total Rice		
		13.56	20.12	1483.17	4876.57	5495.53	1126.93	552.78	266.68	482.44	5429.35	5762.22	1061.31	1421.49	783.74	551.35	932.43	1320.74	1416.44
		Total Jowar			Total Bajra			Total Maize			Total Other Cereals			Total Mung			Total Udid		
		77.14	54.51	706.66	561.43	271.48	483.56	2608.12	2636.06	1010.71	114.27	61.85	541.24	162.20	33.01	203.50	52.83	29.16	551.97
		Total Other Pulses			Total Groundnut			Total Sesamum			Total Sunflower			Total Soyabean			Total Other Oilseeds		
		39.54	20.20	510.75	197.53	146.79	743.12	0.05	0.02	379.58	0.14	0.08	588.22	1204.71	633.15	525.57	0.37	0.16	432.45

*Second Advance Estimate 2023-24 as per final CCE update

Source: State Department of Agriculture

2.5. Weather data (2024)

Month	Rainfall mm	Rainy Days	Temperature		Relative Humidity		Pan evaporation (mm)	Wind speed (Km/hr)	Bright Sunshine (hrs)
			Mx.	Min.	RH I	RH II			
January	0.8	0	28.8	10.5	94	49	1.3	2.1	8.2
February	0.0	0	31.3	10.5	89.7	42.2	1.9	2.2	9.3
March	0.0	0	34.5	13.1	84.7	34.9	4.8	3.2	9.4
April	0.0	0	37.7	19.5	79.7	46.4	9.6	4.6	9.3
May	11.8	2	38.2	23.0	77.8	30.1	10.9	9.4	9.0
June	235.3	11	33.7	25.5	87.6	62.4	5.8	10.3	6.2
July	98.1	13	28.7	21.6	92.9	77.0	3.3	9.4	1.2
August	168.1	13	28.6	22.2	94.1	73.5	3.3	6.6	3.2
September	158.2	12	28.1	20.9	95.6	73.3	2.9	6.2	3.1
October	121.5	5	31.7	20.3	94.1	59.1	3.7	3.5	6.9
November	0.0	0	29.8	12.5	87	49	4.1	2.5	8.2
December	32.8	1	27.6	12.7	87	51	3.0	2.4	7.0
Total/ Averages	**826.6**	**57**	**31.6**	**17.7**	**88.8**	**54**	**4.6**	**5.2**	**6.7**

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

Category	Population (No.)	Production (Per unit)	Productivity (Per unit)
Cattle			
Crossbred	136589	Milk 347824 MT	11 lit /cow /day
Indigenous	758461		04-05 lit /cow /day
Buffalo	221234		06 - 10 lit /buffalo /day
Sheep	243373	Milk included already	
Goats	626644	Milk included already	0.3 - 1 lit /goat/day
Pigs	7616		
Crossbred	1399	Meat 45.9405 MT	12-18 kg /pigs
Indigenous	6217		
Rabbits	1425	Meat 780 kg	0.5-1 Kg /rabbit
Poultry			
Hens (*Crossbred)*	1954164	Egg 2191 lakhMeat 420704.79 MT	110 Eggs/year
Desi	1259418		60 Eggs/year
Fish (Reservoir)	-	-	

Ref.-20th 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	Use of traditional varieties Poor storage life of Onion Non judicious use of pesticides Lack of mechanization Grafting failure on grape root stock Lack of alternate crop Improper use of fertilizers	Training on nursery management and grafting in grapes Use of Improved varieties in agronomical crops Improved cultivation practices to prolong storage life in Onion Improved cultivation practices in quality fruit production in Grapes Integrated pest management, Improved farm machineries Economical protective cultivation techniques Formation of groups for effective transfer of technologies (TTC's) Soil test based fertilizer application
Trimbak	Chirapali,,mulegaon, Chakore, Thanapada, Jategaon, Behedpada	Paddy, Niger, Fingermillet, Littlemillet, Groundnut,Mango, Chilli, Onion, Garlic	Pest and diseases in agronomical and vegetable crops Unavailability of improved seed in agronomical crops FMD, BQ and HS in problems in animals Hemoglobin deficiency in pregnant women Low yields in traditional poultry breed Unbalanced diet in tribal families Imbalanced use of fertilizer in finger millet, paddy & onion Huge store grain losses Lack of proper family nutrition Lack of used of fertilizers	IPM in agronomical and vegetable crops Vegetable nursery management Nutrition management through Kitchen gardening Improving the poultry birds Providing the improved seed Health and hygiene in animals Improving health of pregnant women. Soil test based fertilizer application in finger millet, paddy & onion. low cost storage bins, Nutritional garden Introduction of seasonal and perennial horticulture crops
Sinnar	Moh, Agaskhind, Nimgaon Sinnar	Potato, gram, Soybean,	Use of traditional varieties Non judicious use of pesticides Lack of low level mechanization Low yields in traditional birds FMD, BQ and HS in problems in animals Unbalanced diet in tribal families Improper use fertilizers	Use of Improved varieties in agronomical crops Improved farm machineries Low cost protective cultivation techniques Formation of groups for effective transfer of technologies (TTC's) Nutrition management through Kitchen gardening Improving the poultry birds Health and hygiene in animals, Soil test based fertilizer application
Nashik	Sarul, Dugaon	Garlic, Nursery Management, Paddy, Groundnut , Value Addition	Use of local variety in Garlic High cost of groundnut crop related operation Low price realization in Rice milling Lack of entrepreneurship in vegetable nursery & Value addition.	Use of Improved varieties in Garlic. Improved farm machineries in Paddy processing. Skill development in nursery & Value addition of fruit & vegetable.
Peth	Kayre, Sadarpada, Zari, Hompada, Kadwaipada, Ghanshet	Paddy, Niger, Finger millet, Little millet, Groundnut, Mango, Chilli, Onion, Garlic Backyard poultry, Goatary	Lack of pruning in mango & cashew nut Low productivity of poultry birds & goats due to local breeds Lack of alternative crop in lean season. Use of traditional varieties, No crop in rabi paddy cropping system. Lack of used of fertilizers. Lack of proper family nutrition	Skill development pruning in mango & cashew nut Introducing improved breeds of Backyard poultry & goat Plantation of mango & Cashew nut on non cultivated cultivable lands. Soil test based fertilizer application, Nutritional garden Introduction of perennial horticulture crops De-silting form water bodies through convergence
Igatpuri	Mengal wadi, Dhamangaon, Pimpalgaon Ghadga	Paddy, Niger, Finger millet, Little millet, Mango, Onion, Vegetables, Backyard poultry, Goatary	Lack of pruning in mango & cashew nut Low productivity of poultry birds & goats due to local breeds Lack of alternative crop in lean season. Use of traditional varieties No crop in rabi paddy cropping system. Lack of used of fertilizers, Lack of proper family nutrition Lack of awareness of de-silting of water bodies	Skill development pruning in mango & cashew nut Introducing improved breeds of Backyard poultry & goat. Plantation of mango & Cashew nut on non cultivated cultivable lands. Soil test based fertilizer application Nutritional garden Introduction of perennial horticulture crops De-silting form water bodies through convergence

Chandwad	Bahadurwadi, Jopul	Grape, Onion, Tomato, Maize, G'nut, Bengal gram, Poultry	Use of traditional varieties Poor storage life of Onion Non judicious use of pesticides Lack of low level mechanization Lack of alternate crop Improper use of fertilizers	Use of Improved varieties in agronomical crops Improved cultivation practices to prolong storage life in Onion Integrated pest management. Improved farm machineries Soil test based fertilizer application Introduction of perennial horticulture crop

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
Agril 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

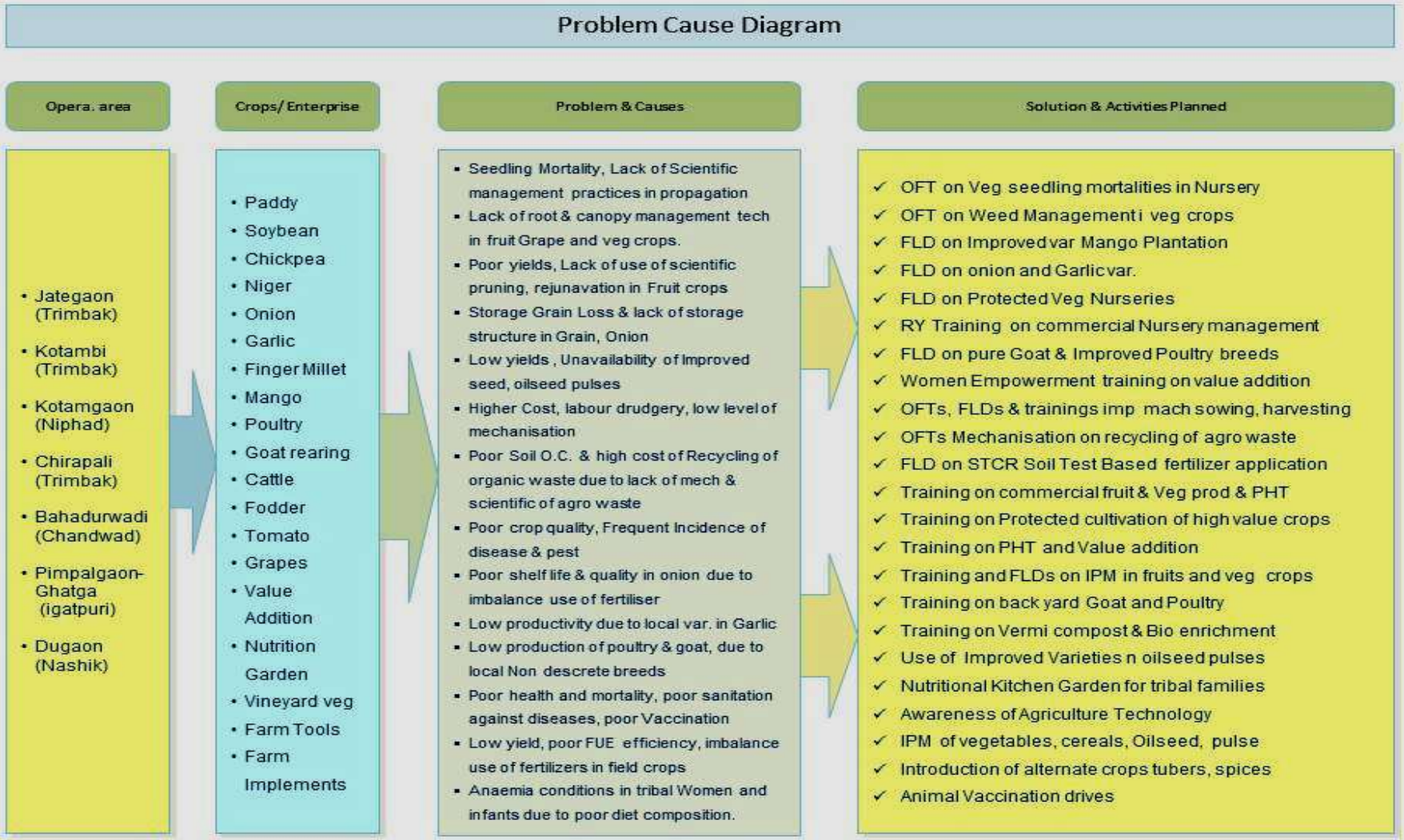
OFT				FLD			
1				2			
Number of OFTs		Number of farmers		Number of FLDs		Number of farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
9	9	170	175	16	16	600	605
Training				Extension Programmes			
3				4			
Number of Courses		Number of Participants		Number of Programmes		Number of participants	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
140	143	6500	6899	90	103	6000	6324
Seed Production (Qtl.)				Planting materials (Nos.)			
5				6			
Target		Achievement		Target		Achievement	
0		0		50000		51843	
Livestock, poultry strains and fingerlings (No.)				Bio-products (Kg/ Ltr.)			
7				8			
Target		Achievement		Target		Achievement	
940		944		6000		6592.5	

3.1. B. Operational areas details during 2024

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.)*
• Paddy • Soybean • Finger Millet • Mango • Onion • Garlic • Groundnut • Grapes • Value Addition • Nutrition Garden • Farm Tools • Farm implements • Poultry • Goat rearing • Cattle	• Seedling Mortality, Lack of Scientific management practices in propagation • Lack of root & canopy management tech in fruit Grape and veg crops. • Poor yields, Lack of use of scientific pruning, rejunavation in Fruit crops • Storage Grain Loss & lack of storage structure in Grain, Onion • Low yields , Unavailability of Improved seed, oilseed pulses • Higher Cost, labour drudgery, low level of mechanisation • Poor Soil O.C. & high cost of Recycling of organic waste due to lack of mechanization& scientific agro waste management • Poor crop quality, Frequent Incidence of disease & pest • Poor shelf life & quality in onion due to imbalance use of fertiliser • Low productivity due to local var. in Garlic • Low production of poultry & goat, due to local Non discrete breeds • Poor health and mortality, poor sanitation against diseases, poor Vaccination • Low yield, poor FUE efficiency, imbalance use of fertilizers in field crops • Anaemia conditions in tribal Women and infants due to poor diet composition.	8 tahasils in the jurisdiction of KVK, Nashik-I	• Behedpada (Trimbak) • Kotamgaon (Niphad) • Chirapali (Trimbak) • Hompada (Peth) • Kotamgaon (Sinner) • Moh(Sinner) • Mahirawani (Nashik) • Nirgude(Trimbak) • Borichi bari(Peth) • Chirapali(Trimbak) • Giranre(Nashik) • Dhamangaon(Igatpuri) • Talegaon(Igatpuri) • Bharvir khurd(Igatpuri) • Ozerkhed(Dindori) • Pahuchi bari(Peth) • Dev dongra(Trimbak) • Aawal pada (trimbak) • Nashik	• OFT on Veg seedling mortalities in Nursery • OFT on Weed Management i veg crops • FLD on Improved var Mango Plantation • FLD on onion and Garlic var. • RY Training on commercial Nursery management • FLD on pure Goat & Improved Poultry breeds • Women Empowerment training on value addition • OFTs, FLDs & trainings imp mach sowing, harvesting • OFTs Mechanisation on recycling of agro waste • FLD on STCR Soil Test Based fertilizer application • Training on commercial fruit & Veg prod & PHT • Training on Protected cultivation of high value crops • Training on PHT and Value addition • Training and FLDs on IPM in fruits and veg crops • Training on back yard Goat and Poultry • Training on Vermi compost & Bio enrichment • Use of Improved Varieties n oilseed pulses • Nutritional Kitchen Garden for tribal families • Awareness of Agriculture Technology • IPM of vegetables, cereals, Oilseed, pulse • Introduction of alternate crops tubers, spices • Animal Vaccination drives

* Support with problem-cause and interventions diagram

Problem Cause Diagram



3.2. Technology Assessment (Kharif 2024, Rabi 2023-24, Summer 2024)

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

Thematic areas	Cereals	Oilseeds	Pulses	Vegetables	Fruits	Mushroom	Total
Integrated Nutrient Management	1	-	-	-	-	-	**1**
Varietal Evaluation	-	1	-	-	-	-	**1**
Weed Management	-	-	-	1	-	-	**1**
Farm Machineries	-	1	-	-	1	-	**2**
Storage Technique	1	-	-	-	-	-	**1**
Mushroom cultivation	-	-	-	-	-	1	**1**
Total	**2**	**2**	**-**	**1**	**1**	**1**	**7**

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

Thematic areas	Cattle	Poultry	TOTAL
Evaluation of Breeds	-	1	-
Nutrition Management	1	-	-
TOTAL	**1**	**1**	**2**

B. Achievements on technologies Assessed

B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	No. of farmers	Area in ha (Per trial covering all the Technological Options)
INM	Finger Millet	To access the use of urea-DAP briquette technology in pair row planting of Finger Millet	10	10	0.4
Varietal Evaluation	Soybean	To assess the soybean cultivar Phule Durva at micro situation	10	10	0.4
Farm Machineries	Grape	Introduction of Tractor operated pruned Grape Twine mulcher for insitu mulching	20	20	0.4
Farm Machineries	Soybean	Manual Precision Seed Dibbler for Soybean	20	20	0.2
Weed Management	Onion	Assessement of Control of weeds by adopting weedicidal combination Oxifluorfen,23.5%EC & Quizalpho ethyl 5% EC in rabi onion	49	49	0.2
Storage Technique	bajra (Pearl millet)	Assessment on increasing shelf life of bajra (Pearl millet) flour	25	25	-
		Total	**134**	**134**	**-**

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 Kaweri and Black Australorp poultry breeds in Backyard rearing system with local breeds	10 (Kaweri - 50 Birds, Black Australorp - 50 Birds compared with local 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
		Total	**17**	**17**

B.3 Technologies assessed under other enterprises

Name of Enterprises	Name of the technology assessed	No. of trials	No. of farmers / farm women
Mushroom	Assessment on different varieties of oyster mushroom cultivation	20 (75 kg mushroom spawn)	20

B 4.Technologies assessed under Women empowerment assessment

Name of Enterprises	Name of the technology assessed	No. of trials	No. of farmers
Mushroom (B.3 Technologies assessed under other enterprises)	Assessment on different varieties of oyster mushroom cultivation	20 (75 kg mushroom spawn)	20

C. 1. Results of Technologies Assessed

Results of On Farm Trial

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	T1: Traditional planting technique without use of fertilizers	1. Tillers per plant 2. Fingers per earhead 3. Length of finger 4. B:C ratio, 5. Yield	Number Number cm q/ha	1.7 4 7.5 1.07, 5.00	The yield has increased due to pair row plating technique and use of use of urea-DAP briquettes	NIL	NIL
					T2: 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 q/ha	2.5 6 9 1.31, 7.50			

Contd..

Technology Assessed	Source of Technology	Production	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: Traditional planting technique without use of fertilizers	Local	5000	Kg/ha	1250	1.07
T2: Improved pair row planting technique with use of Urea-DAP briquettes	MPKV, Rahuri	7500	Kg/ha	7125	1.31

Details of On Farm Trial for assessment :

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 15691 ha in Nashik district. Out of this, 4600 ha area covered in Trambakeshvar tahasil under Finger Millet cultivated in kharif season. The productivity found 832kg/ha, which is very less as compared to state (1320kg/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	:	Demonstrated technology performance indicator 1.Number of Tillers per plant : 2.5 2. Number of fingers per earhead: 6 3. Length of finger in cm : 9 4. B:C ratio : 1.31 5. Yield (qt/ha) : 7.50 Local technology performance indicator 1.Number of Tillers per plant : 1.7 2. Number of fingers per earhead: 4 3. Length of finger in cm : 7.5 4. B:C ratio : 1.07 5. Yield (qt/ha) : 5.00

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 has conducted at Behedpada Tal.Trambakeshwar in Kharif 2024 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.

To access the use of urea - DAP briquette technology in pair row planting of Finger Millet

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
Soybean	Rainfed	Low productivity of Soybean due to use of local variety	To assess the cultivars of Soybean under micro situation	10	Phule Durva variety	1. Number of branches per plant 2. Number of pods per plant 3. Plant height in cm 4. Yield (q/ha)	Number Number CM q/ha	4 90 76 20	The yield enhanced due to use of improved variety	NIL	NIL
					Assessment Practice (T2) : Phule Durva variety	1. Branches per plant 2. Pods per plant 3. Plant height 4. Yield	Number Number cm q/ha	4 90 76 20			

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
Farmers Practice (T1) : JS-335 variety	Local	1600	Kg/ha	29100	1.80
Assessment Practice (T2) : Phule Durva variety	MPKV, Rahuri	2000	Kg/ha	39500	1.93

Details of On Farm Trial for assessment :

1	Title of Technology Assessed	:	To assess the cultivars of Soybean under micro situation
2	Problem Definition	:	Low productivity of Soybean due to use of local variety
3	Details of technologies selected for assessment	:	Farmers Practice (T1) : JS-335 variety Assessment Practice (T2) : Phule Durva variety
4	Source of technology	:	MPKV, Rahuri
5	Production system and thematic area	:	Rainfed farming situation with Heavy to Medium soils
6	Performance of the Technology with performance indicators	:	Demonstrated technology performance indicator 1. Number of branches per plant : 4 2. Number of pods per plant : 90 3. Plant height in cm : 76 4. Yield (q/ha) : 20 Local technology performance indicator 1. Number of branches per plant : 3 2. Number of pods per plant : 65 3. Plant height in cm : 62 4. Yield (q/ha) : 16
7	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	The number of branches and pods found to be more due to use of improved variety and increased in row to row distance.
8	Final recommendation for micro level situation	:	The variety Phule Durva cultivar has given more yield as compared to local variety.
9	Constraints identified and feedback for research	:	NIL
10	Process of farmers participation and their reaction	:	The improved variety Phule Durva seed distributed to 10 farmers as a critical input. The training programme was conducted on soybean production technology. Overall ten demonstrations were conducted on 4 ha area among 10 farmers. The soil sampling has done prior to sowing and fertilizers applied according to soil health card. The monitoring visits were conducted for guiding the farmers during the season. The field day has celebrated at maturity stage of crop and observations of qualitative parameter recorded

To assess the cultivars of Soybean under micro situation

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	Justification 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	Assessement of Control of weeds by adopting weedicidal combination Oxifluorfen,23 .5%EC & Quizalpho ethyl 5% EC in rabi onion	49	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	120 64462 216144 151681 3.35 125 54578 224816 170238 4.11 129 54495 231867 177372 4.27	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..

Technology Assessed	Source of Tech.	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
Farmers Practice (T1) :Farmers Practice : 3-4 hand weddings	MPKV, Rahuri	120	q/ha	151681	3.35
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		125	q/ha	170238	4.11
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		129	q/ha	177372	4.25

Details of On Farm Trial for assessment :

1	Title of Technology Assessed	:	Assessement 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 cotraol 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.

Assessment of Control of weeds by adopting weedicidal combination Oxifluorfen,23.5%EC & Quizalpho ethyl 5% EC in rabi onion

OFT-4

Crop/ enterprise	Farming situation	Problem def.	Title of OFT	No. of trials	Tech. 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
Mechanization in shedding of of pruned twines & mulching in Grape	Irrigated	Grape cultivation involves high labour and cost for removal of pruned twines laying of external organic material bed mulching	Tractor operated pruned Grape Twine mulcher for insitu mulching	20	Tractor operated Side Discharge Flail Mulcher for pruned Twine insitu mulching	Labour Output, Cost	Para meter / Demo / Check / % Labour, Nos, / 6 / 70 / (-) 91.42% Output, Ha/day / 1.9 / 0.29 / (+)555% Cost, Rs.Ha / 6950 / 33420 / (-)79%	%saving Labour, Nos, (-) 91.42% Output, Ha/day (+)555% Cost, Rs.Ha (-)79%	Best suited for insitu and fast recycling of farm organic waste. Saving in the labor, time and cost of mulching.	For varied row spacing adjustable width chute discharge chute will be suitable for varied row spacing	Plantation with varies row spacing are practiced for different soils and varieties

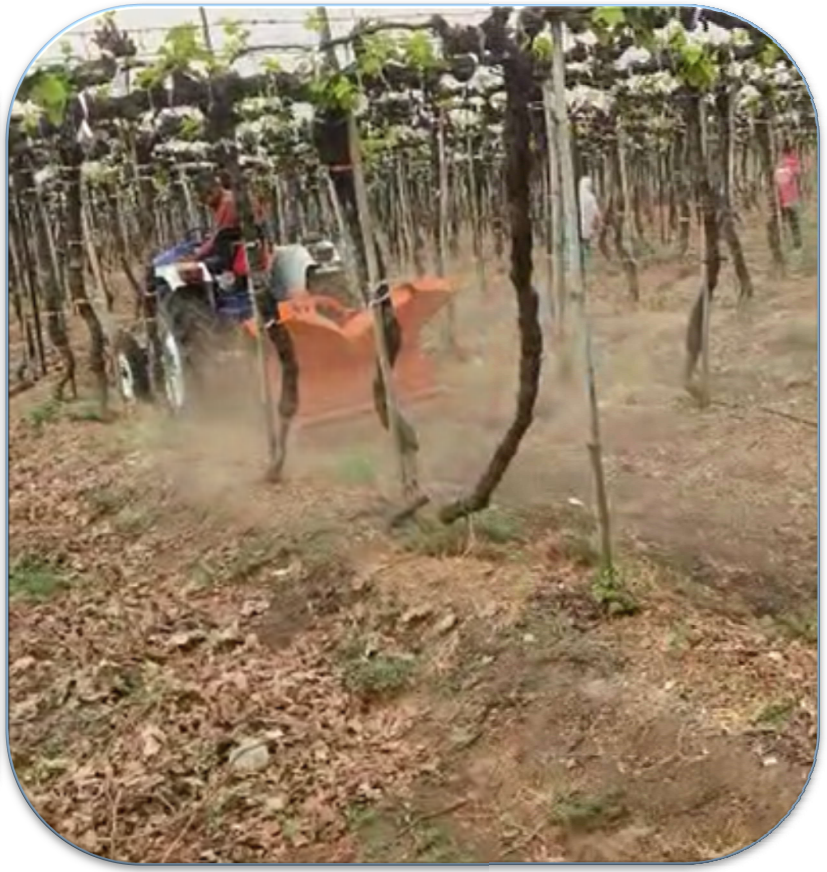
Contd..

Technology Assessed	Source of Technology	Prod.	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

Details of On Farm Trial for assessment :

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 mechanization
6.	Performance of the Technology with performance indicators:	:	Large saving in the labour requirement 90%, machine with increased output by 480% and cost saving by 78% 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 recomm. for micro level situation	:	T/O 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 and developmental departments:	:	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.

Tractor operated pruned Grape Twine mulcher for insitu mulching



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
Soybean	Rain fed	Low yield & high cost of sowing in soybean due to lack of appropriate seed dibbler for marginal farmers	Manual Precision Seed Dibbler for Soybean	20	Manual Precision Seed Dibbler for Soybean	Seed Rate, Germin %, Cost , Yield	Para meter / Demo / Chk Seed Rate Kg/ha: 52 / 75 Cost, Rs.Ha: 31220 / 37250 Yield Q/ha: 32.5 / 21.25	Para meter / % Seed Rate: (-)30.67% Cost %: (-)16.19% Yield, Rs.Ha: (+)52.94%	Soybean seed placement is reasonably precise. Seed saving was observed upto30.67%, Cost Saving observed upto 16.19%. Yield increase upto 52.94%. Best suited for marginal farmers. The dibbler is of multi crop type, hence, offers better utility in all seasons.	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
Tech option 1 (Farmer's practice): Tractor drawn traditional Seed drills	AICRP, FIM MPKV, Rahuri ferti seed drills and dibblers	21.25	Qtl / ha	Rs.52000/ha	2.39
Technology option 2: Precision Multicrop Manual Precision seed dibbler		32.50	Qtl / ha	Rs.105280/ha	4.37

Details of On Farm Trial for assessment :

1	Title of Technology Assessed	:	Manual Precision Seed Dibbler for Soybean
2	Problem Definition	:	Low yield & high cost of sowing in soybean due to lack of appropriate seed dibbler for marginal farmers
3	Details of technologies selected for assessment	:	Manual Precision Seed Dibbler Vs locally used Tractor Drawn Seed drills
4	Source of technology	:	Commercially available manual dibblers, AICRP, FIM MPKV, Rahuri ferti seed drills and dibblers
5	Production system and thematic area	:	Rainfed , Soybean , Agricultural Mechanization
6	Performance of the Technology with performance indicators	:	Soybean seed placement is reasonably precise. Seed saving was observed upto36%, Cost Saving observed upto 48%. Best suited for marginal farmers. The dibbler is of multi crop type, hence, offers better utility in all seasons.
7	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	Most suitable to replace the traditional Tractor Drawn seed drills. Prevents seed damages due to traditional metering & its low precision. Soybean seed placement is reasonably precise @18"*4" (uniform) compared to 9"*2 "(non uniform. Seed saving was observed upto 30.27%, Cost Saving observed upto 16.19%. Yield increase upto 52%. Can be used in conditions not suited from T/D drills. absence of proper access form tractors. Best suited for marginal farmers. Reduces dependence on rental TD seed drills. The dibbler is of Reasonably prices & Small, multi crop type. Offers B: C Ratio of 4.36 compared to 2.39 in T/D seed drills. Offers better utility in all seasons. Manual operation light wt and prevents soil compaction. Most suited with poor road access to tractors and poor soil conditions during rains. Prevents soil moisture loss due to no soil disturbance. Suitable for seeding on all types of soil types & even on raised beds.
8	Final recommendation for micro level situation	:	Most suitable alternative for Tractor Drawn planter for Marginal Farmers. Suitable for seeding on all soil types & even on raised beds. Reasonable price, multi-crop and all season utility offers wide adoption potential. Suitable for individual ownership by marginal farmers.
9	Constraints identified and feedback for research	:	No major constraint observed on operation front.
10	Process of farmers participation and their reaction	:	Soybean crop is grown in eastern & central part of the district. Cultivators are especially small & marginal farmers. Some crop operations like seed sowing are done with tractor drawn seed drills. Farmers depend on rental services due to high cost of seed drills. Secondly, existing T/D seed drills are relatively low in precision, fetched high cultivation sowing. Hence, soybean growers with varied farming & socioeconomic conditions and need were selected in village: Moh Tal sinner. As per the felt need, the village farmers groups were actively involved in the assessment of the machine for its suitability in local conditions. The farmers are very much satisfied with its present performance and its see potential horizontal adoption. The trials shall continue for next two years.

Manual Precision Seed Dibbler for Soybean

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
Bajra (Pearl Millet)	-	Bajra is a nutritious millet but its flour get bitter within 4 to 5 days so people avoid eating it.	Assessment on increasing shelf life of bajra (Pearl millet) flour	25	Farmers practice- Direct milling of bajra in flour	Drying time (min)	0	Shelf life of bajra grinded after roasting is more than dipped in boiling water	Shelf life is more .No change in taste		
						Shelf life (days)	5				
					Technology assessed (T2) Tie bajra in muslin cloth and dip in boiling water 15 to 20 sec	Drying time (sec)	20				
						Shelf life (days)	28				
					Technology assessed (T3)Dry heat treatment before milling of bajra -100°C for 20 min	Drying time(min)	20				
						Shelf life (days)	32				

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): T1- Direct milling of bajra in flour					
Technology option 2 : T2-Tie bajra in muslin cloth and dip in boiling water 15 to 20 sec	CGS, Haryana ,Agriculture University, Hissar				
Technology option 3 : T3-Dry heat treatment before milling of bajra -100°C for 20 min	CGS, Haryana ,Agriculture University, Hissar				

Details of On Farm Trial for assessment :

1	Title of Technology Assessed	: Assessment On increasing shelf life of bajra flour
2.	Problem Definition	: Bajra is a nutritious millet but its flour get bitter within 4 to 5 days so people avoid eating it
3	Details of technologies selected for assessment	:1. Direct milling of bajra in flour 2. Tie bajra in muslin cloth and dip in boiling water 15 to 20sec 3. Dry heat treatment before milling of bajra -100°C for 20 min
4	Source of technology	: CGS, Haryana ,Agriculture University, Hissar
5	Production system and thematic area	: Women and Child Care Nutrition
6	Performance of the Technology with performance indicators	: For increasing the shelf life two methods adopted 1) The bajra kept in muslin cloths in boiling water for 15 to 20 sec then dried & grinding is done. 2) Dry bajra heated then cooled & then grinded.
7	Feedback, matrix scoring of various technology parameters done through farmer's participation/other scoring techniques	: Shelf life in both cases check through number of trials. Shelf life in dry heated grinded flour is more than shelf life of dip in boiling water and then grinded bajra.
8	Final recommendation for micro level situation	: The bajra before grinded should be roasted at 100°C for 20 min and then has to be grinded for better shelf life,
9	Constraints identified and feedback for research	: Time consuming and not easily done
10	Process of farmers participation and their reaction	: Awareness lecture for becoming of bajra. Training and Demonstration of roasting & showing increasing shelf life.Enhancing the use of bajra by other value added products.

OFT-7

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 2.Less knowledge about different varieties of oyster mushroom	Assessment on different varieties of oyster mushroom cultivation	20	Farmers practice- T1 Pleurotus Sajor Caju Technology assessed –	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				
					T2 Pleurotus Florida Technology assessed –	1. Production kg/bag (5 kg wet paddy straw)	1.7kg				
						2.Duration/days	40				
					T3 Pleurotus Blue	1. Production kg/bag (5 kg wet paddy straw)	2kg				
						2.Duration/days	39				

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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)	85 kg	Kg/ 50 beds	14500	5.8
Technology option 3 :Pleurotus Blue	DMR ,Solan (HP)	100 kg	Kg/ 50 beds	17500	7

Details of On Farm Trial for assessment :

1	Title of Technology Assessed	:	Assessment on different varieties of oyster mushroom cultivation
2	Problem Definition	:	1.Lack of knowledge about utilization of farm residue 2.Less knowledge about different varieties of oyster mushroom
3	Details of technologies selected for assessment	:	Cultivation of Pleurotus Sajor Caju, Pleurotus Florida, Pleurotus Blue mushroom on paddy straw.
4	Source of technology	:	DMR ,Solan
5	Production system and thematic area	:	Mushroom Production
6	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.
7	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.
8	Final recommendation for micro level situation	:	All above mentioned varieties of mushroom were cultivated in dark room with 25 -30^0 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.
9	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.
10	Process of farmers participation and their reaction	:	: 1.Awareness lectures among the SHGs and farmers.2. Training session for cultivation of mushroom to interested farmers.3.Helping them during cultivation, harvesting and marketing. Through this process other farmers are attracted because of high yield and income from agricultural residue.

Assessment on different varieties of oyster mushroom

OFT-8

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
Cattle	Intensive farming	1.Low milk yield, 2. Repeat breeding & 3. Retention of placenta due to imbalanced minerals	Use of Di-Calcium Phosphate in Crossbreed cows to reduce repeat breeding with improved production of milk	07 (21 animals)	T1 - Farmers practice/animal - 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	56.42 4335 80159/ 1.89	With use of Di-Calcium phosphate the conception rate and milk production performances of cows, both showing significant results.	Di-Calcium phosphate is easy to feed to animals…but 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	72.05 5511 91254/ 2.10				
					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	86.21 6342 92928/ 2.36				

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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	4335	litre/cow/lactation	71076/-	1.89
T2 - Recommended technology/animal - 30 kg Green fodder/day + 5-6 kg Kadabi/day + 400gm concentrate per lit. of milk + 50 gm Mineral mix.		5511	litre/cow/lactation	100126/-	2.10
T3 - Technology Assessed/animal - T2 + 50 gm extra Mineral mix. (Total 100 gm) + 100 gm Di-Calcium phosphate		6342	litre/cow/lactation	126067/-	2.36

Details of On Farm Trial for assessment :

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 4321 litre/cow/lactation while B:C ration is 1.89 In Recommended practice (T2) - Conception rate 71.43 %, Milk production 5468 litre/cow/lactation while B:C ration is 2.10 In Assessed technology (T3) - Conception rate 45.71 %, Milk production 6257 litre/cow/lactation while B:C ration is 2.36
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.

Use of Di-Calcium Phosphate in Crossbreed cows to reduce repeat breeding with improved production of milk

OFT-9

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
Poultry	Backyard system	Low income potential of local Poultry breeds	Comparisons of Kaweri and Black Australorp poultry breeds in Backyard rearing system with local breeds	10 (Kaweri - 50 Birds, Black Australorp - 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.) 3. B:C ratio	0.725 144/- 1.30	Black Australorp birds are beneficial than Kaweri and local ones.	Black Australorp is phenotypically same to desi birds with higher weight gains and best meat taste.	-	-
					T2- Improved technology - Use of Kaweri improved poultry breed	1. Weight gain/bird - Kg (3.5 months age) 2. Cost on feeding/bird (Rs.) 3. B:C ratio	0.968 158/- 1.40				
					T3 - Improved technology - Use of Black Australorp improved poultry breed	1. Weight gain/bird - Kg (3.5 months age) 2. Cost on feeding/bird (Rs.) 3. B:C ratio	1.234 162/- 1.72				

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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	0.725	Kg/bird (3.5 months age)	43/-Rs./bird	1.30
T2- Improved technology - Use of Kaweri improved poultry breed		0.968	Kg/bird (3.5 months age)	64/-Rs./bird	1.40
T3 - Improved technology - Use of Black Australorp improved poultry breed		1.234	Kg/bird (3.5 months age)	117/-Rs./bird	1.72

Details of On Farm Trial for assessment :

1	Title of Technology Assessed	:	Comparisons of Kaweri 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 Kaweri 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 - 0.725 Kg (3.5 months age) while B:C ratio is 1.30 In Recommended practice (T2) - Weight gain/bird - 0.968 Kg (3.5 months age) while B:C ratio is 1.40 In Assessed technology (T3) - Weight gain/bird - 1.234 Kg (3.5 months age) while B:C ratio 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 Kaweri 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.

Comparisons of Kaweri and Black Australorp poultry breeds in Backyard rearing system with local breeds

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 2024 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
1.	Onion	Crop Production	NHRDF Red-4	Front line demonstration,Field Day, Training	08	160	36
2.	Garlic	Crop Production	Yamuna Safed	Front line demonstration, Field Day, Training	02	85	7
3.	Finger millet - STCR	INM	STCR Based fertilizer application	Kharif 2024	1	20	4
4.	Paddy- STCR	INM	STCR Based fertilizer application	Kharif 2024	1	30	6
5.	Onion -STCR	INM	STCR Based fertilizer application	Rabi 2023	1	20	4

B. Details of FLDs implemented during 2024**(Kharif 2024, Rabi 2023-24, Summer 2024) (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	
1	Cereals: Paddy	INM	Fourfold Technology	Kharif 2024	10	10	50	-	50	-
2	Oilseeds: Soybean	ICM	Varietal Demonstration	Kharif 2024	90	90	-	225	225	
3	horticultural crops :Onion	Crop Production	Variety: NHRDF Red-4	Rabi 2023	10	10	25	00	25	
4	horticultural crops : Garlic	Crop Production	Variety: Yamuna Safed	Rabi 2023	0.4	0.4	30	30	30	
5	horticultural Fruit :Mango	Fruit orchard management	Variety :Kesar	Kharif 2023	02	02	25	00	25	

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 2024	Rainfed	Light to Medium	Low	Low	Medium	Fallow	25.06.2024	20.11.2024	2382	29
Soybean	Kharif 2024	Rainfed	Medium to heavy	Low	Low	Medium	Chickpea	20.06.2024	10.10.2024	686	15
Onion	Rabi 2023	Irrigated	Light to medium	Low	Low	high	Paddy	Dec 2023	April 2024	706.2	55
Garlic	Rabi 2023	Irrigated	Light to medium	Low	Low	high	Paddy	Dec 2023	April 2024	706.2	55
Mango	Kharif 2023	Irrigated	Light to medium	Low	Low	high	Fellow land /farm bunds	June 2023	May 2026	706.2	55
Finger millet - STCR	Kharif 2024	Rainfed	Sloppy,Light	Low	Low	high	Fallow	July 2023	Nov 2024	2382	29
Paddy -STCR	Kharif 2024	Irrigated	Light to medium	Low	Low	high	Onion	July 2023	Nov 2024	2382	29
Onion -STCR	Rabi 2023	Irrigated	Light to medium	Low	Low	high	Paddy	Dec 2022	April 2024	2382	29

Technical Feedback on the demonstrated technologies

S. No	Feed Back
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 Durva	• 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.Onion	• Bulbs are dark red in colour,globular round in shape with thin neck and 5.5-6.25 cm in diameter. • Crop matures in 110-120 days after transplanting. • Keeping quality of bulbs is good. • Higher yield compare to other varities • Low % of joint onion
4.Garlic	• Good attractive colour, silvery white with creamy flesh • Big bulb size diameter of bulb 4.0-4.5 cm • Cloves are Sickle shaped and 25-30 in number per bulb. • High pungency
5. Mango	• Higher survival Rate,
6.Paddy-STCR	• The paddy yield has increased with STCR technology
7.Finger Millet-STCR	• The Finger Millet yield has increased with STCR technology
8.Onion- STCR	• The maximum yield level could not achieve due to light to medium type of soil in Rabi onion.

Farmers' reactions on specific technologies

S. No	Feed Back
1. Paddy: Fourfold Technology	• The spacing between row and plant gives more aeration which helps in maximizing more shoots development. • The planting technique is tedious and time consuming, but can adopt easily with practicing. • The urea-DAP briquettes helps to enhance yield. • The physical property of land enhanced due to use of green manuring.
2. Soybean : Variety- Phule Durva	• The variety gives more yield and stand with less moisture condition • The more pods or bunches observed on the tip of plant
7.Onion variety NHRDF RED-4	• Onion variety NHRDF RED-4 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.
8.Garlic variety Yamuna safed	• Garlic variety Yamuna safed (G-284) is attractive silvery white colour with bold bulb size. • Good market rate. Higher yield over to local variety. Resistance to disease and pests. • Higher Storage life
9.Paddy-STCR	• Soil test based fertilizer application increased yield
10.Finger Millet-STCR	• Soil test based fertilizer application increased yield
11. Onion- STCR	• Soil test based fertilizer application increased yield

Extension and Training activities under FLD

Sl. No.	Activity	No. of activities organized	Date	Number of participants	Remarks
	Agronomy				
1	**Field days**				
	Paddy FLD Kh. 2024	1	25.10.2024	82	
	Finger Millet OFT Kh. 2024	1	25.10.2024	82	
	Soybean CFLD Kh. 2024	1	25.09.2024	89	
	Soybean OFT Kh. 2024	1	08.10.2024	19	
	Onion & Garlic	02	04.04.24	95	
2	**Farmers Training**				
	Paddy FLD Kh. 2024	1	05.07.2024	39	
	Finger Millet OFT Kh. 2024	2	05.07.2024, 30.07.2024	57	
	Soybean CFLD Kh. 2024	2	10.04.2024, 16.08.2024	82	
	Soybean OFT Kh. 2024	1	24.07.2024	18	
	Mango	2	04.07.2024. 13.08.24	107	
	Onion	2	27.9.24, 20.12.24	66	
	Garlic	1	21.10.24	25	
3	**Media coverage**				
	Radio Talks	2	26.03.2024, 18.06.2024		
4	**Training for extension functionaries**	2	17.03.2024, 09.07.2024	182	
1	**Training for farmers**				
	Paddy – STCR	01	30.07.24	30	
	Finger Millet –STCR	01	30.07.24	22	
	Onion -STCR	01	17.01.24	20	
2	**Method demonstration**				
	Paddy -STCR	01	30.07.24	30	
	Finger millet STCR	01	30.07.24	22	
	Onion -STCR	01	03.01.24	20	
4	**Scientific visit**				
	Paddy-STCR	01	30.07.24	30	
	Finger millet - STCR	01	30.07.24	22	
	Onion -STCR	01	07.02.24	17	
5	**Field days**				
	Paddy – STCR	01	25.10.24	22	
	Finger Millet –STCR	01	25.10.24	22	
	Onion -STCR	01	21.04.24	12	
6	Farmers Exposure visit	01	21.02.24	15	

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			Check		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 Durva	225	90	41.25	16.25	21.41	15.16	41.23	48427	87771	39345	1.81	40165	62137	21972	1.55

* 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			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
NIL																		

* 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	Them. Area	Name of the tech.	No. of Farmers	Area (ha)	Yield (q/ha)				% Change in Yield	Other Parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demo			Ch-eck		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Avg.												
Cereals																			
Paddy	INM	Fourfold Technology	50	10	57.5	35	51.20	30.35	68.70	1. No. of tillers: 32 2. Length of earhead: 20 cm	1. No. of tillers: 23 2. Length of earhead: 15 cm	49910	133120	83210	2.67	51355	78910	27555	1.54
Paddy	INM	STCR technology	30	6	51	42	45.06	37.38	21	No.of tillers – 13	No.of tillers – 10	75581.5	112666.66	37085.16	2.55	65168.3	93458.33	28289.5	1.43
Millets																			
Finger millet	INM	STCR technology	20	4	22	15	9.92	6.85	44.89	No. of fingers – 5	No.of fingers – 3	25081.5	35730	10648.5	1.42	21289.37	24660	3370.62	1.15
Vegetables																			
Onion	Crop Prod.	NHRDF RED-4	25	08	200	165	183	165	10.91	Weight of bulb -166gm Diameter of bulb – 5.78 cm	Weight of bulb-137 gm Diameter of bulb – 5.12 cm	66850	360000	293150	5.38	64965	297000	232035	4.57
Garlic	Crop Prod.	Variety Yamuna Safed (G-284)	30	0.2	60	34	77	62	24.19	Weight of bulb -65gm Diameter of bulb – 4.2 cm No of Cloves-26	Weight of bulb-39 gm Diameter of bulb – 2.1 cm No of Cloves-18	168125	240000	71875	1.42	149125	155000	5875	1.03
Onion	INM	STCR technology	20	4	102	90	198.95	175.5	13.26	Weight of bulb -127gm	Weight of bulb-91gm	65645	397900	332255	6.06	67181.75	351000	283818.25	5.22

* 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 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										
NIL																		

Soybean CFLD - Diagnostic visit

Paddy FLD - Profuse Tillering

Field day On STCR paddy field plot.

Field day On STCR Finger millet field plot

Filed Day Under Rabi Onion

Field Day on Garlic

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	1291 ql/ha	1001 ql/ha	28.97	Cost of production, Gross Income	Cost of production, Gross Income	18991	141003	122012	7.42	17354	106397	89043	6.13
Poultry	Poultry farming	Introduction of Black Australorp breed for backyard.	25	425	1.284 Kg/Bird	0.837 Kg/Bird	53.40	Cost of production, Gross Income	Cost of production, Gross Income	169	281	112	1.66	161	210	49	1.30
Sheep & Goat	Goat farming	Pure Osmanabadi Goats for higher productions and upgradation of local breeds	10	22 (20 females+2 males common)	28.58 Kg	18.48 Kg	54.65	Cost of production, Gross Income	Cost of production, Gross Income	2692	8028	5336	2.98	2866	5321	2455	1.86

* 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 Fisheries

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

* 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)
NIL																

FLD on Women Empowerment

Category	Name of technology	No. of demonstrations	Name of observations	Demonstration	Check
NIL					

FLD Pure Osmanabadi Goats for higher productions and upgradation of local breeds

FLD on Black Australorp bird

FLD on Farm Implements and Machinery

Name of the implement	Crop	Technology demonstrated	No. of Farmer	Area (ha)	Major parameters	Filed observation (output/man hour)		% change in major parameter	Labor reduction (man days)				Cost reduction (Rs./ha or Rs./Unit etc.)			
						Demo	Check		Land prepar -ation	Sowing	Weeding	Total	Land preparatio -n	Labour	Irrigati -on	Total
BBF Planter Soybean Cultivation		BBF Planter for insitu moisture conseration in Soybean Cultivation	10	04	Labour (nos.)	3	8	(-) 62.5%		05				Rs.490 /ha		Rs.490 /ha
					Output (ha/day)	0.33 (ha/day)	0.14(ha/day)	(+)0.19 ha/day								
					Cost (Rs./ha)	2850	3340	(-) 14.67%								
					Yield q/ha	20.2 q/ha	17.8q/ha	(+)13%								
Vertical conveyor reaper	paddy	Merchandised Harvesting of paddy for marginal farmers	10	04	Labor (nos.)	2	12	(-) 83.33%			10 (Harvesting)					
					Output (ha/day)	2.29 (ha/day)	0.68(ha/day)	(+)1.61 ha/day								
					Cost (Rs./ha)	1150	2310	(-)50.21%						Rs.1160 /ha		Rs.1160/ha
					Drudgery	Low	High	Very low								
T/D Multicrop Planter	Chick pea	Improved seed and fertilizer placement with Multicrop planter	10	04	Labour (nos.)	2	6	(-)66.66%		04						
		@Chirapali, kone,TSP)			Output (ha/day)	1.26(ha/day)	0.59(ha/day)	(+)0.67ha/day								
					Cost (Rs./ha)	1780	2050	(-)13.17%				04	Rs.270 /ha			***Rs.270 /ha
					Yield(q/ha)	16.5 q/ha	11.5 q/ha	(+)43%								
Groundnut Decorticator	Groundnut	To study the efficiency of Groundnut Decorticator	30	70 hrs	Labour	2	5	(-)60%			03	03				
					Time	51kg/h	31kg/h	(-)64%								
					Cost	32/q	95/q	(-)67%						Rs.78/ql		Rs.78/ql
Vaibhav Sickles	Paddy		50	2 ha	Area covered by harvesting /day	0.80 ha	0.5 ha	(+)60%								
					Cost of operation Rs/ha	1500	1900	(-)21.05%						For Harvesting) Rs.500/ha		(For Harvesting) 500 Rs/Ha
					Labour day/ha	7	11	(-)36%			(for Harveting) 4	(for Harveting) 4				

Crop Stand with BBF Planter for insitu conservation in soybean

Demonstration of Groundnut Decorticator

Distribution on Vaibhav Sickles

Demonstration of Vaibhav Sickles

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	50	50	375	230	63	50	50	1200	5300	4100	3.41	800	2100	1300	1.6

***check maybe family adopting different Nutrition garden model/ no adoption of Nutrition garden model**
Savings from produce of Nutrition garden used for home consumption

FLD on Demonstration details on crop hybrids

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

Note: Remove the Enterprises/crops which have not been shown

Distribution Of Nutrition Garden Kit

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		
		M	F	T	M	F	T	M	F	T
I Crop Production										
Organig farming	1	4	1	5	39	1	40	43	2	45
Total	**1**	**4**	**1**	**5**	**39**	**1**	**40**	**43**	**2**	**45**
II Horticulture										
a) Vegetable Crops										
Protective cultivation	1	68	2	70	10	0	10	78	2	80
Cultn & Mangmnt	4	114	43	157	90	20	110	204	63	267
Post Harv Mgmt	5	120	25	145	59	8	67	179	33	212
Total (a)	**10**	**302**	**70**	**372**	**159**	**28**	**187**	**461**	**98**	**559**
Grand Total (a to g)	**10**	**302**	**70**	**372**	**159**	**28**	**187**	**461**	**98**	**559**
III Soil Health and Fertility Management										
Production and use of organic inputs	30	582	81	663	685	57	742	1267	138	1405
Total	**30**	**582**	**81**	**663**	**685**	**57**	**742**	**1267**	**138**	**1405**
IV Livestock Production and Management										
Dairy Management	1	12	11	23	24	12	36	36	23	59
Total	**1**	**12**	**11**	**23**	**24**	**12**	**36**	**36**	**23**	**59**
V Home Science/Women empowerment										
H.F.S. by kitchen gardening and nutrition gardening	1	0	0	0	1	26	27	1	26	27
Value addition	1	0	0	0	0	19	19	0	19	19
Income Generation Activity for Women	4	0	2	2	62	105	167	62	107	169
Women and child care	1	0	1	1	3	44	47	3	45	48
Total	**7**	**0**	**3**	**3**	**66**	**194**	**260**	**66**	**197**	**263**
VI Agril. Engineering										
Precision Farming	1	13	2	15	4	0	4	17	2	19
Protected Cultivation Tech	2	124	4	128	0	0	0	124	4	128
Total	**3**	**137**	**6**	**143**	**4**	**0**	**4**	**141**	**6**	**147**
X CapacityBuilding and Group Dynamics										
Bee Keeping	**2**	**115**	**3**	**118**	**27**	**20**	**47**	**142**	**23**	**165**
Total	**2**	**115**	**3**	**118**	**27**	**20**	**47**	**142**	**23**	**165**
GRAND TOTAL	**54**	**1152**	**175**	**1327**	**1004**	**312**	**1316**	**2156**	**487**	**2643**

Farmers' Training including sponsored training programmes (off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
I Crop Production										
Integrated Crop Management	4	18	0	18	66	28	94	84	28	112
Integrated nutrient management	2	77	6	83	1	0	1	78	6	84
Total	**6**	**95**	**6**	**101**	**67**	**28**	**95**	**162**	**34**	**196**
II Horticulture										
b) Fruits										
Management of young plants/orchards	5	16	4	20	182	51	233	198	55	253
Total(b)	**5**	**16**	**4**	**20**	**182**	**51**	**233**	**198**	**55**	**253**
Grand Total (a to g)	**5**	**16**	**4**	**20**	**182**	**51**	**233**	**198**	**55**	**253**
III Soil Health and Fertility Management										
Integrated Nutrient Management	3	0	0	0	64	0	64	64	0	64
Production and use of organic inputs	4	110	35	145	51	4	55	161	39	200
Total	**7**	**110**	**35**	**145**	**115**	**4**	**119**	**225**	**39**	**264**
IV Livestock Production and Management										
Dairy Management	6	113	39	152	135	40	175	248	79	327
Poultry Management	3	39	6	45	69	27	96	108	33	141
Animal Nutrition Management	2	55	34	89	15	10	25	70	44	114
Disease Management	2	25	6	31	59	25	84	84	31	115
Feed & fodder technology	1	32	18	50	15	16	31	47	34	81
Total	**14**	**264**	**103**	**367**	**293**	**118**	**411**	**557**	**221**	**778**
V Home Science/Women empowerment										
Household F. S. by kitchen gardening & nutrition gardening	1	0	0	0	0	28	28	0	28	28
Value addition	10	7	20	27	4	272	276	11	292	303
Women and child care	2	0	0	0	8	50	58	8	50	58
Income Generation Activity for Women	6	4	72	76	26	183	209	30	255	285
Total	**19**	**11**	**92**	**103**	**38**	**533**	**571**	**49**	**625**	**674**
VI Agril. Engineering										
Improved Farm Machineries	4	0	0	0	63	31	94	63	31	94
Total	**4**	**0**	**0**	**0**	**63**	**31**	**94**	**63**	**31**	**94**
GRAND TOTAL	**55**	**496**	**240**	**736**	**758**	**765**	**1523**	**1254**	**1005**	**2259**

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
I Crop Production										
Integrated Crop Management	4	18	0	18	66	28	94	84	28	112
Integrated nutrient management	2	77	6	83	1	0	1	78	6	84
Organig farming	1	4	1	5	39	1	40	43	2	45
Total	**7**	**99**	**7**	**106**	**106**	**29**	**135**	**205**	**36**	**241**
II Horticulture										
a) Vegetable Crops										
Protective cultivation	1	68	2	70	10	0	10	78	2	80
Cultn & Mangmnt	4	114	43	157	90	20	110	204	63	267
Post Harv Mgmt	5	120	25	145	59	8	67	179	33	212
Total(a)	**10**	**302**	**70**	**372**	**159**	**28**	**187**	**461**	**98**	**559**
b) Fruits										
Management of young plants/orchards	5	16	4	20	182	51	233	198	55	253
Total(b)	**5**	**16**	**4**	**20**	**182**	**51**	**233**	**198**	**55**	**253**
Grand Total (a to g)	**15**	**318**	**74**	**392**	**341**	**79**	**420**	**659**	**153**	**812**
III Soil Health and Fertility Management										
Integrated Nutrient Management	3	0	0	0	64	0	64	64	0	64
Production and use of organic inputs	34	692	116	808	736	61	797	1428	177	1605
Total	**37**	**692**	**116**	**808**	**800**	**61**	**861**	**1492**	**177**	**1669**
IV Livestock Production and Management										
Dairy Management	7	125	50	175	159	52	211	284	102	386
Poultry Management	3	39	6	45	69	27	96	108	33	141
Animal Nutrition Management	2	55	34	89	15	10	25	70	44	114
Disease Management	2	25	6	31	59	25	84	84	31	115
Feed & fodder technology	1	32	18	50	15	16	31	47	34	81
Total	**15**	**276**	**114**	**390**	**317**	**130**	**447**	**593**	**244**	**837**
V Home Science/Women empowerment										
H.F.S. by kitchen gardening and nutrition gardening	2	0	0	0	1	54	55	1	54	55
Value addition	11	7	20	27	4	291	295	11	311	322
Women and child care	3	0	1	1	11	94	105	11	95	106
Income Generation Activity for Women	10	4	74	78	88	288	376	92	362	454
Total	**26**	**11**	**95**	**106**	**104**	**727**	**831**	**115**	**822**	**937**
VI Agril. Engineering										
Improved Farm Machineries	4	0	0	0	63	31	94	63	31	94
Precision Farming	1	13	2	15	4	0	4	17	2	19
Protected Cultivation Tech	2	124	4	128	0	0	0	124	4	128
Total	**7**	**137**	**6**	**143**	**67**	**31**	**98**	**204**	**37**	**241**
X CapacityBuilding and Group Dynamics										
Bee Keeping	2	115	3	118	27	20	47	142	23	165
Total	**2**	**115**	**3**	**118**	**27**	**20**	**47**	**142**	**23**	**165**
GRAND TOTAL	**109**	**1648**	**415**	**2063**	**1762**	**1077**	**2839**	**3410**	**1492**	**4902**

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	2	22	4	26	5	8	13	27	12	39
Integrated farming	1	36	0	36	14	0	14	50	0	50
Seed production	1	15	3	18	5	3	8	20	6	26
Mushroom Production	3	7	4	11	46	43	89	53	47	100
Bee-keeping	1	30	20	50	0	0	0	30	20	50
Value addition	3	16	7	23	3	3	6	19	10	29
Sheep and goat rearing	3	54	22	76	47	24	71	101	46	147
Soil water conservation	1	8	3	11	4	2	6	12	5	17
TOTAL	**15**	**188**	**63**	**251**	**124**	**83**	**207**	**312**	**146**	**458**

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
Production of organic inputs	1	15	8	23	0	0	0	15	8	23
Dairying	1	0	0	0	34	28	62	34	28	62
Sheep and goat rearing	1	27	2	29	18	0	18	45	2	47
TOTAL	**3**	**42**	**10**	**52**	**52**	**28**	**80**	**94**	**38**	**132**

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	2	22	4	26	5	8	13	27	12	39
Integrated farming	1	36	0	36	14	0	14	50	0	50
Seed production	1	15	3	18	5	3	8	20	6	26
Mushroom Production	3	7	4	11	46	43	89	53	47	100
Bee-keeping	1	30	20	50	0	0	0	30	20	50
Value addition	3	16	7	23	3	3	6	19	10	29
Sheep and goat rearing	4	81	24	105	65	24	89	146	48	194
Soil water conservation	1	8	3	11	4	2	6	12	5	17
Production of organic inputs	1	15	8	23	0	0	0	15	8	23
Dairying	1	0	0	0	34	28	62	34	28	62
TOTAL	**18**	**230**	**73**	**303**	**176**	**111**	**287**	**406**	**184**	**590**

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	2	72	0	72	28	0	28	100	0	100
Integrated Pest Management	1	70	32	102	18	12	30	88	44	132
Care and maintenance of farm machinery and implements	4	139	12	151	0	0	0	139	12	151
Management in farm animals	3	364	68	432	284	67	351	648	135	783
TOTAL	**10**	**645**	**112**	**757**	**330**	**79**	**409**	**975**	**191**	**1166**

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	17	3	20	7	2	9	24	5	29
Protected cultivation technology	1	17	5	22	6	3	9	23	8	31
Information networking among farmers	1	14	11	25	0	0	0	14	11	25
Management in farm animals	2	36	6	42	24	4	28	60	10	70
Integrated Crop management	1	52	12	64	12	10	22	64	22	86
TOTAL	**6**	**136**	**37**	**173**	**49**	**19**	**68**	**185**	**56**	**241**

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	3	89	3	92	35	2	37	124	5	129
Integrated Pest Management	1	70	32	102	18	12	30	88	44	132
Care and maintenance of farm machinery and implements	4	139	12	151	0	0	0	139	12	151
Management in farm animals	5	400	74	474	308	71	379	708	145	853
Protected cultivation technology	1	17	5	22	6	3	9	23	8	31
Information networking among farmers	1	14	11	25	0	0	0	14	11	25
Integrated Crop management	1	52	12	64	12	10	22	64	22	86
TOTAL	**16**	**781**	**149**	**930**	**379**	**98**	**477**	**1160**	**247**	**1407**

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
Crop production and management										
Organic Farming	1	4	1	5	39	1	40	43	2	45
Prodvity enhc in field crops	2	72	0	72	28	0	28	100	0	100
IPM	1	70	32	102	18	12	30	88	44	132
Production and value addition										
Fruit Mgmt_young plants/orchards	5	16	4	20	182	51	233	198	55	253
Veg cultn & Mangmnt	4	114	43	157	90	20	110	204	63	267
Veg Post Harv Mgmt	5	120	25	145	59	8	67	179	33	212

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
Prod use of org inputs	28	603	114	717	526	61	587	1129	175	1304
Value addition	3	16	7	23	3	3	6	19	10	29
Prodvity enhc in field crops	1	17	3	20	7	2	9	24	5	29
Protected Cultivation Tech	1	17	5	22	6	3	9	23	8	31
ICM	1	52	12	64	12	10	22	64	22	86
Total	**52**	**1101**	**246**	**1347**	**970**	**171**	**1141**	**2071**	**417**	**2488**
Farm machinery										
Integrated farming	1	36	0	36	14	0	14	50	0	50
Improved Farm Machinery & Implements	4	139	12	151	0	0	0	139	12	151
Total	**5**	**175**	**12**	**187**	**14**	**0**	**14**	**189**	**12**	**201**
Livestock and fisheries										
Sheep & goat rearing	2	55	13	68	37	18	55	92	31	123
Mangmt in farm animals	5	400	74	474	308	71	379	708	145	853
Dairy Mgmt	2	41	8	49	26	0	26	67	8	75
Dairying	1	0	0	0	34	28	62	34	28	62
Total	**10**	**496**	**95**	**591**	**405**	**117**	**522**	**901**	**212**	**1113**
Home Science										
Value addition	5	7	20	27	4	145	149	11	165	176
Income Genration Activity for Women	4	3	72	75	24	131	155	27	203	230
Total	**9**	**10**	**92**	**102**	**28**	**276**	**304**	**38**	**368**	**406**
Agricultural Extension										
Bee Keeping	1	5	2	7	27	20	47	32	22	54
Info networking in farmers	1	14	11	25	0	0	0	14	11	25
Total	**2**	**19**	**13**	**32**	**27**	**20**	**47**	**46**	**33**	**79**
GRAND TOTAL	**78**	**1801**	**458**	**2259**	**1444**	**584**	**2028**	**3245**	**1042**	**4287**

Details of vocational training programmes carried out by KVKs for rural youth (4 or more than 4 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
Crop production and management										
Seed production	1	15	3	18	5	3	8	20	6	26
Total	**1**	**15**	**3**	**18**	**5**	**3**	**8**	**20**	**6**	**26**
Post harvest technology and value addition										
Value addition	3	16	7	23	3	3	6	19	10	29
Nursery Mgmt Horti crops	1	10	2	12	0	7	7	10	9	19
Total	**4**	**26**	**9**	**35**	**3**	**10**	**13**	**29**	**19**	**48**
Livestock and fisheries										
Sheep and goat rearing	1	14	1	15	14	0	14	28	1	29
Total	**1**	**14**	**1**	**15**	**14**	**0**	**14**	**28**	**1**	**29**
Income generation activities										
Mushroom Production	2	2	0	2	35	28	63	37	28	65
Total	**2**	**2**	**0**	**2**	**35**	**28**	**63**	**37**	**28**	**65**
Grand Total	**8**	**57**	**13**	**70**	**57**	**41**	**98**	**114**	**54**	**168**

3.5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services (Other than KMAS)	1	225	0	225
Diagnostic visits	8	220	20	240
Field Day	7	332	10	342
Group discussions	1	28	0	28
Exhibition	5	1627	29	1656
Scientists' visit to farmers field	20	651	11	662
Farmers' seminar/workshop	1	49	0	49
Method Demonstrations	1	19	0	19
Celebration of important days	4	231	27	258
Exposure visits	8	104	9	113
Farmers Visit to KVK	19	566	46	612
Lecture Delivered	22	1019	344	1363
Total	**97**	**5071**	**496**	**5567**

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

Details of other extension programmes:

Particulars	Number
Electronic Media (CD./DVD)	-
Extension Literature	2
Newspaper coverage	18
Popular articles	-
Radio Talks	6
TV Talks	-
Animal health camps (Number of animals treated)	1 (245)
Social Media (No. of platforms Used)	5
Others (pl. specify)	-
Total	**32**

Scientific visit on STCR Onion field plot

Millet Exhibition at New Delhi

Mahila Kissan Din

Workshop on Natural farming under Dr.PDNFM at KVK

Lecture delivered with hands-on practice on multiplication of bio pesticides

KVK stall in agriculture exhibition at college of agriculture Pune

3.6 Online activities during year 2024

S. No.	Activity Type	Mode of implementation (V C / AC / Fb Live / YouTube Live/ Zoom/ G. meet/ Webex etc.)	Title of Program	No. of Programmes	No. of Participants/ Views
A	Farmers training				
1	Training Programme	**Zoom**	Fruit & Vegetable processing and Value Adittion	6	138
	Training Programme	**Zoom**	Training on hygiene and sanititation and child care	1	48
	Total			**7**	**186**
B	Farmers scientist's interaction programme				
1	Radio talks	**Audio Conferencing**	Organic Vegetable & fruits marketing	1	110
	Total			**1**	**110**
E	Workshops/ Seminar/ Meets	**Zoom**	Opportunities in Fruit & vegetable processing and value adition	6	441
	Total			**6**	**441**
	Grand Total (A+B+E)			**14**	**737**

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
NIL						

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		36628	2930240	Prepared in Kharif 2024 & will be supplied during May-June 2025
		Ratna		4186	334880	
		Sindhu		3743	299440	
Ornamental plants		Hapus		1962	156960	
		Banganpalli		1301	104080	
		Pairi		296	23680	
Medicinal and Aromatic		Amrapali		331	26480	
		Dudhpedha		741	59280	
		Vanraj		728	58240	
Plantation	Coconut	Banavali		1464	183000	
	Jackfruit	Kappa		463	23150	
Total				**51843**	**4199430**	

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg/Lit	Value (Rs.)	No. of Farmers
Bio-fungicide	Yash- Trichoplain	617	149500	63
	Yash- Trichotripple	2	500	1
	Yash- Amphilomyces	1	250	1
	Yash - Bacillus	85	21250	15
	Yash- Pseudo	141	35250	18
Bio-pesticide	Yash- Baeveria	146	31750	14
	Yash- Metarhzium	90	22250	14
	Yash- Nomoria	54	9000	10
	Yash- Vertim	316	74000	18
	Yash- Pacilo	89	22250	12
Bio Fertilizers	Yash- BioAzospi	2165	541250	54
	Yash- Bio Aceto	2	500	1
	Yash- BioAzeto	117.5	29375	14
	Yash- Rhizolego	1	250	1
	Yash - Rhizojapo	118.5	29625	13
	Yash- Bio Phospho	1578.5	394625	65
	Yash- Bio Potash	1063	265750	20
	Yash- BioZinc	6	1500	10
	Total	**6592.5**	**1628875**	**344**

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)	Qty	Value (Rs.)	No. of Farmers
Dairy animals							
Others (Pl. specify)	Goat	Osmanabadi Goats	Meat (Live Weight gain)	34	872 Kg	305200	24
Poultry							
Duals (broiler and layer)	Poultry	Black Australorp	Chicken	475	609 Kg	164430	40
	Poultry	Black Australorp	Eggs	340	3588	35880	30
	Poultry	Kaweri	Chicken	50	72 Kg	19440	11
	Poultry	Kaweri	Eggs	45	3600	36000	15
			Total	**944**	-	**560950**	**120**

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

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

B. Literature developed/published

Item	Citation/ Title	Authors name	Number
Extension literature	पिक संरक्षणासाठी जैविक रोग व कीटकनाशके	Dr. Niteen J. Thoke	1000
	पिक उत्पादन वाढीसाठी जीवाणू खते	Shri. Mangesh T. Vyavahare	1000
Others (Pl. specify) KVK activity news	KVK activity news	KVK	18
		TOTAL	**2018**

C. Details of Electronic Media Produced

S. No.	Type of media	Title of the programme	Number
1	Video Film on KVK activities	KVK activities and transplantation of old Coconut trees	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)	27	YouTube	125
2	Facebook page/ Account (no of Post)	21	Facebook	121
3	Mobile Apps	-	-	-
4	WhatsApp groups	8	WhatsApp	257
5	Twitter Account	4	Twitter	90
6	Instagram	62	Instagram	34

D. Success Stories / Case studies - Annexure I - Empowerment of Tribal households with Backyard Poultry: Black Australorp birds

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

- ✓ Village Behedpada from Tryambakeshwar tahsil 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), Hompada, Tal. Peth (2023), Nirgude, Tal. Tryamabakeshwar (2024)

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 :26

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

Four Fold Technology in Paddy, Bengalgram Cultivar Digvijay, Improved Onion Variety – ALR, NHRDF RED -3, Improved Garlic variety Yamuna Safed, 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, Nutritional Garden, Super Grain Bag

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

Background Information:

Nashik district, located in the agro-climatically transitional zone of Maharashtra, India, presents a diverse agricultural landscape across its fifteen tehsils. This region is characterized by a wide variety of crops, including fruits, vegetables, oilseeds, pulses, and cereals, supporting a large agriculture-dependent population. However, the average size of landholdings is steadily declining.

The district's geography is distinctly divided into two regions: the eastern plains and the western hilly areas. The eastern plains are characterized by a flat terrain, light soils with a hardpan, and low rainfall (approximately 700mm). In contrast, the western hilly regions receive higher rainfall (around 1200mm) and are home to tribal communities engaged in paddy-based agriculture.

Tribal livelihoods in these western regions are characterized by undulating, fragmented lands, uncertain irrigation facilities, and a reliance on traditional crops such as paddy, finger millet (Kharif), and wheat and chickpea (Rabi) grown on residual moisture or protective irrigation. These communities often face challenges related to limited access to resources, technology, and market linkages.

Problems of Local Agriculture: The agricultural sector in Nashik district faces numerous challenges that impact productivity and livelihoods. These challenges can be categorized as follows:

- **Regional Disparities:** The eastern plains suffer from water scarcity due to low rainfall and poor soil quality, limiting crop options and yields. The western hilly regions, primarily inhabited by tribal communities, face challenges related to fragmented landholdings, uncertain irrigation, and reliance on traditional, low-yielding varieties.
- **Declining Landholdings:** The average size of landholdings is shrinking, making it difficult for farmers to achieve economies of scale and invest in modern technologies.
- **Limited Access to Technology:** Many farmers, particularly in tribal areas, lack access to modern agricultural technologies, improved varieties, and quality inputs.
- **Soil Degradation:** Over-reliance on traditional farming practices and inadequate nutrient management have led to soil degradation and reduced fertility.
- **Pest and Disease Infestations:** Crops are frequently affected by pests and diseases, leading to significant yield losses.
- **Post-Harvest Losses:** Inadequate storage and processing facilities result in substantial post-harvest losses, reducing farmers' income.
- **Horticulture Specific Problems:** Traditional seedling raising methods lead to high seed wastage, disease susceptibility, and poor seedling quality. Lack of access to quality planting materials of improved fruit and vegetable varieties. High mortality rates of seedlings in open-field nurseries. Limited availability of trained manpower for grafting and nursery management.
- **Backyard Poultry Problems:** High initial chick mortality due to improper care, lack of vaccination, and poor feed management.
- **Mechanization Problems:** High cost of machinery, lack of precision in available machinery, and lack of economy of scale in tribal agriculture.
- **Inefficient Waste Management:** Traditional open dumping of animal waste leads to nutrient loss and prolonged decomposition.
- **Poor crop economics:** Tribal farming lacks economy of scale.

Need for Technological Up gradation, Technological Details, and Activities Undertaken:

Recognizing these challenges, KVK, Nashik, implemented a comprehensive strategy of technological up gradation and extension activities. The objective was to bridge the gap between research and farmers' fields, empowering them with knowledge, skills, and technologies.

Key areas of intervention and activities undertaken:

- **Improved Crop Varieties:**Introduction and promotion of high-yielding, disease-resistant varieties of paddy (Fourfold Technology), soybean ("Phule Durva"), onion (NHRDF RED-4), and garlic ("Yamuna Safed")
- **Fourfold technology in paddy:** This technology focuses on optimizing row-to-row and plant-to-plant spacing (15-25cm) for better aeration and intercultural operations. It promotes the use of rice husk and straw ash to improve soil physical properties and green manure of sunhemp for nitrogen supply. Urea-DAP briquettes are used for slow-release nutrient supply.
- **Soybean "Phule Durva":** This variety matures in 105-110 days, yielding 30-35 qt/ha. It has round, medium-sized yellow seeds, an average of 47 pods per plant with 2.5 seeds per pod, and moderate resistance to pests and diseases. The average protein content is 41%, and the oil content is 21%.
- **Enhanced Crop Management Practices:** Dissemination of scientific crop management techniques, including optimized spacing, integrated nutrient management, and integrated pest management.Promotion of green manuring and the use of bio-fertilizers to improve soil health.Soil Test Crop Response (STCR) technology for better nutrient management.
- **Horticulture Development:** Establishment of high-tech nurseries to produce quality planting materials.Training programs on modern seedling raising techniques using plug trays and protected structures.Provision of on-field grafting services for grape farmers.Skill development programs for rural youth to become nursery entrepreneurs.

- **Modern nursery techniques:** Replacing traditional soil bed nurseries with plug tray nurseries in protected structures. This reduces seed wastage, disease incidence, and seedling mortality, and improves seedling quality and uniformity. Coco peat based media with biofertilizer is used.
- **Mechanization:** Introduction of tractor-operated Side Discharge Flail Mulcher for grape pruning.Promotion of manual precision seed dibblers for soybean sowing.
- **Livelihood Diversification:** Training programs on oyster mushroom cultivation for tribal women, focusing on value addition and marketing.Promotion of backyard poultry farming using improved breeds (Kaweri and Black Australorp) to enhance income and nutritional security.
- **Oyster mushroom cultivation:** Three-day residential training programs covering media sterilization, bag filling, spawn placement, and mushroom processing. Provision of polythene bags and quality spawn.
- **Backyard poultry farming:** Introduction of Kaweri and Black Australorp breeds, known for their resistance and high productivity. KVK rears day-old chicks for 21 days, providing necessary vaccinations before distribution. Training programs cover rearing practices, vaccination, deworming, feed preparation, and egg hatching.
- **Capacity Building:** Organization of training programs, demonstrations, and field days to disseminate knowledge and skills.Formation and strengthening of self-help groups (SHGs) to promote collective action and entrepreneurship.Awareness lectures among farmers and SHGs.
- **Scientific Waste Management:** Promotion of scientific composting and vermin composting through training and provision of infrastructure.Provision of bio-agents to enhance decomposition and nutrient enrichment.
- **Vermicomposting/ composting:** Training on scientific composting and vermin composting methods, providing compost beds, and supplying bio-agents (Azotobacter, PSB, KMB, Trichoderma).

Increase in Production, Income, & Impact in the Area:

The agricultural technology transfer activities by KVK, Nashik, have resulted in significant positive impacts:

- ✓ **Increased Crop Productivity:** Improved varieties and management practices have led to increased yields in paddy, soybean, onion, and garlic. STCR technology has enhanced nutrient management, resulting in higher yields Onion NHRDF RED-4 and Garlic Yamuna safed both showed better yield and storage life.
- ✓ **Improved Soil Health:** Green manuring, bio-fertilizers, and scientific composting/vermin composting have improved soil fertility. Rice husk and straw ash improved soil physical properties.
- ✓ **Enhanced Horticultural Practices:** High-tech nurseries have ensured the availability of quality planting materials. Modern seedling raising techniques have reduced seedling mortality and improved crop quality.10 large nurseries created, producing 150 million seedlings annually, creating 250 jobs. Thousands of acres covered by quality grafts.
- ✓ **Livelihood Diversification and Women Empowerment:** Oyster mushroom cultivation has provided tribal women with a significant income source, with each group earning a net profit of Rs. 2.7 lakh annually. Backyard poultry farming has improved income and nutritional security, with 30-50 bird units generating 40-50 man-days of employment.11 undernourished children brought to normal weight due to KVK poultry project implementation.35,000 chicks produced by rural mass.
- ✓ **Improved Income and Employment:** Increased crop yields and diversified livelihood options have led to higher incomes. Nurseries and mushroom cultivation units have created new employment opportunities. Mechanization has increased farming efficiency.
- ✓ **Enhanced Nutritional Security:** Backyard poultry and mushroom cultivation have provided access to protein-rich foods.
- ✓ **Improved Waste Management and Environmental Sustainability:** Scientific composting/vermin composting has reduced nutrient loss and environmental pollution. In Behedpada village, each family now harvests 3 tons of bio-agent

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 cun demonstration projects
10.	CRIDA, Hydrabad	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.	IIHR, Banglore	New techniques and OFT / FLD
13.	PD, Biocontrol Banglore	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, Join 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(State Govt./Other Agencies)	Amount (Rs.)
National Bee Keeping and Honey Mission	30th Jan 2025	NHM	9,28,000/-
कृषि विस्तार विषयक सुधारणा करीता सहाय्य आत्मा शेतकरी अभ्यास दौरा	16th Aug 2024	ATMA	1,25,000/-
Dr. Punjabrao Deshmukh Natural Farming Mission, Akola	7th Dec 2024	Project Director, Natural Farming Mission, Akola	10,000,00/-

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 / Dept of Agri.

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	No of Farmers attending
01	**Meetings**	• ATMA Meeting at Hon. Collector Office • ATMA, Nashik Executive Comitee Meeting • ATMA ,Nashik general Body Meet & FPO meet	**3**	**-**	**28 (EF)**
02	**Research projects**				
03	**Training programmes**	PF (On+ Off)	**8**	**34**	**2327**
04	**Demonstrations**	-	**-**	**-**	**-**
05	**Extension Programmes**				
	KisanMela	-	**6**	**-**	**1250**
	Exposure visit	Women study tour on Mushroom Cultivation by tribals at Itarsi, Bhopal	**1**	**-**	**25**
	Exhibition	Participation Agriculture Exhibition	**1**	**-**	**562**
	Lecture Delivered	On various programs of ATMA & Dept. of Agri. : Paddy, Maize and wheat production technology, onion cultivation, Commercial Horticulture Production and Post Harvest Management. HDP Mango, Guava and Sapota, Mango Orchard Management technology, Protected cultivation of Vegetable & flowers, Clean Milk Production, Commercial Poultry farming , FMD in Cows and Buffaloes, Animal Husbandry and scope for a livelihood, wild vegetable cultivation, Mushroom Cultivation , Methods, tools and strategies for effective extension, importance of soil testing and use of bio fertilizer, bio pesticides multiplication in field, insitu soil and water conservation measures for kharif crops, Natural Farming Programmes, Mechanization and improved Machineries.	**43**	**53**	**6581**
06	**Publications**	-	**-**	**02**	**2000**
	Other Activities (Pl.specify)				
07	**Special Programme**	Krishi Saptah		**1**	**129**
08	**Workshop**	Commercial Horticulture Production and Post Harvest Management, KIT & Training Module Development Under SMART Scheme, Five year District action Plan, District Agriculture Development plan, mango orchard management, Monthly Technical Review	**10**	**1**	**272**

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
1.	Scientific Bee Keeping Training Programs	Funding under NBHM through NHM	9,28,000/-	5,25,000/-	-

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 (Skill development/RPL)

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
1	Mushroom Grower (Entrepreneur) (AGR/Q7803) FY 2023-24	Funding under RKVY through ATARI	84000	84309	-

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
1.	Paramparagat Krishi Vikas Yojana by Dept. of Agri./ ATMA	Supply of Bio Agents as per requirement	-	-	Supply of Bio Agents as per requirement
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 under RKVY through ATARI	75000	75000	-

I. Details of linkage with SMAF (Sub-mission on Agro forestry)

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, Udyog-Vardhini, etc. on various subjects like;

- Paddy, Maize and wheat production technology,
- Com. Horticulture Production and Post-HarvestManagement.
- Mango, Guava and Sapota, Mango Orchard Management technology,
- Protected cultivation of Vegetable & flowers,
- Clean Milk Production, Commercial Poultry farming , FMD in Cows and Buffaloes,
- Animal Husbandry and scope for a livelihood,
- Wild vegetable cultivation,
- Mushroom Cultivation. strategies for effective extension,
- soil testing and use of bio agents
- insitu soil and water conservation measures for kharif crops,
- Natural Farming Programmes,
- Mechanisation and improved Machineries.

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
Tractor operated Side Discharge Flail Mulcher for pruned Twine insitu mulching	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.
To access the use of urea-DAP briquette technology in pair row planting of Finger Millet	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 has conducted at Behedpada Tal.Trambakeshwar in Kharif 2023 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.
To assess the cultivars of Soybean under micro situation	The improved variety Phule Durva seed distributed to 10 farmers as a critical input. The training programme was conducted on soybean production technology. Overall ten demonstrations were conducted on 4 ha area among 10 farmers. The soil sampling has done prior to sowing and fertilizers applied according to soil health card. The monitoring visits were conducted for guiding the farmers during the season. The field day has celebrated at maturity stage of crop and observations of qualitative parameter recorded.
Assessement of Control of weeds by adopting weedicidal combination Oxifluorfen,23.5%EC & Quizalpho ethyl 5% EC in rabi onion	Selected farmers who are cultivating late Rabi/Summer Onion from last three years with available irrigation facility.
Manual Precision Seed Dibbler for Soybean	Soybean crop is grown in eastern & central part of the district. Cultivators are especially small & marginal farmers. Some crop operations like seed sowing are done with tractor drawn seed drills. Farmers depend on rental services due to high cost of seed drills. Secondly, existing T/D seed drills are relatively low in precision, fetched high cultivation sowing. Hence, soybean growers with varied farming & socioeconomic conditions and need were selected in village: Moh Tal sinner. As per the felt need, the village farmers groups were actively involved in the assessment of the machine for its suitability in local conditions. The farmers are very much satisfied with its present performance and its see potential horizontal adoption. The trials shall continue for next two years.
Assessment on increasing shelf life of bajra (Pearl millet)flour	Awareness lecture for becoming of bajra. Training and Demonstration of roasting & showing increasing shelf life.Enhancing the use of bajra by other value added products.
Assessment on different varieties of oyster mushroom cultivation	1.Awareness lectures among the SHGs and farmers.2. Training session for cultivation of mushroom to interested farmers.3.Helping them during cultivation, harvesting and marketing. Through this process other farmers are attracted because of high yield and income from agricultural residue.
Use of Di-Calcium Phosphate in Crossbreed cows to reduce repeat breeding with improved production of milk	Di-Calcium phosphate should be available at any chemist.
Comparisons of Kaweri and Black Australorp poultry breeds in Backyard rearing system with local breeds	Black Australorp is phenotypically same to desi birds with higher weight gains and best meat taste.

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

Discipline	Technical Feedback from the KVK Scientists to Research institutions/Universities
Agronomy :	▪ The NPK briquettes should be available at nearest research station as it is useful for Paddy and Finger Millet cultivation. ▪ The latest improved variety is not available in quantity for CFLD purpose considering oilseed soybean demonstration. ▪ The short duration varieties prefers by the soybean growers which is suitable at Niphad and Sinnar blocks as it protects from late monsoon at harvesting time.
Horticulture :	▪ Availability of seed needs to be ensured for promotion of the improved varieties. ▪ Research and demonstration & planting material for innovative crops like Date Palm, avocado, need to be undertaken as per the demand from the farmers. ▪ Need develop adoptive technologies for small and marginal farmers. ▪ Vegetable crop varieties for protected cultivation. ▪ Research on new crop varieties in response to climate change ▪ Research and technologies on Processing and value addition of fruits & vegetable for Medium and small scale enterprise.
Agri Engg :	▪ Location specific implements for the sowing and intercultural for small and marginal farmers with mechanical powers. ▪ Mechanisation research in onion crop cultivation, direct seeding machineries, harvesting on planting methods need to be undertaken to reduce the cost of cultivation. ▪ Modification research in large scale traditional seed drills needed in in-situ conservation usages. ▪ Imported manual wheel type seed plantersneed to validate research. ▪ Finger millet based machineries needed for small tribal farmers. ▪ Precision techniques in irrigation need to be standardised through IOT technologies.
Vet Science:	▪ The cost of nutritious animal feed in the market is always towards higher side. So farmers are not able to pay for the same. Farmers need low cost diet formulations with raw material available with them. ▪ Farmers are not getting regular supply of guanine desi-poultry breeds for backyard farming. So concerns kindly satisfy the demand of farmers.
Home Science:	▪ For promotion of kitchen gardening, seed material of indigenous varieties need to made available. ▪ Women friendly tools for some crops like finger millet need to be developed. ▪ Nutrient rich foods and varieties need to identified, developed to avoid malnutrition
Soil Science & Microbiology:	▪ Technical & scientific back up from research institution are most important in case of establishing laboratories ▪ Issue of availability authentic source of the various microbial cultures is most important. Cultures need to be made available from SAU/ research institutions for promotion & multiplication. ▪ Farm level multiplication protocols and kits need to be standardized from SAU and Research institutions. ▪ Licensing process of the bio-agent production and promotion need to be KVK friendly. ▪ KVKs should be given priorities by State Dept of Agri in sourcing boi-agents for farmers and its different schemes and project.

11. Technology Week celebration during 2024: No

Period of observing Technology Week: From to -

Online / Offline: -

Total number of farmers visited : -

Total number of agencies involved : -

Number of demonstrations visited by the farmers within KVK campus: -

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
Oilseeds	-	-
Pulses	-	-
Cereals	-	-
Vegetable crops	-	-
Tuber crops	-	-
Total	-	-

C. Farmers-scientists interaction on livestock management

State	Livestock components	Number of interactions	No. of participants
Maharashtra	Goat farm management	22	1042
	Poultry farm management (Commercial Broiler+ Commercial Layer+Backyard)	16	854
	Dairy farm management	06	82
	Total	**44**	**1978**

D. Animal health camps organized

State	Number of camps	No.of animals	No. of farmers
Maharashtra	01	245	115

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

State	Crops	Quantity (qtl)	Coverage of area (ha)	Number of farmers
Maharashtra	mushroom spawn	75 kg mushroom spawn	-	25 women

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	**210 ha**	**190**

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	**4**	**151**	**-**	**-**	**-**	**-**	**1**	**49**	**2**	**1042**	**-**	**-**

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)
Fourfold Technology in Paddy	50	68	111300	156800
Onion	40	57	316178	401925
Garlic	50	52	554957	906130
Paddy-STCR	30	48	111300	141120
Finger millet - STCR	4	51	18947	20020
Onion-STCR	20	62	103880	170240
Goat Farming	10	71	5528.96	8968
Vegetable seed Kit	50	69	2332	5824

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

B. Cases of large scale adoption

Annexure II - Mushroom cultivation for Livelihood Diversification
Annexure III - LARGE SCALE ADOPTION_BIO AGENT

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

Annexure IV - TSP Implement Utility Centre

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 2024	5	365	-
Feb 2024	3	456	-
March 2024	21	577	-
April 2024	14	559	-
May 2024	16	896	-
Jun 2024	18	456	-
Jul 2024	13	556	-
Aug 2024	16	356	-
Sept 2024	17	486	-
Oct 2024	9	400	-
Nov. 2024	8	547	-
Dec. 2024	5	400	-

Name of KVK	Message Type	Type of Messages				
		Crop	Livestock	Weather	Other enterprise	Total
Nashik-I	Text only	112	15	-	18	145
	farmers Benefited	5604	193	-	257	6054

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	-	-	-	-
2	Nursery	2001	2 ha	Fruit crops	grafts	51843 No.	15,00,000/-	41,47,440	-
3	Apiculture	2021	0.2 ha	*Apis cerana, Tetragonula iridipennis (stingless bee)*	Pollination	-	53,000/-	Pollination purpose	Improvement in prod.& 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	
Fruits									
Mango	29.6.96	June 25	3.8	kesar, Ratna, Sindhu	Fruits	27325	125000	1085950	
Sapota	26.6.96	May 25	0.8	Kallipa	Fruits	1316	15000	52660	
Guava	30.6.96	July 25	0.8	Sardar	Fruits	225	10000	9000	
Aonla	11.8.95	April 25	0.8	6 Var	Fruit	722	10000	23670	
Tamarind	9.7.99	May 25	0.8	Nageshwari	Fruits	00	10000	000	
Jack fruit	5.7.2001	June 25	Border	Local Kapa	fruits	8473	20000	84880	
Coconut	2003	Round the Year	14	Banawali	Fruit	2818	100000	57920	

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

Sl.No.	Bio Products	Name of the Product	Qty (kg/lit)	Amount (Rs.)		Remarks
				Cost of inputs	Gross income	
1.	Bio-Fungicides	Yash- Trichoplain	617	74750	149500	Registration in process.
		Yash-Trichotripple	2	250	500	
		Yash-Amphilomyces	1	125	250	
		Yash - Bacillus	85	10625	21250	
		Yash- Pseudo	141	17625	35250	
2.	Bio-pesticides	Yash- Baeveria	146	15875	31750	Registration in process.
		Yash- Metarhzium	90	11125	22250	
		Yash- Nomoria	54	4500	9000	
		Yash- Vertim	316	37000	74000	
		Yash- Pacilo	89	11125	22250	
3.	Bio-Fertilizers	Yash- BioAzospi	2165	270625	541250	Registration process completed got license for Commercial sale.
		Yash- Bio Aceto	2	250	500	
		Yash- BioAzeto	117.5	14687.5	29375	
		Yash- Rhizolego	1	125	250	
		Yash - Rhizojapo	118.5	14812.5	29625	
		Yash- Bio Phospho	1578.5	197312.5	394625	
		Yash- Bio Potash	1063	132875	265750	
		Yash- BioZinc	6	750	1500	
			6592.5	**814437.5**	**1628875**	

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.	Intensive Poultry unit	Black Australorp	Chicken	475 Birds (609 Kg)	Poultry birds	164430/-	Used for FLD.
2.	Semi-intensive Goat Unit	Osmanabadi	Meat	34 Goats (872 Kg)	Pure Osmanabadi Does and Bucks	305200/-	Partly used for FLD and others are the part of Instructional farm.

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 **2024**	73	146	-
February **2024**	372	372	-
March **2024**	101	303	-
April **2024**	10	10	-
May **2024**	9	9	-
June **2024**	-	-	-
July **2024**	-	-	-
August **2024**	241	723	-
September **2024**	75	225	-
October **2024**	-	-	-
November **2024**	-	-	-
December **2024**	26	26	-

F. Database management

S. No	Period of Database	Database target	Database created
1	2024	Database for the Kisan Sarthi Portal	In year 2022
2	2024	Training Enquiry Data	In year 2021

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

Amt sanction (Rs.)	Exp. (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 prog.	No. of Demo.	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)		
NA									

H. Performance of Nutritional Garden at KVK farm

If Nutritional Garden developed at KVK farm/Village Level? No

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
-	Vegetable crops	-	-
-	Fruit crops	-	-
-	Others if any	-	-

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
02	Vegetable crops	10	75
	Fruit crops	02	50
-	Others if any	-	-

H. Details of Skill Development Trainings/RPL organized

S.No.	Name of KVKs/SAUs/ICAR Institutes	Name of QP/Job role	Duration (hrs)	No. of participants					
				SCs/STs		Others		Total	
				M	F	M	F	M	F
1	KVK, Nashik-I	Mushroom Grower(Entrepreneur) (AGR/Q7803)	210	11	15	7	4	18	19

16. 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	93010001000000060 93010001000000088	422024014	PUNB0930100
With KVK	-	-	-	-	-	-	-
Projects	Punjab National Bank	YCMOU, Nashik	930100	Finance Officer, YCMOU (Oilseeds) Finance Officer, YCMOU (Pulses) Finance Officer, YCMOU (RPL ASCI)	93010001000018479301000100002244 93010001000022359	422024014	PUNB0930100

B. Utilization of KVK funds during the year 2024-25 (Rs. in lakh) (Till February, 2025)

S. No.	Particulars	Sanctioned Rs. in Lacs	Released Rs. in Lacs	Expenditure Rs. in Lacs
A. Recurring Contingencies				
1	**Pay & Allowances**	252.78	252.78	255.89
2	**Traveling allowances**	ONEH General=3.00 TSP= 15.00 Total= 18.00	ONEH General=2.90 TSP= 15.00 Total= 17.90	0.43
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)			3.49
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)			9.62
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			
TOTAL (A)		**270.78**	**270.68**	**269.43**
B. Non-Recurring Contingencies				
1	**Works**	-	-	-
2	**Equipments including SWTL** **TSP Farmers Implements & Equipments Utility Center**	9.00	-	-
3	**Vehicle** (Four wheeler/Two wheeler, please specify)	-	-	-
4	**Library** (Purchase of assets like books & journals)			
TOTAL (B)		**9.00**	-	-
C. REVOLVING FUND		-	51.03	32.45
GRAND TOTAL (A+B+C)		**279.78**	**321.71**	**301.88**

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

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
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	27.80	24.36	39.16
April 2023 to March 2024	39.16	35.09	27.42	46.83
April 2024 to March 2025	46.83	51.03	32.45	65.41

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
Shri. Mangesh T. Vyavahare	Prog. Assist. Agri.	Soil tesing,Bio agents production and PHT laboratory building visit	MPKV Rahuri,KVK Baramati	Offline	09/01/24 to 10/01/24
Shri. Rajaram B. Patil	SMS Agril. Engg.	Interface workshop on climate resilient technology	ICAR-NIASM	Offline	21/02/2024
Shri. Hemraj M. Rajput	SMS Horti.	Interface workshop on climate resilient technology	ICAR-NIASM	Offline	21/02/2024
Dr. Niteen J. Thoke	Sr. Scientiest & Head	Exhibition cum interaction	UAS, Bangalore	Offline	13/11/24 to 16/11/24
Shri. Rajaram B. Patil	SMS Agril. Engg.	Exhibition cum interaction	UAS, Bangalore	Offline	13/11/24 to 16/11/24
Shri. Mangesh T. Vyavahare	Prog. Assist. Agri.	Training and exposure visit on natural farming for master trainers	UAS,GKVK,Bengl ore	Offline	25/03/24 to 29/03/24

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)
Behedpada, , Beze ,Jategaon, Tal Tryambak, Moh, Tal. Sinnar, Dugaon, Tal. Nashik, Ugaon, Tal. Niphad, Kadwaipada Tal-Peth	217	Demonstration of improved technology wrt crops, machinery, Vegetable Nursery, Mushroom, livestock breeds, and as Integrated Faming mode	35	64941	122560

*Data above on the basis of final DFI reporting of year 2022

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	4	FLD, OFT, Trainings, Extension Activities	272	210

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 per unit		No. Of Groups Formed
						Before	After	
Horticulture Nursery for Tribal Youths as income Generating Unit	2	39	1	10	5	150000	460000	01
Promotion and Establishment of Osmanabadi Goat units as an alternative agribusiness	1	29	0	0	11	20000	44796	02
Promotion and Establishment of Mushroom production unit as a small enterprise	5	185	0	0	48	40,000	1,80,000	03

21. Details of Swachhta Action Plan (SAP)

S. No.	*Types of major Activity conducted- Swachhta Pakhwada, Cleaning, Awareness Workshop, Microbial based Agricultural Waste Management by Vermicomposting etc.*	No. of Programmes conducted	No. of Participants
1	*Awareness programme on importance of soil testing and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field*	23	1163

Sr. No	Name of KVK	Date	*Activity*	No of VIPs	No of Farmers	Others	Total
1.	KVK, Nashik-I	Jan-24	Radio Talks, Lecture Delivered,Farmers Visit to KVK	-	198	34	232
2.	KVK, Nashik	Feb-24	Lecture Delivered	-	63	1	64
3.	KVK, Nashik	March-24	Farmers Visit to KVK	3	35	2	40
4.	KVK, Nashik	April-24	Farmers Visit to KVK	6	58	2	66
5.	KVK, Nashik	May-24	Farmers Visit to KVK	1	120	2	123
6.	KVK, Nashik	June-24	Training Programme on Natural Farming	10	352	28	390
7.	KVK, Nashik	July-24	Scientists' visit to farmers field	1	22	2	25
8.	KVK, Nashik	Sept-24	Extension Activity under Natural Farming and Awareness	2	153	4	159
9.	KVK, Nashik	Oct-24	Farmers Visit to KVK Under scheme Natural farming, Field Day	1	100	4	105

22. Books published 2024-25

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

23. Footfall in KVKs

State	Name of KVK	No. of Footfalls			
		Farmers	Officials	VIPs	Total
Maharashtra	Nashik-I	3373	1322	12	4707

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

- Award received For Digital Sheti Shala in Paddy given by “Pani Foundation”on date 29-02-2024.

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	109	3410	1492	4902
Rural youths	18	406	184	590
Extension functionaries	16	1160	247	1407
Sponsored Training	78	3245	1042	4287
Vocational Training	8	114	54	168
Total	**143**	**4976**	**1923**	**6899**

* 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	225	90	
Cereals	80	16	
Vegetables	75	12.2	
Other crops (Millet)	20	4	
Total	**400**	**122.2**	
Livestock & Fisheries	45	-	947
Other enterprises (Mechanization)	30	12	
Other enterprises (Groundnut Decorticator- Groundnut)	30	-	70 hrs
Other enterprises (Vaibhav Sickles- Paddy)	50	2	-
Vegetable seed Kit	50	0.01	50
Total	**205**	**14.01**	
Grand Total	**605**	**136.21**	

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	3	69	69
Livestock	2	17	16
Various enterprises	4	85	90
Total	**9**	**171**	**175**
Technology Refined	-	-	-
Crops	-	-	-
Livestock	-	-	-
Various enterprises	-	-	-
Total	-	-	-
Grand Total	**9**	**171**	**175**

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	97	5567
Other extension activities	6	757
Total	**103**	**6324**

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages			Total
		Crop	Livestock	Other enterprise	
Nashik-I	Text only	112	15	18	145
	farmers Benefitted	5604	193	257	6054

6. Seed & Planting Material Production

	Quintal/Number	Value (Rs.)
Seed (q)	-	-
Planting material (No.)	51843	4199430
Bio-Products (kg)	6592.5	1628875
Livestock Production (No.)	944	560950

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value (Rs.)
Soil	870	282050
Water	6	900
Total	**876**	**282950**

8. HRD and Publications

Sr. No.	Category	Number
1	Abstract	01
2	Workshops	29
3	Conferences	-
4	Meetings	3
5	Trainings for KVK officials	6
6	Visits of KVK officials	20
7	Book published	-
8	Training Manual	1
9	Book chapters	-
10	Booklet	-
11	Leaflets/ Folder/ Pamphlet	2
12	Research papers	-
13	Technical Bulletin	-
14	Popular article	1
15	Lead papers	-
16	Seminar papers	-
17	Extension folder	2
18	Proceedings	1
19	Award & recognition	3
20	On-going research projects	-
21	News paper coverage	18
22	Animal Health Camps (No. of animals treated)	1 (245)
23	Social media (No. of platform used)	5

Annexure I

Empowerment of Tribal householdswith Backyard Poultry: Black Australorp birds

Background Information

The poultry industry in India has experienced remarkable growth, yet the contribution of backyard poultry, particularly in rural areas, remains vital. Backyard poultry plays a significant role in ensuring nutritional and livelihood security for the rural poor. In many rural communities, diets are predominantly cereal-based, leading to protein deficiencies. Backyard poultry farming offers a solution by providing a readily available source of protein through eggs and meat. This practice is particularly beneficial for small and marginal farmers, landless labourers, tribal communities, and those from backward classes.

Backyard poultry farming requires minimal inputs, utilizing household waste, farm by-products, green vegetation, waste grains, and insects. This makes it a sustainable and cost-effective option for rural households. Additionally, eggs and meat from backyard poultry often command a premium price due to their perceived higher quality and consumer preference, even in urban markets. Beyond providing a stable supply of nutritious food, backyard poultry generates income opportunities, especially for vulnerable populations. This enhances the economic stability of rural tribal families, contributing to their overall socio-economic well-being.

Problems of District Agriculture

The Krishi Vigyan Kendra (KVK) identified a significant challenge in successful backyard poultry farming: high initial mortality rates, often reaching 50-60%. This was primarily attributed to improper care, inadequate vaccination, and poor feed management during the critical early stages of chick growth. Farmers often lacked the necessary knowledge and resources to provide optimal conditions for young chicks.

Traditional backyard poultry farming, while widespread, often relied on local breeds with lower productivity and susceptibility to diseases. Farmers lacked access to improved breeds and modern management practices, limiting their potential for increased income and nutritional security. The free-range system, while natural, exposed birds to various environmental risks and predators, contributing to high mortality. There was a clear need for interventions that could address these challenges and improve the efficiency and profitability of backyard poultry farming.

Need for Technological Intervention, Technological Interventions Details & Activities Undertaken

To overcome the challenges, KVK recognized the need for targeted technological interventions. The primary goal was to introduce improved poultry breeds and management practices that could enhance productivity and reduce mortality. The key intervention was the introduction of the Black Australorp breed, known for its hardiness, high egg production, and adaptability to backyard conditions.

KVK implemented a multi-pronged approach:

- Pre-grown Chick Supply: To mitigate high initial mortality, KVK reared day-old chicks on its demonstration farm for the first 21 days.During this critical period, chicks received standard brooding procedures and essential vaccinations (Marek's disease and Newcastle disease).Only healthy, pre-grown chicks (3-4 weeks old) were distributed to farmers, significantly improving survival rates.
- Training and Capacity Building: KVK conducted comprehensive training programs for farmers, focusing on rearing practices, vaccination methods, deworming, feed preparation and storage, and hatching techniques.Emphasis was placed on practical demonstrations and hands-on learning.Regular farm visits by KVK experts provided ongoing guidance and support.
- Breed Introduction and Comparison: Frontline demonstrations were conducted to compare the performance of Black Australorp birds with local breeds.These demonstrations highlighted the superior growth rate, egg production, and disease resistance of the Black Australorp breed.
- Support through Government Agencies: KVK collaborated with government agencies like the Central Poultry Development Organisation (CPDO), Mumbai, to facilitate the distribution of vaccinated chicks.This ensured a reliable supply of healthy birds to rural communities.
- Promotion of Local Hatching: KVK trained farmers on how to use local broody hens to hatch Black Australorp eggs, promoting breed multiplication at the village level.
- Shelter provisions: KVK planned to provide readymade local home-made shelters to protect the birds from stray dogs and other predators. This step will also help to minimize cross breeding.
- Increase in Production, Income, & Impact in the Area :The interventions implemented by KVK yielded significant positive impacts:
- Increased Production: The average live weight of Black Australorp birds at 3 months was more than double that of local breeds (1158.44 gm vs. 516.28 gm).Egg production significantly increased, with Black Australorp birds laying an average of 2070 eggs per 15-bird unit compared to 975 eggs for local breeds.Approximately 24,000 day old chicks were produced by local hens.
- Enhanced Income: The average gross return from a 15-bird Black Australorp unit increased from ₹1698 to ₹3580, demonstrating a substantial income boost.The adoption of backyard poultry provided a valuable subsidiary income source for rural households, particularly for women's self-help groups (SHGs).
- Improved Nutritional Security: Increased availability of eggs and meat improved the nutritional intake of rural families, addressing protein deficiencies. This has been especially beneficial for malnourished children.
- Empowerment and Capacity Building: Training programs empowered farmers with the knowledge and skills to manage backyard poultry effectively.SHG members gained confidence and enhanced their management capacities.The project spread over 17 villages and impacted over 600 farmers.
- Sustainability: The promotion of local hatching techniques fostered breed multiplication and sustainability.The provision of shelters will help to maintain pure breed lines, and prevent predation.
- Reduced Mortality: The supply of pre-grown vaccinated birds, resulted in survivability of up to 98% under field conditions.
- Expansion of Activity: Seeing the success of the Black Australorp, more SHG groups are requesting to begin the meat production of the birds.

The KVK's interventions have successfully transformed backyard poultry farming in the region, contributing to improved livelihoods, nutritional security, and economic empowerment of rural communities.

Annexure II

Mushroom Growing :Mushrooming Strength & Livelihood Diversification for tribal women

Background Information:

Nashik district, characterized by its diverse agro-climatic zones, presents a unique agricultural landscape. The western region, predominantly hilly and receiving substantial rainfall, is home to a significant tribal population engaged in paddy-based cropping systems. This region, encompassing approximately 76,200 hectares, forms the backbone of tribal livelihoods. However, the undulated terrain, fragmented landholdings, and reliance on traditional farming practices pose significant challenges. Tribal agriculture in Nashik is largely family-centric, operating on a small scale, and often lacks the economies of scale necessary for profitability. The perception of agriculture as an economically unviable venture is particularly prevalent among tribal communities, leading to distress migration from rural to urban areas in search of alternative livelihoods.

The role of women in tribal agriculture is paramount. They constitute a significant portion of the agricultural workforce, primarily engaged in labor-intensive tasks such as sowing, transplanting, weeding, and harvesting. Their contributions, often unpaid or underpaid, are crucial for subsistence farming. Moreover, many women juggle agricultural work with domestic responsibilities and childcare, highlighting the need for income-generating opportunities that can be integrated into their existing routines. The high dependence of women on agriculture for their livelihood, estimated at 84%, underscores the importance of empowering them through sustainable agricultural interventions.

Problems of District Agriculture: Challenges Faced by Tribal Communities

The tribal agricultural landscape in Nashik is fraught with numerous challenges that hinder its growth and sustainability. These challenges include:

- **Fragmented Landholdings and Undulated Terrain:** The hilly terrain and fragmented landholdings limit the scope for mechanization and large-scale farming, impacting productivity and efficiency.
- **Dependence on Rainfed Agriculture:** Uncertain rainfall patterns and limited irrigation facilities make agriculture vulnerable to climatic vagaries, leading to crop failures and income instability.
- **Lack of Access to Modern Technologies:** Limited awareness and access to modern agricultural technologies, improved seeds, and sustainable farming practices restrict productivity and profitability.
- **Limited Market Access and Value Addition:** Tribal farmers often lack access to organized markets and value addition facilities, forcing them to sell their produce at low prices to intermediaries.
- **Distress Migration:** The perception of agriculture as an economically unviable proposition leads to distress migration, particularly among the youth, impacting the social fabric of rural communities.
- **Gender Disparities:** Women, who play a vital role in agriculture, often face limited access to resources, training, and decision-making opportunities.
- **Underutilization of Crop Residues:** Large amount of paddy straw, a byproduct of rice cultivation, was often dumped without proper use. This leads to environmental problems and a loss of potential resources.

Need for alternative enterprise: Mushroom Cultivation as a Viable Solution

Recognizing these challenges, the Krishi Vigyan Kendra (KVK) in Nashik identified the need for technological interventions that could enhance the income and livelihoods of tribal communities, particularly women. Mushroom cultivation, specifically of oyster mushrooms, emerged as a promising solution due to its several advantages:

- Low Input Requirements: Oyster mushrooms can be cultivated using readily available crop residues, such as paddy straw, reducing the reliance on external inputs.
- Short Growth Cycle: Oyster mushrooms have a relatively short growth cycle, enabling farmers to harvest multiple crops within a year.
- High Nutritional Value: Mushrooms are a rich source of protein, vitamins, and minerals, contributing to improved nutrition and health.
- Market Demand: There is a growing demand for mushrooms in local markets, providing a ready market for the produce.
- Ease of Cultivation: Oyster mushrooms are relatively easy to cultivate, making them suitable for small-scale farmers and women with limited technical expertise.
- Income Diversification: Mushroom cultivation offers an opportunity to diversify income sources, reducing the reliance on traditional crops.

Technological Details and Activities Undertaken:

The KVK implemented a comprehensive program to promote and establish mushroom production units among tribal women. The program included:

- Training Programs: KVK organized residential vocational training programs on oyster mushroom cultivation, covering technical aspects such as media sterilization, spawn preparation, and cultivation techniques. These programs also included hands-on training on value addition and processing of mushrooms.
- Demonstrations: KVK conducted demonstrations on mushroom cultivation techniques, showcasing the process from start to finish.
- Provision of Inputs: KVK provided women with essential inputs, such as polythene bags and quality spawn, to kick start their mushroom cultivation ventures.
- Formation of Women Groups: KVK encouraged the formation of women self-help groups (SHGs) to facilitate collective cultivation and marketing of mushrooms.
- Marketing Support: KVK provided guidance and support to women groups in marketing their produce, connecting them with local markets and potential buyers.
- "Ready to Grow" bag promotion: KVK promoted the idea of selling "Ready to Grow" mushroom bags, so that more women could start to cultivate mushrooms with less initial effort.

Program Statistics: Over the past three years , KVK conducted 22 training programs, benefiting 537 tribal women farmers. 15 women groups established mushroom production units with an average capacity of 200 beds per batch. 26 individuals established mushroom production units with an average capacity of 100 beds per batch.

Increase in Income and Impact in the Area: Transforming Lives Through Mushroom Cultivation

The mushroom cultivation program has had a significant impact on the lives of tribal women in Nashik district, leading to increased income, employment generation, and improved livelihoods.

Economic Impact: Each women group, cultivating mushrooms on 200 beds per batch (600 beds per year), earns an average income of Rs. 3 lakh per year. The net profit per group, after deducting cultivation costs, is approximately Rs. 2.7 lakh per year. Individual women farmers, cultivating mushrooms on 100 beds per batch, also experience a substantial increase in income. Sau.Maya Khotare, a success story, started with 50 bags, earning Rs. 20,000 in two months, and now is farming 200 bags per batch, 3 batches a year.

Employment Generation: The program has created employment opportunities for 76 women in group-based mushroom cultivation and 26 women in individual ventures. The establishment of mushroom production units has also generated indirect employment opportunities in related activities, such as spawn production and marketing.

Social Impact: The program has empowered tribal women by providing them with income-generating opportunities and enhancing their economic independence. The formation of women groups has fostered a sense of community and collaboration, strengthening social bonds. Mushroom cultivation has improved the nutritional status of tribal families by providing access to a healthy and affordable food source. The success of women like Sau.Maya Khotare, encourages other women to also start their own mushroom cultivation businesses.

Overall Impact:

The mushroom cultivation program has proven to be a successful and sustainable intervention for improving the livelihoods of tribal women in Nashik district. By providing access to technology, training, and resources, KVK has empowered women to become entrepreneurs and contribute to the economic development of their communities. The program has demonstrated the potential of mushroom cultivation as a viable livelihood option for tribal communities, and its impact is expected to continue to grow in the years to come

Annexure III

Promoting Sustainable Agriculture through Use of Bioagents

Background

Nashik district, renowned for its production of grapes, onions, tomatoes, pomegranates, exotic vegetables, and flowers, is also characterized by a high level of pesticide usage. This indiscriminate use of chemical pesticides, coupled with the region's vibrant climate, has led to significant environmental pollution, affecting soil, water, and air quality. Furthermore, the excessive application of chemical fertilizers has resulted in soil degradation, reduced productivity, increased soil salinity, and a depletion of beneficial soil microflora, hindering natural plant growth and yield. Recognizing these challenges, the Krishi Vigyan Kendra (KVK) in Nashik has initiated interventions focused on promoting and supplying bio-pesticides and bio-fertilizers to foster residue-free and organic production practices.

Problems in Crop Management and Need for Intervention

The heavy reliance on chemical inputs in Nashik's agriculture has created a cascade of problems. The pollution caused by pesticides poses a risk to human and environmental health. The decline in soil health due to chemical fertilizer overuse negatively impacts crop productivity and long-term sustainability. The reduction of native beneficial microorganisms in the soil further exacerbates these problems. Therefore, there was a pressing need for interventions that could mitigate these issues and promote environmentally friendly and sustainable agricultural practices. The introduction and adoption of bio-agents were identified as a crucial step towards addressing these challenges and improving crop production and management.

Type of Intervention, Activities Conducted & Output

To address the identified problems, KVK-Nashik implemented a comprehensive intervention strategy focused on the promotion and supply of bio-pesticides and bio-fertilizers. Key activities included:

- **Production and Supply of Bio-agents:** KVK established bio-fertilizer and bio-pesticide production laboratories to ensure the quality and availability of these inputs. This included the production of NPK bio-fertilizers suitable for various crops and beneficial fungal and bacterial bio-agents. A total of 19,891 liters of bio-agents were produced and supplied to over 140 farmer groups and Farmer Producer Organizations (FPOs).Production and supply of a diverse range of bio-agents, including:
  - Trichoderma species (Yash-Trichoplaiin, Yash-Trichotripple, Yash-Trichoplus)
  - Bacillus species (Yash-Bacillus)
  - Pseudomonas species (Yash-Pseudo)
  - Beauveria species (Yash-Baeveria)
  - Nomuraea species (Yash-Nomoria)
  - Verticillium species (Yash-Vertim)
  - Paecilomyces species (Yash-Pacilo)
  - Azospirillum species (Yash-BioAzospi)
  - Acetobacter species (Yash-Bio Aceto, Yash-BioAzeto)
  - Rhizobium species (Yash-Rhizolego, Yash-Rhizojapo)
  - Phosphate solubilizing bacteria (Yash-Bio Phospho)
  - Potassium solubilizing bacteria (Yash-Bio Potash)
  - Zinc solubilizing bacteria (Yash-BioZinc)
- **Training and Capacity Building:** KVK conducted 65 training programs across 15 tehsils, reaching approximately 2,600 farmers, to educate them on the importance and proper usage of bio-agents for promoting natural farming.
- **Method Demonstrations:** KVK conducted 65 method demonstrations, also reaching 2,600 farmers, focusing on the multiplication of bio-agents using jaggery solution in field conditions, empowering farmers to produce their own bio-inputs.
- **Advisory Services:** KVK provided ongoing advisory services to farmers on the appropriate use of bio-fertilizers and bio-pesticides, ensuring effective implementation and maximizing benefits.

Outcome and Tangible Impact in Crop Management

The interventions implemented by KVK-Nashik yielded significant positive outcomes:

- **Increased On-Farm Production:** Farmers successfully multiplied 397,820 liters of bio-agents in their fields, using the 19,891 liters of mother culture supplied by KVK. This demonstrates the effectiveness of the training and method demonstrations in empowering farmers to produce their own bio-inputs.
- **Cost Reduction:** The adoption of bio-fertilizers and bio-pesticides resulted in a 25% reduction in the use and cost of chemical fertilizers for each crop. Farmers also experienced cost savings by producing bioagents on their own farms.
- **Reduced Chemical Input Dependency:** The increased use of bio-agents reduced the reliance on chemical inputs, contributing to a more sustainable and environmentally friendly agricultural system.
- **Increased area under Bioagent application:** Farmers covered more than 19891 acre area under bioagent application.

Large Scale Impact

The large-scale impact of KVK's technology transfer activities is evident in the widespread adoption of bio-agents across Nashik district. The ability of farmers to multiply bio-agents on their own farms has created a self-sustaining system, ensuring the continued availability and use of these beneficial inputs. The reduction in chemical input usage has contributed to improved soil health, reduced environmental pollution, and enhanced crop quality. The shift towards residue-free and organic production practices has the potential to enhance the marketability of Nashik's agricultural produce and improve the livelihoods of farmers in the region. The KVK intervention has proven to be a very successful technology transfer, and has been adopted on a large scale.

Annexure IV

" TSP - Implement Utility Centre" by KVK : by the Tribal's & for the Tribal's

Background Information

Nashik district, a microcosm of India's agricultural diversity, presents a unique set of challenges and opportunities. Situated within an agro-climatically transitional zone, the district boasts a mosaic of agricultural practices, ranging from expansive fruit orchards and vibrant vegetable farms to the cultivation of essential oilseeds, pulses, and cereals. Agriculture forms the backbone of the district's economy, sustaining a significant portion of its rural populace. However, the relentless fragmentation of landholdings, a common phenomenon across India, poses a substantial threat to agricultural sustainability and profitability in Nashik.

The district's geographical and climatic variations further compound the agricultural landscape. The eastern region, characterized by its flat terrain, light soils often underlain by a hardpan layer, and a meager average rainfall of 700mm, presents a stark contrast to the western hilly tract. The latter, blessed with an average rainfall of 1200mm, supports a thriving paddy-based cropping system, which serves as the primary livelihood source for the region's tribal communities.

These tribal communities, residing in the district's more challenging terrains, have developed agricultural practices intricately woven into the region's unique topography and climatic conditions. Their livelihoods are characterized by fragmented, undulating land parcels, unreliable irrigation facilities, and a reliance on traditional crops. In the Rabi season, they cultivate wheat and chickpea, utilizing residual soil moisture or supplementary irrigation. These agricultural enterprises are predominantly family-centric, operating on a small scale and often lacking the economies of scale necessary for profitability.

Problems of District Agriculture & Need for Technological Intervention

Paddy, the primary Kharif crop and a relatively assured source of sustenance, plays a pivotal role in the tribal economy. However, paddy productivity and profitability have remained consistently low and uncertain, plagued by a multitude of challenges. Traditional crop operations, including sowing, inter-cultivation, harvesting, threshing, and post-harvest handling, are characterized by high drudgery levels, labor intensity, and time consumption, thereby undermining the economic viability of paddy cultivation.

The reliance on manual labor, coupled with the lack of access to appropriate machinery, has resulted in delayed operations, increased labor costs, and significant post-harvest losses. These factors, in turn, have contributed to low yields and reduced income for tribal farmers. Moreover, the changing climate patterns, with increased instances of erratic rainfall and prolonged dry spells, have further exacerbated the challenges faced by these communities. In addition to the adoption of scientific crop management practices, the utilization of appropriate, cost-effective, and time-saving equipment and machinery is crucial for enhancing crop economics. Furthermore, the widespread and deep dissemination of these technologies is essential for achieving a significant impact on agricultural productivity and profitability.

The varied topographical conditions, fluctuating cropping patterns, and challenging socioeconomic circumstances prevalent in tribal areas have resulted in a low adoption rate of modern, high-capacity machinery. Therefore, it is imperative to address crop-specific operations with appropriate machinery and implement effective sharing mechanisms to ensure wider access for smallholder farmers. The need for technological intervention is clear: to alleviate drudgery, improve efficiency, reduce costs, and ultimately, enhance the livelihoods of the tribal communities.

Technological Details & Activities Undertaken

It has been observed that commercially available, high-capacity mechanization solutions for paddy cultivation are often unsuitable for the specific needs of tribal agriculture due to various limitations. Drawing upon years of experience and consistent efforts by individuals, institutions, and stakeholders such as KVK, state departments, and farmers, it has become evident that a "one-size-fits-all" approach is not feasible in the diverse and resource-constrained environment of tribal areas. Farm mechanization initiatives in such contexts must be selective and integrated with socially embedded service delivery systems.

KVK, Nashik, has been actively involved in addressing farm mechanization challenges across a range of crops, collaborating closely with AICRP, MPKV, Rahuri, and manufacturers over the past eight years. The sharing of technological resources from various institutions has facilitated rapid feedback and adaptation. These institutions include CIAE, Bhopal, AICRP on FIM, MPKV Rahuri, innovative farmers, farmer groups, potential custom hiring entrepreneurs nurtured by KVK, village-level self-help groups, and private manufacturers offering promising solutions.

- **Resource Center:** KVK has served as a resource center, providing formal and informal training and guidance on technology availability, machinery sourcing, and manufacturer identification.
- **Solution Identification:** Through its extension activities, KVK has actively sought and identified appropriate and best-fit solutions for tribal agricultural contexts.
- **Sharing Strategies:** KVK has advised on various sharing and service strategies for small tools and machinery to promote self-sustainability and accelerate mechanization.
- **Government Support:** Recent mechanization initiatives have received support from the state department through RKVY, enabling village-level groups to implement these technologies.

KVK has established "TSP Implement utility centers" in nine tribal villages through Farmer Producer Companies and Farmers Krishi Vigyan Mandals, operating on a community-use basis to serve a wider area and population. These implement banks include machinery such as: Paddy Harvesting with Vertical conveyor reaper (3), Spiral Separator (7), Gnut Decort (11)

These centers are operated by:

- Vanraj Farmer Producer Company, Gavandpada, Taluka Peth, District Nashik
- Jagdeshwari Farmer Producer Company, Kadwai Pada (Om Pada), Taluka Peth, District Nashik
- Ganesh Organic Farming Group, Borichi Bari, Taluka Peth, District Nashik
- Saptsrungi Self Help Savings Group, Bahadurwadi, Post Bahadurwadi, Taluka Chandwad, District Nashik
- Bal Bhairavnath Self Help Savings Group, Bharvir Khurd, Taluka Igatpuri, District Nashik
- Gayatri Women's Self Help Savings Group, Ghoti Khurd Kokanewadi, Taluka Igatpuri, District Nashik
- Ekvira Mata Self Help Group, Tatlewadi, Taluka Igatpuri, District Nashik
- Ram Samarth Women's Self Help Group, Ghorpade Wadi, Taluka Igatpuri, District Nashik

- Paddy Harvesting with Vertical conveyor reaper of small farmers; saving the labour by 80%, time by 51% & cost of operation 60% with the timely operations, Reduced the drudgery. Increased speed of operation to three fold. entrepreneur earn on an average of Rs.15,000 to Rs.25,000 per year per unit.
- Mini rice mills to meet the needs of Tribal hutments : Mini rice mill Milling % :72%, Commercial hullers milling%: 56%, Increase in milling% :16 %, Capacity 100-150 kg per hr. Avenue for Village level enterprise, acceptability as low polish rice
- Given the limitations of individual ownership of improved machinery due to small landholdings and high costs, the concept of custom hiring has proven effective in expanding access for a wider range of farmers.
- Service delivery models encompassing individual ownership, farmer group ownership, village-level institutional ownership, and entrepreneurial ownership have been explored.
- purely entrepreneurial local ownership and service delivery proved comparatively more effective in serving the socioeconomic poor, hilly agriculture and low land holding environment.
- In crops with high service demand within narrow timeframes, such as paddy, soybean, and wheat harvesting and threshing, entrepreneurial ownership has proven to be the most effective service delivery model.
- Entrepreneurs with agro-technological knowledge, skills, and capacities have emerged as valuable local resources, providing continuous feedback and customization. The "By the Tribal, For the Tribal" approach has proven to be more sustainable.
- Technological support for existing custom hiring entrepreneurs has facilitated the introduction and rapid scaling up of new machinery.
- Government-supported mechanization initiatives should align with local needs and beneficiary preferences.

Increase in Income, & Impact in the Area:

The introduction of selective mechanization has yielded significant positive impacts on agricultural productivity, income, and overall well-being in the tribal areas of Nashik district.

- **Increased Productivity:** The use of vertical conveyor reapers for paddy harvesting has resulted in an 80% reduction in labor requirements, 51% reduction in time, and a 60% reduction in operational costs. This has enabled timely harvesting, reduced drudgery, and increased the speed of operations threefold.
- **Enhanced Income:** Custom hiring entrepreneurs operating these reapers have reported average annual earnings of Rs. 15,000 to Rs. 25,000 per unit, providing a valuable source of income.
- **Improved Grain Quality:** The adoption of mini rice mills has increased milling efficiency from 56% to 72%, resulting in higher-quality rice production. These mills have also created opportunities for village-level enterprises and have gained acceptance for producing low-polish rice.
- **Community Empowerment:** The establishment of implement utility centers through Farmer Producer Companies and self-help groups has empowered communities to manage and access essential agricultural machinery.
- **Reduced Migration:** By enhancing agricultural profitability and creating local employment opportunities, these initiatives have contributed to a reduction in distress migration from rural to urban areas.
- **Strengthening of local economy:** The increase of income of the farmers and the entrepreneurs, have strengthened the local economy.

Annexure –V: 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
Crop Production													
10/04/24	PF	Advance Tech of Soybean cultivation	1	Off	16	0	16	0	0	0	16	0	16
05/07/24	PF	Fourfold Technology of Paddy	2	Off	1	0	1	24	14	38	25	14	39
05/07/24	PF	Paired row planting technology on Finger Millet	2	Off	1	0	1	24	14	38	25	14	39
23/07/24	PF	Integrated Nutrient Management for Soybean	2	Off	17	0	17	1	0	1	18	0	18
30/07/24	PF	Training on pair row planting technique of Finger Millet	2	Off	0	0	0	18	0	18	18	0	18
16/08/24	PF	IPM practices in soybean crop	2	Off	60	6	66	0	0	0	60	6	66
17/12/24	PF	Organic farming	1	On	4	1	5	39	1	40	43	2	45
		Total (7)	**12**		**99**	**7**	**106**	**106**	**29**	**135**	**205**	**36**	**241**
Horticulture													
24/01/24	PF	Protected cultivation Horticulture Crops	1	On	68	2	70	10	0	10	78	2	80
29/01/24	PF	Mango Inflorecence and pest disease mangemnt	1	Off	0	0	0	54	3	57	54	3	57
27/02/24	PF	Opportunities in Organic Produce marketing Management	2	On	55	12	67	35	12	47	90	24	114
13/06/24	PF	Traininig on Natural Farming Production and marketing Channels	1	On	22	2	24	15	3	18	37	5	42
07/08/24	PF	Fruit & Vegetable processing and Value Adittion	8	Online	4	2	6	0	0	0	4	2	6
13/08/24	PF	Hortsap training Mango Orchard Management	1	Off	8	2	10	55	6	61	63	8	71
19/08/24	PF	Opportunities in Fruit & vegetable processing and value adition	1	Online	82	14	96	0	0	0	82	14	96
23/09/24	PF	Fruit & Vegetable processing and Value Adittion	7	Online	2	5	7	0	0	0	2	5	7
26/09/24	PF	Mango Orchard Management technology	1	Off	8	2	10	31	19	50	39	21	60
24/09/24	PF	Training on post harvest management& marketing of organic fruits &vegetables	1	On	15	2	17	37	5	42	52	7	59
25/11/24	PF	Training on Mango inflorecence management	1	Off	0	0	0	15	5	20	15	5	20
27/11/24	PF	Training on Post Harvest Management and marketing of organic produce by the FPC in Nashik district	1	On	17	2	19	22	3	25	39	5	44
09/12/24	PF	Training Organic Vegetable cultivation and marketing	1	On	5	27	32	4	2	6	9	29	38
19/12/24	PF	Training on mango orchard management	1	Off	0	0	0	27	18	45	27	18	45
24/12/24	PF	Training Organic Vegetable cultivation and marketing	1	On	32	2	34	36	3	39	68	5	73
		Total (15)	**29**		**318**	**74**	**392**	**341**	**79**	**420**	**659**	**153**	**812**
Veterinary Sci.													
03/01/24	PF	Clean Milk Production	2	Off	22	8	30	12	0	12	34	8	42
20/01/24	PF	Dairy Farming	1	Off	19	0	19	14	0	14	33	0	33
15/02/24	PF	Remedies to minimize infertility in Cows and Buffaloes	2	Off	0	0	0	64	21	85	64	21	85
05/03/24	PF	Dairy Farming	2	On	12	11	23	24	12	36	36	23	59
18/04/24	PF	Diet Management for quality development of calf	2	Off	27	18	45	9	10	19	36	28	64
06/05/24	PF	Urea treatment of fodder	2	Off	28	16	44	6	0	6	34	16	50
05/06/24	PF	Introduction of Black Australorp for Backyard Poultry	2	Off	0	0	0	28	19	47	28	19	47
03/07/24	PF	Heat Identification in cattle for successful conception	2	Off	21	4	25	18	0	18	39	4	43
10/07/24	PF	Importance of Vaccination in Bovines and its schedules	2	Off	0	0	0	38	21	59	38	21	59
05/08/24	PF	Ornamental Birds rearing	2	Off	18	2	20	22	0	22	40	2	42
09/08/24	PF	Management of FMD in Cows and Buffaloes	2	Off	25	6	31	21	4	25	46	10	56
17/09/24	PF	Ornamental Birds rearing	2	Off	21	4	25	19	8	27	40	12	52

08/10/24	PF	Challenge feeding in Bovines	2	Off	22	9	31	9	3	12	31	12	43
13/11/24	PF	Milk processing techniques for increasing its shelf-life.	2	Off	29	18	47	18	16	34	47	34	81
03/12/24	PF	Nutritive upgradation of Raw quality feed for animals	2	Off	32	18	50	15	16	31	47	34	81
		Total (15)	**29**		**276**	**114**	**390**	**317**	**130**	**447**	**593**	**244**	**837**
Agril. Engineering													
18/01/24	PF	Controlled Climate Nursery and techniques	1	On	14	3	17	0	0	0	14	3	17
23/01/24	PF	Controlled climate Cultivation of vegetable and flowers	1	On	110	1	111	0	0	0	110	1	111
29/08/24	PF	Micro irrigation and protected climate nurseries ,selection errection and maitenance -nursery training module	1	On	13	2	15	4	0	4	17	2	19
05/11/24	PF	Improved Farm Mahinaries for Cost & time reduction, Multi crop Planters, reaperss Decorticators for cereals oilseed and pulse crops in the district	1	Off	0	0	0	18	8	26	18	8	26
08/11/24	PF	Improved Farm Mahinaries for Cost & time reduction, Multi crop Planters, reaperss Decorticators for cereals oilseed and pulse crops in the district	1	Off	0	0	0	10	12	22	10	12	22
08/11/24	PF	Improved Farm Mahinaries for Cost & time reduction, Multi crop Planters, reaperss Decorticators for cereals oilseed and pulse crops in the district	1	Off	0	0	0	19	6	25	19	6	25
04/11/24	PF	Custom Hiring Enterprises through Improved Machineries for Multi crop Planters cum Ferti0drill, Harvesting of cereals oilseed and pulse crops	1	Off	0	0	0	16	5	21	16	5	21
		Total (7)	**7**		**137**	**6**	**143**	**67**	**31**	**98**	**204**	**37**	**241**
Home Science													
09/01/24	PF	Training,Demonstration,Processing of Oyster Mushroom cultivation and Exposure visit of mushroom farmers at Pune	5	On	0	0	0	21	26	47	21	26	47
18/01/24	PF	Training and Processing of fingermillet	1	Off	0	1	1	0	31	31	0	32	32
19/01/24	PF	Processing on Nagli and its various product	1	Off	0	1	1	1	54	55	1	55	56
10/02/24	PF	Training on Oyster Mushroom Cultivation and Processing	1	On	0	0	0	14	33	47	14	33	47
15/02/24	PF	Training on Oyster Mushroom Cultivation and Processing	2	On	0	0	0	27	25	52	27	25	52
20/02/24	PF	Training and Processing of Spices	1	Off	7	18	25	2	1	3	9	19	28
26/02/24	PF	Training on Oyster Mushroom cultivation	1	Off	0	28	28	1	2	3	1	30	31
06/03/24	PF	Training on oyster mushroom cultivation	2	On	0	2	2	0	21	21	0	23	23
18/04/24	PF	Preparation of iron rich recopies	2	Off	0	0	0	0	23	23	0	23	23
22/04/24	PF	Processing of aonla	1	Off	0	0	0	0	27	27	0	27	27
26/04/24	PF	Training on hygiene and sanitition	1	Off	0	0	0	8	18	26	8	18	26
14/05/24	PF	Low cost techniques for drinkinh water purification for tribal village	1	Off	0	0	0	0	32	32	0	32	32
24/05/24	PF	Processing of Karwand kike pickles,squash etc.	1	Off	0	0	0	0	27	27	0	27	27
19/06/24	PF	Training on nagli processing	1	Off	0	0	0	0	21	21	0	21	21
24/06/24	PF	Pre training on nutrition garden	1	Off	0	0	0	0	28	28	0	28	28
16/07/24	PF	Training on aonla processing like aonla candy,syrup etc.	1	Off	0	0	0	0	29	29	0	29	29
24/07/24	PF	Training om oyster mushroom cultivation and processing	2	Off	1	0	1	2	24	26	3	24	27
04/07/24	PF	Training on hygiene and sanititation	1	Online	0	1	1	3	44	47	3	45	48
06/08/24	PF	Training on aonla processing like aonla candy,syrup etc.	1	Off	0	0	0	1	38	39	1	38	39
07/08/24	PF	Training on oyter mushroom cultivation	1	Off	0	29	29	0	0	0	0	29	29
08/08/24	PF	Training on oyter mushroom cultivation	1	Off	1	1	2	0	42	42	1	43	44
06/09/24	PF	Training on Oyster Mushroom Cultivation	1	Off	2	14	16	23	87	110	25	101	126
11/09/24	PF	Training on nagli processing and its product	1	Off	0	0	0	0	21	21	0	21	21
12/11/24	PF	Training on Milky and Oyster mushroom cultivtaion	2	Off	0	0	0	0	28	28	0	28	28

11/12/24	PF	Training on aonla processing like aonla candy,syrup etc.	2	On	0	0	0	0	19	19	0	19	19
18/11/24	PF	Training on recycling kitchen waste through vermiculture biotechnology	2	On	0	0	0	1	26	27	1	26	27
		Total (26)	**37**		**11**	**95**	**106**	**104**	**727**	**831**	**115**	**822**	**937**
Agril Extension													
24/01/24	PF	Scientific Bee Keeping practices	1	On	110	1	111	0	0	0	110	1	111
26/03/24	PF	Scientific Bee Keeping	3	On	5	2	7	27	20	47	32	22	54
		Total (2)	**4**		**115**	**3**	**118**	**27**	**20**	**47**	**142**	**23**	**165**
Soil Science													
03/01/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	1	Off	35	0	35	0	0	0	35	0	35
17/01/24	PF	preseasonal training programme on INM in Rabi Onion	1	Off	0	0	0	20	0	20	20	0	20
01/02/24	PF	Use of biofertilizer and biopesticides in vegetable crops	1	Off	0	0	0	31	4	35	31	4	35
26/02/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	1	On	0	0	0	41	0	41	41	0	41
27/02/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	1	On	0	0	0	40	0	40	40	0	40
27/02/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	1	On	0	0	0	40	0	40	40	0	40
28/02/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	1	On	40	0	40	0	0	0	40	0	40
12/04/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	2	On	5	0	5	22	0	22	27	0	27
10/06/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	2	On	93	2	95	0	0	0	93	2	95
14/06/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	2	On	93	2	95	0	0	0	93	2	95
18/06/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	2	On	93	2	95	0	0	0	93	2	95
20/06/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	2	On	93	2	95	0	0	0	93	2	95
30/07/24	PF	INM in STCR Kharif Paddy	1	Off	0	0	0	22	0	22	22	0	22
30/07/24	PF	INM in STCR Finger millet	1	Off	0	0	0	22	0	22	22	0	22
11/09/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	1	On	17	0	17	0	0	0	17	0	17
11/09/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	1	On	11	0	11	0	0	0	11	0	11
13/09/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	1	On	0	0	0	54	0	54	54	0	54
13/09/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	1	On	0	0	0	53	0	53	53	0	53
24/09/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	1	On	0	0	0	44	0	44	44	0	44
24/09/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	1	On	0	0	0	46	0	46	46	0	46

24/09/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	1	On	0	0	0	52	0	52	52	0	52
24/09/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	1	On	0	0	0	48	0	48	48	0	48
27/11/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	1	On	0	0	0	61	15	76	61	15	76
28/11/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	1	On	69	10	79	0	0	0	69	10	79
30/11/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	1	Off	75	35	110	0	0	0	75	35	110
09/12/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	1	On	6	0	6	13	0	13	19	0	19
09/12/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	1	On	10	0	10	30	0	30	40	0	40
10/12/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	1	On	5	0	5	13	0	13	18	0	18
10/12/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	1	On	6	5	11	14	0	14	20	5	25
16/12/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	1	On	8	0	8	31	0	31	39	0	39
16/12/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	1	On	4	0	4	28	0	28	32	0	32
18/12/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	1	On	10	25	35	0	0	0	10	25	35
18/12/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	1	On	8	33	41	0	0	0	8	33	41
20/12/24	PF	Pre seasonal training on INM in Rabi Onion	1	Off	0	0	0	20	0	20	20	0	20
24/12/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	1	On	6	0	6	26	0	26	32	0	32
24/12/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	1	On	5	0	5	23	0	23	28	0	28
27/12/24	PF	Importance of soil health management and use of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	1	On	0	0	0	6	42	48	6	42	48
		Total (37)	**42**		**692**	**116**	**808**	**800**	**61**	**861**	**1492**	**177**	**1669**
		Grand Total (109)	**160**		**1648**	**415**	**2063**	**1762**	**1077**	**2839**	**3410**	**1492**	**4902**

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
16/01/24	RY	Seed production of oilseed, pulses and cereal crops	Agro	5	On	15	3	18	5	3	8	20	6	26
17/03/24	RY	Paddy, Maize and wheat production technology	Agro	1	On	36	0	36	14	0	14	50	0	50
23/11/24	RY	Soil sampling techniques for seasonal crops	Agro	2	On	8	3	11	4	2	6	12	5	17
17/01/24	RY	Horticulture Nursery Management	Hort	1	On	12	2	14	5	1	6	17	3	20
09/03/24	RY	Fruit & Vegetable processing and Value Adittion	Hort	7	Online	6	2	8	1	1	2	7	3	10
10/04/24	RY	Fruit & Vegetable processing and Value Adittion	Hort	7	Online	5	3	8	1	1	2	6	4	10
09/05/24	RY	Fruit & Vegetable processing and Value Adittion	Hort	7	Online	5	2	7	1	1	2	6	3	9
26/08/24	RY	Horticulture Nursery Management	Hort	6	On	10	2	12	0	7	7	10	9	19
18/01/24	RY	Commercial Poultry farming	Vets	2	Off	27	2	29	18	0	18	45	2	47
09/03/24	RY	Commercial Goat Farming	Vets	1	On	12	10	22	14	6	20	26	16	42
05/09/24	RY	Management of FMD in Cows and Buffaloes	Vets	2	Off	0	0	0	34	28	62	34	28	62
24/09/24	RY	Commercial Goat Farming	Vets	5	On	14	1	15	14	0	14	28	1	29
28/11/24	RY	Commercial Goat farming for R-Seti students	Vets	1	On	28	11	39	19	18	37	47	29	76
21/03/24	RY	Training om oyster mushroom cultivation and processing	Hsci	3	On	7	4	11	11	15	26	18	19	37
18/09/24	RY	Training on Milky and Oyster mushroom cultivtaion and its by product	Hsci	5	On	0	0	0	17	22	39	17	22	39
23/12/24	RY	Traing on oyster mushroom cultivation and its by product	Hsci	4	On	0	0	0	18	6	24	18	6	24
09/02/24	RY	Scientific Bee Keeping practices	AgEx	1	On	30	20	50	0	0	0	30	20	50
23/02/24	RY	Importance of bio fertilizer, bio pesticides in crop production & bio agents multiplication in field	SSci	1	Off	15	8	23	0	0	0	15	8	23
		Total (18)		**61**	**18**	**230**	**73**	**303**	**176**	**111**	**287**	**406**	**184**	**590**

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
20/01/24	EF	Integrated weed management	Agro	1	On	42	0	42	8	0	8	50	0	50
18/02/24	EF	Millet Production technology	Agro	1	On	30	0	30	20	0	20	50	0	50
09/07/24	EF	Soybean, Maize & Paddy production Technology under CROPSAP of Dept of Agriculture	Agro	1	On	70	32	102	18	12	30	88	44	132
30/05/24	EF	Training on ICM,IPM of Pomegranate &Tomato under HORT SAO scheme, organised by ASDO, Nashik	Hort	1	Off	52	12	64	12	10	22	64	22	86
19/06/24	EF	Training on HDP Mango, Guava and Sapota	Hort	1	Off	17	3	20	7	2	9	24	5	29
07/10/24	EF	Training on Protected cultivation of Vegetable & flowers	Hort	1	Off	17	5	22	6	3	9	23	8	31
02/02/24	EF	Latest updates in Veterinary Science for field Veterinarians	Vets	3	On	188	35	223	125	24	149	313	59	372
30/07/24	EF	Artificial Insemination in Animals and its SOPs	Vets	1	On	88	14	102	74	19	93	162	33	195
28/08/24	EF	Standared Operating procedures for Artificial Insemination in Animals	Vets	3	On	88	19	107	85	24	109	173	43	216
03/09/24	EF	Animal Census Expert Committee meet	Vets	1	Off	8	6	14	7	4	11	15	10	25
15/09/24	EF	Animal Husbandry and scope for a livelihood	Vets	2	Off	28	0	28	17	0	17	45	0	45
21/01/24	EF	Mechanisation and improved Machineries for the District for DAESI batch	AgEg	1	On	40	0	40	0	0	0	40	0	40
21/01/24	EF	Mechanisation and improved Machineries for the District for DAESI batch	AgEg	1	On	35	0	35	0	0	0	35	0	35
24/04/24	EF	Premosoon insitu soil and water conservation measures for kharif crops	AgEg	1	On	32	4	36	0	0	0	32	4	36
24/10/24	EF	Agricultural Mechanisation and improved Machineries for the District for State Dept Extension Functionaries (Newly Recruit)	AgEg	1	On	32	8	40	0	0	0	32	8	40
14/02/24	EF	Methods, tools and strategies for effective extension	AgEx	1	Off	14	11	25	0	0	0	14	11	25
		Total (16)		**21**	**16**	**781**	**149**	**930**	**379**	**98**	**477**	**1160**	**247**	**1407**

Krishi Vigyan Kendra

Yashwantrao Chavan Maharashtra Open University

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