ICAR-ATARI, Pune
DETAILS OF ANNUAL PROGRESS REPORT OF KVKs DURING 2023
(January 2023 to December 2023)

1. GENERAL INFORMATION ABOUT THE KVK

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

Address with PIN code	Telephone		E mail	Website address & No. of visitors (hits)
Krishi Vigyan Kendra At.Po.- Kolde, Tal.Dist.- Nandurbar (M.S.) 425412	Office 02564-299315	FAX	kvk_ndb@yahoo.com	www.kvknandurbar.net

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

Address	Telephone		E mail	Website address
	Office	FAX		
Dr. Hedgewar Seva Samiti, Nandurbar. B.No 110 Girivihar Housing Society, Nandurbar 425412	02564-295201	--	drhssho@gmail.com	drhssnandurbar.org.in

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

Name	Telephone / Contact		
	Office	Mobile	Email
Shri. Rajendra Sahebrao Dahatonde	02564-299315	9657323334	kvk_ndb@yahoo.com

1.4. Date and Year of sanction: 19 December 2001

1.5. Staff Position (as on December, 2023)

Sl. No.	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	Current Grade Pay		
1.	Senior Scientist and Head	Shri R.S. Dahatonde	9657323334	Post Harvest technology	147900	--	14.05.2019	Permanent
2.	Subject Matter Specialist	Vaccant	--	Horticulture	--	--	--	--
3.	Subject Matter Specialist	Shri J.N.Uttarwar	8280227544	Agricultural Engineering	92700	--	16-08-2002	Permanent
4.	Subject Matter Specialist	Shri P.C. Kunde	9890756141	Plant protection	92700	--	12-06-2003	Permanent
5.	Subject Matter Specialist	Shri U. D. Patil	8668485726	Crop production	84900	--	05.06.2008	Permanent
6.	Subject Matter Specialist	Sau. A.H.Deshmukh	9503612702	Home Science	63100	--	15.05.2019	Permanent
7.	Subject Matter Specialist	Vaccant	--	Post harvest technology	--	--	--	--
8.	Programme Assistant	Vaccant	--	Veterinary	--	--	--	--
9.	Computer Programmer	Shri. V.S.Bagal	9923459461	Computer Programmer	64100	--	02-02-2005	Permanent
10.	Farm Manager	Shri.R.R.Bhavsar	9922722992	Farm Manager	66000	--	16-08-2002	Permanent
11.	Accountant/ Superintendent	Ku. G. N. Kadam	9604041798	Assistant	50500	--	05.11.2011	Permanent
12.	Stenographer	Shri.Rahul R. Nawale	9404749963	Stenographer	44800	---	01-07-2002	Permanent
13.	Driver 1	Shri. R.S.Rajput	9404749676	Driver 1	36100	--	01-07-2002	Permanent
14.	Driver 2	Shri.K.Y.Patil	9823976708	Driver 2	36100	--	01-10-2004	Permanent

15.	Supporting staff 1	Shri. K.C.Marathe	9923364625	Supporting staff 1	29700	--	01-07-2002	Permanent
16.	Supporting staff 2	Shri.K.J.Sonawane	9657524930	Supporting staff 2	29700	--	01-10-2004	Permanent

1.6. Total land with KVK (in ha):

S. No.	Item	Area (ha)
1	Under Buildings	0.40
2.	Under Demonstration Units	0.05
3.	Under Crops	16.20
4.	Horticulture	1.60
5.	Pond	0.09
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)	Expenditure (Rs.)	Starting year	Plinth area (Sq. m)	Status of construction
1.	Administrative Building	ICAR	2004-05 2006-07	500	2750006 1821000	--	--	--
2.	Farmers Hostel							
3.	Staff Quarters	ICAR	2006-07	400	2148000	--	--	--
4.	Fencing	ICAR	2005-06	-	1680000	--	--	--
5	Rain Water harvesting system	ICAR	2006-07	-	879000	--	--	--
6	Threshing floor	ICAR	2008-09	--	200000	--	--	-
7	Farm Podown							
8	Soil and water testing lab	ICAR	2005-06	60	1200000	2005	--	--
9	Mini soil testing Kit	--	--	--	--	--	--	--
10	Sell Contour	--						
11	Demo unit	ICAR	2005-06	107	418000	--	--	--
i	ICT lab	--	--	--	--	--	--	--
ii	Solar Panel	--	--	--	--	--	--	--
12	counter seal	--	--	--	--	--	--	--
13	Other pl mention	--	--	--	--	--	--	--
14	Administrative Building	ICAR	2004-05 2006-07	500	2750006 1821000	--	--	--
15	Other pl mention							

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Running	Present status
Tractor	2002	400000	--	Said for condom
Motor cycle TVS	2004	50000	--	Not in use
Motor cycle Hero Honda	2006	50000	107996	Good
4 Wheeler Xylo	2014	800000	324334	Said for condom

C) Equipment & AV aids

Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
Photocopier	2001 – 2002	90000.00	Not in use
Electronic typewriter	2001 – 2002	13905.00	Working
White Board	2001 – 2002	4150.00	Good
TV – VCD	2002 – 2003	18000.00	Working
Computer & Printer	2002 – 2003	55300.00	Working
Trailer	2002 – 2003	88500.00	Working
Slide Projector	2002 – 2003	15000.00	Not in use
Cupboard	2002 – 2003	5140.00	Good
Agricultural Equipment	2002 – 2003	10000.00	Good
3 HP Pump set	2002 – 2003	8060.00	Working
Fax Machine	2003 – 2004	8500.00	Working
Cupboard	2003 – 2004	19530.00	Good
Office Table	2003 – 2004	19940.00	Good
EPBX Machine	2003 – 2004	18000.00	Working
Revolving Chairs	2003 – 2004	14000.00	Good
Plastic Chairs	2003 – 2004	11000.00	Good
Study Chairs	2003 – 2004	13600.00	Good
Ceiling Fan	2003 – 2004	9300.00	Working
Pedestal Fan	2003 – 2004	3600.00	Working
Computer Table & Chair	2003 – 2004	10000.00	Working
Cooler	2003 – 2004	11000.00	Working
PVC Pipes	2003 – 2004	4735.00	Nil
Rain Gun	2003 – 2004	8010.00	Working
Computer Related Equip.	2003 – 2004	7755.00	Working
White Board	2003 – 2004	11294.00	Good
Black Board	2003 – 2004	436.00	Good
Loud Speaker	2003 – 2004	10800.00	Working
Refrigerator	2003 – 2004	12500.00	Working
Podium	2003 – 2004	1500.00	Good
Sony Hipoint	2003 – 2004	4500.00	Working
Camera Stand	2004 – 2005	1640.00	Good
Curtains	2004 – 2005	8400.00	Good
Dais Chairs	2004 – 2005	5950.00	Good
Digital Camera	2004 – 2005	11300.00	Not in use
Digital Thermometer	2004 – 2005	1507.00	Not in use

Dual Board	2004 – 2005	3240.00	Good
Equipment	2004 – 2005	12613.00	Good
Fixo Graph	2004 – 2005	8849.00	Good
Handy Camera	2004 – 2005	24400.00	Working
Information Board	2004 – 2005	14435.00	Good
Iron Rack	2004 – 2005	5000.00	Good
LCD Screen	2004 – 2005	7800.00	Good
M Hall Panel	2004 – 2005	12405.00	Good
Modular System	2004 – 2005	9800.00	Not in use
Multipurpose Hall Dais	2004 – 2005	15500.00	Good
Notice Board	2004 – 2005	3300.00	Good
Office Cupboard	2004 – 2005	9500.00	Good
Office Table	2004 – 2005	5700.00	Good
Plastic Chair	2004 – 2005	13050.00	Good
Pedestal Fan	2004 – 2005	3500.00	Good
Public Address System	2004 – 2005	7395.00	Good
Revolving Chairs	2004 – 2005	3600.00	Good
Ceiling Fan	2004 – 2005	15080.00	Working
Study Chairs	2004 – 2005	61000.00	Good
T O Table	2004 – 2005	15500.00	Good
Visitors Chairs	2004 – 2005	13836.00	Good
Computer & Accessories	2005 – 2006	100000.00	Working
LCD Projector	2005 – 2006	72000.00	Working
UPS System	2005 – 2006	28000.00	Working
Inverter	2005 – 2006	30000.00	Working
Furnishing of Hostel - Mattresses / Pillows / Shawls	2005 – 2006	44800.00	Good
Cots	2005 – 2006	87500.00	Good
Curtains	2005 – 2006	7000.00	Good
Dining Table	2005 – 2006	9000.00	Good
Energy Lamp	2005 – 2006	3050.00	Not in use
Fans	2005 – 2006	17000.00	Working
Gas Burners	2005 – 2006	3560.00	Not in use
Gas Cylinder	2005 – 2006	5100.00	Working
Hostel Table	2005 – 2006	6500.00	Good
Italian Cabinet	2005 – 2006	10200.00	Good
Mirror & Hangers	2005 – 2006	5000.00	Nil
Notice Board	2005 – 2006	4000.00	Good
Plastic Chair	2005 – 2006	14000.00	Good
Solar water heating System	2005 – 2006	22000.00	Working
Steel Cupboard	2005 – 2006	10125.00	Goods
Utensils	2005 – 2006	40000.00	Goods
Utensils	2005 – 2006	5165.00	Goods
Bullock drawn tractor	2006 – 2007	28000.00	Working
Groundnut digger	2006 – 2007	6385.00	Working
Jyoti bullock drawn planter	2006 – 2007	9900.00	Not in use
Seed drill	2006 – 2007	29150.00	Working
Power-weeder	2007-2008	70550.00	Working
Multi crop thresher	2008 - 2009	75000.00	Working
Panja cultivator	2008 - 2009	25000.00	Working

Atomic Absorption Unit	2008 - 2009	1000000.00	Working
Plastic chair	2016-17	50000	Good
I Ball Tablet	2016-17	10000	Good
IT- Laptop , Desktop, Printer	2016-17	95000	Good
E connectivity- GPS	2016-17	15000	Good
Trolly Sprayer	2016-17	38160	Good
Rotavator	2016-17	87000	Good
Rotary Tiller	2016-17	60000	Good
Wheel Trolly	2016-17	8500	Good
Spray Pump	2016-17	6340	Good
Bullock Drawn Implements	2018-19	39200	Good
Small Tractor drawn implements	2018-19	135720	Good
Tractor operated Sprayer	2018-19	75600	Good
Farm Implements – Small tools	2018-19	29944	Good
Bullock drawn	2018-19	6770	Good
Vegetable and paddy transplanting	2018-19	37500	Good
Animal feed machine	2018-19	134400	Good
Urea Briquetting Machine	2018-19	200600	Good
Electric motor	2018-19	11900	Good
Leaf shredder and Hand winch wheel barrows	2018-19	71738	Good
Neem seed pulverizer	2018-19	62540	Good
Reversible MB plough and Roller	2018-19	79501	Good
Multicrop Reaper	2018-19	145040	Good
Mobile Shredder	2018-19	169547	Good
G-Lioyd Split Air Conditioner	2020-21	58500	Good
Sound System	2020-21	33450	Good
Furniture Expences(Table,Cupboard, Table-Top, etc)	2020-21	131000	Good
G-LG- Small Refrigerator	2020-21	15890	Good
Equipments- Linova PC, UPS-Artis, EPSiON LCD Projector	2020-21	91600	Good
Microtek Invertor and Batteries	2020-21	45700	Good
Celling Fan - Crompton	2020-21	23860	Good
Convention Oven 6Trays(Electrical)	2022-23	82600	Good
Flour Mill(Pukhraj)16"JHBT	2022-23	81000	Good
Mobile Rice Mill with 2HP	2022-23	40540	Good
Rice cum Flour Mill	2022-23	178600	Good
Table Top Huller for all Small Millett	2022-23	102260	Good

1.8. Details of SAC meeting conducted in the year :

Date	Name and Designation of Participants	Salient Recommendations	Action taken
28.12.2023	Shri. K. K. Patil	--	--
	Hon. Shri. Dr. C. D. Dorkar	--	--
	Hon. Shri. U. B. Hole	--	--
	Shri. Patilbhau Mali	--	--
	Shri. Swapnilbhau Patil	--	--
	Shri. P. S. Late	--	--
	Shri. M. P. Pawar	--	--
	Shri. Sachin Gangurde	--	--
	Shri. Y. S. Hizwala	--	--
	Sau. Archnatai Valvi	--	--
	Sau. Ashabai Komalsing Rajput	--	--
	Shri. Suresh Ananda Patil	--	--
	Shri. Ganesh Pathare	--	--

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
1	Crop + Horticulture + Live stock
2	Crop + Horticulture
3	Crop + Livestock
4	Crop + Livestock + Enterprise

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

S. No.	Agro-climatic Zone (Planning Commission)	Characteristics
1	Zone – I, East part of Nandurbar & Shahada tahsil	Scarcity zone
2	Zone – II, Navapur tahsil	Western ghat Zone
3	Zone – III Akrani & Northern part of Akkalkuwa	Sub Moutain Zone
4	Zone –IV Taloda & southern part of Akkalkuwa & western part of Shahada Tahsil	Western Maharashtra plain Zone

a) Topography

S. No.	Agro ecological situation	Characteristics
1	Scarcity Zone AES-1	Rainfall less than 500mm.Very light to medium type soils. Long dry spells, Kharif predominant Cotton, Bajra, Groundnut and Onion are the main crops of the AES.

2	Scarcity Zone AES-2	Rainfall less than 750mm., but more than 500mm.soils are medium to black. Kharif and rabi are predominant seasons. Cotton, Bajra, Mung, Maize, are the main crops. Mung followed by Rabi Jowar is present crop rotation.
3	Western Ghat Zone AES-3	Average rainfall 750 to 1000mm. Medium to deep soils. Good irrigation potential. Sugarcane, Paddy, Maize, Cotton, Vegetables are the main crops.
4	Western Ghat Zone AES-4	Average rainfall 1000 mm. light to medium soils. Rice, Sugarcane, finger millets, small millets are main crops
5	Sub Mountain Zone AES-5	Average rainfall 1700 to 2500mm.Maximum 35o to 45o and minimum 10o to 16o c. temperature. Rice, Maize, Jowar, Bajra, Gr.nut and Small millets are main Kharif crops, while Wheat, Gram and vegetables are important rabi crops.
6	Western Maharashtra Plane Zone AES-6	Assured rainfall area having average rainfall 950 to 1250mm. Heavy to very heavy soils. Tapi river valley area. jowar, cotton, mung, maize, Bajra are main crops during Kharif. rabi jowar, wheat, gram are crops during Rabi Sugarcane and Banana are also having economic importance

2.3 Soil Types

S. No	Soil type	Characteristics	Area in ha
1	Digraj series	Shallow soil depth, Basalt rock is below. The land have low productivity, low water holding capacity and low fertility, restricted plant growth	----
2	Tintarvani series	Low water holding capacity, very low productivity	----
3	Patoda series	Medium soil depth (50 cm.) contains 5-10 % calcium, medium drainage, hard rock below, found cracks in summer, low water holding capacity and less fertile	----
4	Kumbhaphal series	Soils having 25 cm depth, weathered murum is below. Low water holding capacity, difficult to cultivate stony land	Akrani Tehsil
5	Ilegaon soil series	Having 1-3 % slope, having drainage problem, underground rock is basalt mix with lime.	Nawapur, Nandurbar Tehsil
6	Phulkalas soil series	Weathered basalt resulted in hard murum is observed below. The soils are difficult to cultivation, medium textured soils.	Some area of Nandurbar and Navapur Tehsil
7	Rajani soil series	Soils get cracks and hence plant roots are damaged reducing yield of crop	Some parts of Nandurbar and Navapur Tehsils.

2.4. Area, Production and Productivity of major crops cultivated in the area of jurisdiction of KVK (2023)

S. No	Crop	Area (ha)	Production (MT)	Productivity (q./ha)
	Major Field crops			
1	Paddy	30000	360.90	1201.16
2	Wheat	23600	381.80	1615.34
3	Jowar	26800	359.30	1339.20
4	Rabi jowar	8900	108.40	1212.21
5	Pearl millet	6800	45.23	659.48
6	Maize	48500	851.77	1751.40
7	Gram	31000	383.20	1234.27
8	Red gram	22400	78.20	348.00
9	Black gram	9450	35.58	376.330
10	Green gram	4100	9.04	217.10
11	Sunflower	590	00	00
12	Groundnut kh	1800	11.82	653.90
13	Groundnut summer	6300	81.37	1281.14
14	Seasamum	700	0.01	190.90
15	Rabi maize	5017	120.45	24.01
16	Safflower	1420	1.88	1318.70
17	Soybean	29200	370.56	1264.80
18	Cotton	125800	1725.98	233kg lint
	Major Horticultural crops			
19	Mango	8486	-	400
20	Chilli	4000	-	040
21	Onion	2000	-	100
22	Banana	4000	-	500
23	Ber	1221	-	75
24	Guava	1344	-	220
25	Custard apple	1153	-	30
26	Papaya	1400	-	500
27	Watermelon summer	744	-	12

2.5. Weather data (2023)

Month	Normal RF(mm)	Normal Rainy days (number)	Temperature (^{0} C)		Relative Humidity (%)	
			Maximum	Minimum	Maximum	Minimum
January	00	00				
February	00	00				
March	36	03				
April	4.5	01				
May	02	00				
June	47	03				
July	131.5	13				

August	58	08				
September	203	09				
October	00	00	34.7	20.6		
November	58	02	31.7	17.9		
December	06	01				
Total	**546**	**40**				

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

Category	Population (No)	Production	Productivity
Cattle			
Crossbred	14533		
Indigenous	322374		
Buffalo	72100		
Sheep	15227		
Goats	272753		
Pigs			
Crossbred	1117		
Indigenous	9543		
Rabbits	1711		
Poultry			
Hens (*Crossbred)*			
Desi	50000		
Fish (Reservoir)			

2.7. Details of Operational area / Villages

Taluka / Block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
Nandurbar	Junmohida, Kakarda.	Cotton, Chilli, Onion, Gram, Bajara, Wheat, G.Nut. Maize,Banana,Papaya,watermelon	Inefficient water management, Heavy incidence of pest and diseases, Lack of knowledge regarding IPM & INM Practices, Imbalanced fertilizer application. Lack of knowledge regarding processing	Water conservation at farmers level, Improved varieties with improved cultivation practices ,IPM,INM fertigation, Primary processing
Taloda	Revanagar Shelvai Umarkuva	Sugarcane, Soybean, Gram, Wheat, Cotton, Green gram, Brinjal Okra, Paddy,Jowar	Low productivity, Poor fertilizer management, Labour shortage, Lack of knowledge regarding IPM & INM Practices,	improved farm implement INM, ICM, improve varieties with improved packages

Shahada	Adgaon	Sugarcane, Soybean, Gram, Wheat, Cotton, Papaya, Banana	Low productivity, Poor fertilizer management, Labour shortage, Pest & disease incidence. Lack of knowledge regarding processing	Fertigation techniques improved farm implement INM, IPM, improved varieties with improved packages
Dhadgaon	Kharvad Katri, Bhujgaon	Little millet, Barnyard Millet, Jowar, Bajara, Gr. Nut, Black gram, Green gram, Bengal gram, mango, garlic, custard apple	Low yield due shallow soil, improper fertilizer management, incidence of pest and diseases drudgery in farming operation Lack of knowledge regarding processing	Improved Varieties Water conservation practices IPM INM Farm implements Primary processing
Navapur	Nimboni, Sonpada Palipada Talavipada	Paddy, Rabi Jowar, Soybean , Groundnut, Brinjal, Okra, Cauliflower, Cluster bean, mango	Lack of knowledge regarding seed treatment , Improper fertilizer management, Incidence of pest and disease, Inefficient water management	Improved variety Seed treatment INM IPM , Water management ,Improved farm implements
Navapur	Ninmboni	Paddy, Rabi Jowar , Soybean Brinjal, Okra, Cauliflower, Cluster bean, mango	Improper fertilizer management, Incidence of pest and disease, Water management, Lack of knowledge regarding processing	Improved variety Seed treatment INM, IPM, Water management Honey bee.
Akkalkuva	Bhagdari Bijripati, Debramal	Pulses, Soybean, Jowar, Niger, mango, garlic custard apple, Onion.	Local varieties, Lack of knowledge regarding processing	Improved Varieties, Farm implement, Small scale processing, INM, IPM

2.8. Priority thrust areas:

Crop/Enterprise	Thrust area
Cotton	Integrated Nutrient Management, Integrated Pest Management Drip irrigation. Integrated crop Management, Improved farm implements
Paddy	Improved varieties, Improved farm implements, Pest & disease management, Processing and Value Addition
Ground nut	Integrated crop Management, Improved farm implements
Sorghum, maize	Soil moisture conservation ,Nutrient management, Pest management, Processing and Value Addition

Papaya	Raised bed technology, Integrated Nutrient Management, water management, Integrated Pest Management, bio control methods of pests & diseases.
Rabi sorghum	Improved Varieties ,Improved farm implements, water management, Integrated Pest Management, INM
Bengal gram,	Seed treatment, Improved Varieties, cultivation practices, INM, Pest and disease management
Summer Ground nut	Integrated Nutrient Management, pest & disease management, ICM, Improved farm implements
Mango	Integrated Nutrient Management, pest & disease management, Processing and Value Addition
Banana	Integrated Nutrient Management, pest & disease management, improved farm implements, fertigation techniques, Processing and Value Addition
Onion	Integrated Nutrient Management, water management, Integrated Pest and disease Management, storage
Chilli	Integrated Nutrient Management, water management, Integrated Pest and disease Management
Brinjal	Integrated Nutrient Management, water management, Integrated Pest and disease Management, ICM
Okra	Integrated Crop management,Improved varieties
Cluster bean	Integrated Crop management, Improved varieties
Watermelon	Integrated Crop management
Soybean	Improved Varieties Integrated Nutrient Management, pest & disease management
Red gram	Improved Varieties, Integrated Nutrient Management, Pest management, Processing and Value Addition
Green gram	Seed treatment, Improved Varieties, cultivation practices, Integrated Nutrient Management, pest & disease management, ICM, Processing and Value Addition
Black gram	Seed treatment, Improved Varieties, cultivation practices, Integrated Nutrient Management, pest & disease management, ICM, Processing and Value Addition
Wheat	Integrated Nutrient Management, pest & disease management
Onion seed production	Honey bee, integrated crop management
Veterinary/Livestock production	Cultivation and conservation of feeds & fodders.
	Importance of mineral mixtures & additives in the feeds
	Clean milk production
	Profitable dairy farming
	Back yard poultry
Post Harvest Technology	Awareness creation on harvesting, drying and storage of agril. Produce.
	Awareness creation on cleaning and grading of grains.
	Quality improvement in Amchur preparation from Mango.
	Processing and value addition of pulses and oilseeds
	Reduction of wastage and shelf life enhancement.
	Value addition of Minor millets.

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
	4		52		2		26
	3		36		4		56
	2		26		3		56

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
	42		1364				
	27		907				
	36		1618				

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement

3.1. B. Operational areas details during 2023

S.No.	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.)*
1	Little millets	• Unawareness about seed treatment •Low productivity •Use of local variety	150	Dhadgaon	FLD/Training, Demonstration
2	Foxtail millet	• Unawareness about seed treatment •Low productivity •Use of local variety	100	Dhadgaon	FLD/Training, Demonstration
3	Cotton	Attack of sucking pests.	60000	Nandurbar block & Navapur tahsil	FLD/Training
		INM, Balance Nutritional managenet	50000	Shahada blaock, Nandurbar block & Navapur tahsil	OFT/FLD/Training
		Attack of pink bollworm	65000	Eastern part of Nandurbar &	Demonstration
		Integrated nutrient management	25000	Nandurbar block	FLD/Training
		Less conservation of rain water	42000	Eastern part of Nandurbar	Training
		• Low productivity and increased cost of cultivation of Rain fed Bt cotton	55000	--	Training & Extension activities
2	Soybean	Nutrient management & Pest management	20000	Dhadgaon,Nandurbar & Navapur block	Cluster FLDs/OFT
3	Vegetables	Pest Management & Nutrient Management	5000	Navapur tahsil	FLD/OFT
		Seed availability	5000	Navapur tahsil	Seed production pragramme
4	Banana	Nutrient	2500	Shahada & Taloda	FLD/Trainings

		Management & Sigatoka disease management		block	
5	Groundnut	Pest Management & Nutrient Management	6000	Navapur block & Dhadgaon block	Cluster FLDs
6	Farm implement	Non availability of single implement for various operations	--	--	FLD/Trainings/OFT
7	Kharif crops	• Unawareness about seed treatment	--	--	Training & Extension activities
8	Bengal gram	• Low productivity of Bengal gram due to pod borer & Nutrient management	10000	Nandurbar & Dhadgaon block	Cluster FLDs /Trainings/OFT
9	Summer groundnut	Pest Management & Nutrient Management	3000	Navapur block	FLD/Trainings
10	Mango	Low yield of mango Improper quality and low yield of mango Blackening of amchur	1800	Dhadgaon & Akkalkuwa block	Demonstration /Trainings
11	Red gram	IPM & INM	9000	Navapur Block	Cluster FLDs /Trainings/OFT
12	oil expeller	Available oils are blended, Demand for quality oils.	--	Akkalkuwa tahsil	Training and Demonstation
13	Mini Dal mill	Home scale processing, More broken, Lower quality of dal	--	Akkalkuwa tahsil	FLD/Trainings
14	Grain cleaner	Time and labour consuming, Less market price	--	Akkalkuwa tahsil	FLD/Trainings
15	Rabi Jowar	Fertiliser Management & Pest management	2500	Navapur tahsil	FLDs/Trainings

16	Soil and water conservation	Low productivity of rainfed crops, Low productivity of kharif crops	--	--	Trainings & demonstration
17	Processing and value addition	Less knowledge about post harvest technology and value addition	--	--	Trainings & demonstration
18	Chilli	Low productivity of chilli Seedling mortality, Nutrient management & pest, disease management	3000	Nandurbar & shahada tahsil	FLD/Trainings/OFT
19	Bee keeping	Poor pollination Unavailability of honey	--	Navapur, Akkalkuva block	Training / Demonstrations
20	Sericulture	Unavailability	--	Navapur, Nandurbar block	Training / Demonstrations
21	Vermi composting	Unavailability of organic fertilizer & poor organic carbon in soil	--	Navapur, Dhadgaon,Nandurbar block	Training / Demonstrations
22	Watermelon	Low productivity of watermelon due to nutrient & pest managent	1000	Nandurbar & shahada tahsil	FLD/Trainings/OFT
23	Fodder crop	Lower productivity and poor nutritional status	--	--	FLD/Trainings/OFT
24	Fodder – Maize	Unavailability of green fodder in summer season	--	--	FLD/Trainings/OFT

3.2. Technology Assessment (Kharif 2023, Rabi 2022-23, Summer 2023)

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

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

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

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Evaluation of Breeds						
Nutrition Management						
Disease of Management						
Value Addition						
Production and Management						
Feed and Fodder						
Small Scale income generating enterprises						
TOTAL						

B. Achievements on technologies Assessed
B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trial covering all the Technological Options)
Integrated Nutrient Management	Cotton	To assess the Split application of Nitrogen fertilizer schedule of Bt. Cotton.	13	13	3
	Rabi Jowar	To assess the effect of Potassium Nitrate (13:00:45) on Yield of *Rabi* Sorghum	13	13	3
Varietal Evaluation	Little Millet	Varietal performance of Little millet (Phule Ekadashi) in satpuda ranges of Dhadgaon tahasil.	13	13	3
	Foxtail millet	Varietal performance of Foxtail millet (suryanandi) in satpuda ranges of Dhadgaon tahasil	13	13	3
Integrated Pest Management	Maize	Management of Fall Army Worm	13	13	5
	Onion	Management of White grub in onion	13	13	5
Integrated Crop Management					
Integrated Disease Management	Okra	Management of leaf curl virus	10	10	2.5
Small Scale Income Generation Enterprises					
Weed Management					
Resource Conservation Technology					
Farm Machineries	Cotton	Hand push seeder	13	13	5
	Cotton	Bullock drawn twin blade hoe with fertilizer applicator	13	13	5
Integrated Farming System					
Seed / Plant production					
Value addition					

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trial covering all the Technological Options)
Drudgery Reduction					
Storage Technique					
Mushroom cultivation					
Total					

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				
Health Management				
Dairy Management				
Nutrition management				
Disease management				
Feed and fodder management				
Processing & Value addition				
Production and management				
Composting fish culture				
Small scale income generating enterprises				
Fish production				
Other				
Total				

B.3 Technologies assessed under other enterprises

Name of Enterprises	Name of the technology assessed	No. of trials	No. of farmers
Mushroom			
Apiary			
Vermicompost			
Tailoring			
Nutrition Garden			

Name of Enterprises	Name of the technology assessed	No. of trials	No. of farmers
Nursery Management			
Production and Management			
Eentrepreneurship development			
Engegy consrvation			
storage techniques			
House hold food security			
organic farming			
mechanization			
Bee keeping			
Seed production			
post-harvest management			
other			

B 4.Technologies assessed under Women empowerment assessment

Name of Enterprises	Name of the technology assessed	No. of trials	No. of farmers
Drudgery Reduction			
Entrepreneurship development			
Health and Nutrition			
value addition			
Kitchen gardening			
nutrition security			
other			

C. 1. Results of Technologies Assessed
Results of On Farm Trial :
Crop production : 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
Little millet	irrigated	Use of traditional variety, Low yield	Varietal performance of Little millet (Phule Ekadashi) in satpuda ranges of Dhadgaon tahasil.	13	Use of Improve variety (Phule Ekadashi)	Yield Tillers per plant C:B ratio	Yield T1: 11.17 T2: 15.24 Net return: T1:27446 T2: 41512 B:C Ratio: T1: 2.83 T2: 3.53	Yield is increase (41%)	1.Biofertilizers seed treatment found effective for good germination. 2. Variety performed better for achieving growth and yield components compared to traditional variety. 3.Number of productive tillers/plant (8.67),		

									panicle length (37.6 cm), number of grains/panicle (397) and test weight (1.93 g) is better than control plot. 4.Yield increase 36%		

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)	Traditional practice	11.17	Qt/ha	27446	2.83
Technology option 2	MPKV Rahuri	15.24	Qt/ha	45512	3.53
Technology option 3					

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

<table>
<tr><td>1</td><td>Title of Technology Assessed :</td><td colspan="3">Varietal performance of Little millet (Phule Ekadashi) in satpuda ranges of Dhadgaon tahasil.</td></tr>
<tr><td>2</td><td>Problem Definition : for assessment</td><td colspan="3">Use of traditional variety, Low yield</td></tr>
<tr><td>3</td><td>Details of technologies selected</td><td colspan="3">Use of Improve variety (Phule Ekadashi)</td></tr>
<tr><td>4</td><td>Source of technology</td><td colspan="3">MPKV,Rahuri</td></tr>
<tr><td>5</td><td>Production system and thematic area</td><td colspan="3">Varietal performance, Production management and technology</td></tr>
<tr><td rowspan="3">6</td><td rowspan="3">Performance of the Technology with performance indicators</td><td>Performance indicators</td><td>Farmers practice T1</td><td>Improved practice T2</td></tr>
<tr><td>Yield Q/ha</td><td>11.17</td><td>15.24</td></tr>
<tr><td>Net return Rs/ha</td><td>27446</td><td>45512</td></tr>
<tr><td>7</td><td>Feedback, matrix scoring of various technology parameters done through farmer’s participation / other scoring techniques</td><td colspan="3">1.Biofertilizers seed treatment found effective for good germination
.2. Variety performed better for achieving growth and yield components compared to traditional variety.
3.Number of productive tillers/plant (8.67), panicle length (37.6 cm), number of grains/panicle (397) and test weight (1.93 g) is better than control plot.
4.Yield increase 36%</td></tr>
<tr><td>8</td><td>Final recommendation for micro level situation</td><td colspan="3">Variety performed better for achieving growth and yield components compared to traditional variety</td></tr>
<tr><td>9</td><td>Constraints identified and feedback for research and developmental departments</td><td colspan="3">36% Yield increased than traditional variety</td></tr>
<tr><td>10</td><td>Process of farmers participation and their reaction</td><td colspan="3">Training and demonstration organized at block leval</td></tr>
</table>

11. Good Quality Photo in JPG (separate with proper caption)

	
Varietal Performance of Little millet Variety Phule Ekadashi	**Flowerng satge of Little millet Variety Phule Ekadashi**

Crop production : 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
Foxtail millet	irrigated	Use of traditional variety, Low yield	Varietal performance of Foxtail millet (suryanandi) in satpuda ranges of Dhadgaon tahasil.	13	Use of Improve variety :Survanadi	Yield Tillers per plant C:B ratio	Yield T1: 12.55 T2: 16.57 Net return: T1: 35300 T2: 49780 B:C Ratio: T1: 3.37 T2: 4.02	Yield is increase (32%)	1.Biofertilizers seed treatment found effective for good germination. 2. Variety performed better for achieving growth and yield components compared to traditional variety. 3.Plant height (112),No of tillers/ M square (60.90), Earehead		

									lengh (12.30cm) and test weight (3.15 g) is better than control plot. 4.Yield increaed 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)	Traditional practice	12.55	Qt/ha	35300	3.37
Technology option 2	MPKV Rahuri	16.57	Qt/ha	49780	1.02
Technology option 3					

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

<table>
<tr><td>1</td><td>Title of Technology Assessed :</td><td colspan="3">Varietal performance of Foxtail millet (suryanandi) in satpuda ranges of Dhadgaon tahasil.</td></tr>
<tr><td>2</td><td>Problem Definition : for assessment</td><td colspan="3">Use of traditional variety, Low yield</td></tr>
<tr><td>3</td><td>Details of technologies selected</td><td colspan="3">Use of Improve variety :Survanadi</td></tr>
<tr><td>4</td><td>Source of technology</td><td colspan="3">Achatya N G Ranga Agril University Kurnool</td></tr>
<tr><td>5</td><td>Production system and thematic area</td><td colspan="3">Varietal performance, Production management and technology</td></tr>
<tr><td rowspan="3">6</td><td rowspan="3">Performance of the Technology with performance indicators</td><td>Performance indicators</td><td>Farmers practice T1</td><td>Improved practice T2</td></tr>
<tr><td>Yield Q/ha</td><td>12.55</td><td>16.57</td></tr>
<tr><td>Net return Rs/ha</td><td>35300</td><td>49780</td></tr>
<tr><td>7</td><td>Feedback, matrix scoring of various technology parameters done through farmer’s participation / other scoring techniques</td><td colspan="3">1.Biofertilizers seed treatment found effective for good germination
.2. Variety performed better for achieving growth and yield components compared to traditional variety.
3.Plant height (112),No of tillers/ M square (60.90), Earehead lengh (12.30cm) and test weight (3.15 g) is better than control plot.
4.Yield increase 32%</td></tr>
<tr><td>8</td><td>Final recommendation for micro level situation</td><td colspan="3">Variety performed better for achieving growth and yield components compared to traditional variety</td></tr>
<tr><td>9</td><td>Constraints identified and feedback for research and developmental departments</td><td colspan="3">32% Yield increased than traditional variety</td></tr>
<tr><td>10</td><td>Process of farmers participation and their reaction</td><td colspan="3">Training and demonstration organized at block leval</td></tr>
</table>

11. Good Quality Photo in JPG (separate with proper caption)

	
Varietal performance of Foxtail millet (suryanandi) in satpuda range	**Flowerng satge of Foxtail millet (suryanandi) in satpuda range**

Results of On Farm Trial - Crop production : 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
Cotton	Deep Black Soil with Drip irrogated	Farmers are applying Nitrogen in 3 splits .Farmers are facing the problem of reddening in cotton.	To assess the Split application of Nitrogen fertilizer schedule of Bt. Cotton.	13	N Shedule (6 splits) 1st wk 20 %, 25 (kg/ha) 4th wk 16 %, 20 (30DAS) 6th wk 16 %, 20 (45DAS) 8th wk 16 %, 20 (60DAS) 10th wk 16 %, 20 (75DAS) 12 wk 16 %, 20	1. Soil testing 2 No of Bolls/plant. 3.C:B ratio 4.Yield(qt/ha)	Yield T1: 14.52 T2: 18.13 Net return : T1:70542 T2: 94123 B:C Ratio: T1: 3.17 T2: 3.72	Yield is increase (25.60%)	No of bolls per plant is increase Yield is increase (30%) due to use of fertigation technology Saving of fertilizer cost	yes	Fertilizer efficiency is more due to fertigation technology

					(90DAS) Phospha te (65 kg/ha) & Potash (65 kg/ha) As per recomm endation						

Contd..

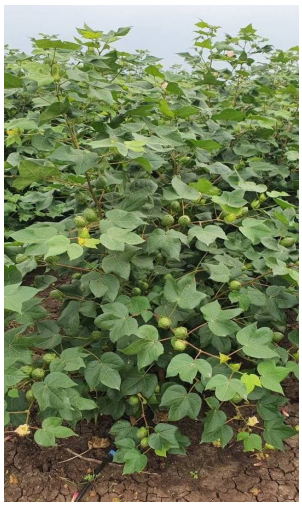
Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)		14.52	qt/ha	70542	3.17
Technology option 2	MPKV Rahuri	18.13	Qt/ha	94123	3.72
Technology option 3					

C2. Details of On Farm Trial for assessment :3

1	Title of Technology Assessed :	To assess the Split application of Nitrogen fertilizer schedule of Bt. Cotton.		
2	Problem Definition : for assessment	Farmers are applying Nitrogen in 3 splits .Farmers are facing the problem of reddening in cotton		
3	Details of technologies selected	N Shedule (6splits) 1st wk 20 %, 25 (kg/ha) 4th wk 16 %, 20 (30DAS) 6th wk 16 %, 20 (45DAS) 8th wk 16 %, 20 (60DAS) 10th wk 16 %, 20 (75DAS) 12 wk 16 %, 20 (90DAS) Phosphate (65 kg/ha) & Potash (65 kg/ha) As per recommendation.		
4	Source of technology	MPKV,Rahuri		
5	Production system and thematic area	Integrated Nutrient Management		
6	Performance of the Technology with performance indicators	**Performance indicators**	**Farmers practice T1**	**Improved Practice T2**
		Yield Q/ha	14.52	18.13
		Net return Rs/ha	70542	94123
7	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	1.No of bolls per plant is increase 2.Yield is increase(30%) due to use of fustigation technology 3.Saving of fertilizer cost		
8	Final recommendation for micro level situation	6th Split application of Nitrogen fertilizer schedule of Bt. Cotton		
9	Constraints identified and feedback for research and developmental departments	Fertilizer efficiency is more, yield is increase (30%)		
10	Process of farmers participation and their reaction	Farmers meetings, Training, Method demonstration		

11. Good Quality Photo in JPG (separate with proper caption)

Split application of Nitrogen fertilizer schedule in Cotton



Results of On Farm Trial - Crop production : 4

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
Rabi Jowar	Rainfed	Rabi sorghum is important cereal crop cultivated in Nandurbar district having 17500 ha area are sown. The productivity of *Rabi* Sorghum is low (Dist avg.886 kg	To assess the effect of Potassium Nitrate (13:00:45) on Yield of *Rabi* Sorghum	13	Soak the seeds in the solution of KMnO4 @0.05% for 10-12 hours and dry under shade. Then treat the seeds with Azotobactor and PSB (each25gm/kg of seeds) and RDF i.e 80:40:40 NPK kg/ha + 2 % foliar spray KMnO4	1. Germination % 2. Plant Population 3. Plant Height at maturity (cm.) 4. Yield (qt/ha) 5. C:B Ratio	Yield T1: 11.67 T2: 15.27 Net return : T1:23359 T2: 28969 B:C Ratio: T1: 2.58 T2: 2.99	Yield is increase (29.74%)	1. Soak the seeds in the solution of potassium nitrate (0.05%) for good germination.2. Foliar spraying of 2% potassium nitrate at 55 DAS for effetive vegetative growth as weel as plant height (118 cm) 3.1000 seed wt.(23.10 gm) 4. Yield	-	-

		/ha).			at 55 DAS				increase 31%		

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	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	Farmers not pracice	11.67	q/ha	23359	
Technology option 2	MPKV Rahuri	15.27	q/ha	28969	
Technology option 3					

C2. Details of On Farm Trial for assessment: 2

<table>
<tr><td>1</td><td>Title of Technology Assessed :</td><td colspan="3">To assess the effect of Potassium Nitrate (13:00:45) on Yield of Rabi Sorghum</td></tr>
<tr><td>2</td><td>Problem Definition : for assessment</td><td colspan="3">Rabi sorghum is important cereal crop cultivated in Nandurbar district having 17500 ha area are sown.The productivity of Rabi Sorghum is low (Dist avg.886 kg /ha).</td></tr>
<tr><td>3</td><td>Details of technologies selected</td><td colspan="3">Soak the seeds in the solution of KMnO4 @0.05% for 10-12 hours and dry under shade. Then treat the seeds with Azotobactor and PSB (each25gm/kg of seeds and RDF i.e 80:40:40 NPK kg/ha + 2 % foliar spray KMnO4 at 55 DAS</td></tr>
<tr><td>4</td><td>Source of technology</td><td colspan="3">MPKV,Rahuri</td></tr>
<tr><td>5</td><td>Production system and thematic area</td><td colspan="3">Integrated Nutrient Management</td></tr>
<tr><td rowspan="3">6</td><td rowspan="3">Performance of the Technology with performance indicators</td><td>Performance indicators</td><td>Farmers practice T1</td><td>Improved practice T2</td></tr>
<tr><td>Yield Q/ha</td><td>11.67</td><td>15.27</td></tr>
<tr><td>Net return Rs/ha</td><td>23359</td><td>28969</td></tr>
<tr><td>7</td><td>Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques</td><td colspan="3">1. Soak the seeds in the solution of potassium nitrate (0.05%) for good germination.
2. Foliar spraying of 2% potassium nitrate at 55 DAS for effetive vegetative growth as weel as plant height (118 cm)
3.1000 seed wt.(23.10gm)
4. Yield increase 31%</td></tr>
<tr><td>8</td><td>Final recommendation for micro level situation</td><td colspan="3">Soak the seeds in the solution of KMnO4 @0.05% for 10-12 hours and dry under shade. Then treat the seeds with Azotobactor and PSB (each25gm/kg of seeds) and RDF i.e 80:40:40 NPK kg/ha + 2 % foliar spray KMnO4 at 55 DAS</td></tr>
<tr><td>9</td><td>Constraints identified and feedback for research and developmental departments</td><td colspan="3">solution of KMnO4 @0.05% for 10-12 hours and dry under shade. Then treat the seeds with Azotobactor and PSB (each25gm/kg of seeds) and RDF i.e 80:40:40 NPK kg/ha overall yield is increase 28.60 %</td></tr>
<tr><td>10</td><td>Process of farmers participation and their reaction</td><td colspan="3">Farmers meetings, Training, Method demonstration</td></tr>
</table>

11. Good Quality Photo in JPG (separate with proper caption)

Effect of Potassium Nitrate (13:00:45) on of *Rabi* Sorghum Variety Phule Vasudha

Results of On Farm Trial -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
Maize	Irrigated, medium to heavy soil.	Maize is the major cereal crop grown in all tahsils of Nandurbar district. Incidence of Fall army worm was found in kharif & rabi maize, affecting the yield of	Management of fall army worm in maize	13	**When the incidence of FAW noticed** Two Spraying of Spinetoram 11.7 % SC@5 ml OR Chlorantraniprol 18.5 SC @ 4 ml Pre 10 lit. Water at 15 days interval T3 Two Spraying of Metarhizium (Nomuraea) rileyi (1x 10^8	FAW infestation-	6.95 % 3.95 % 2.90 %	Low incidence of FAW was observed in T3 as compared to T2 and farmers practice.	Spraying of Metarhizium anisopliae was found effective and economical for the control of Fall Army Worm.		

		maize.			CFU/g)1.15WP OR Metarhizium anisopliae 1x 10^8 CFU/g) 1.15WP @ 50 gm per 10 lit of water at 15 days interval.						

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	BC Ratio
13	**14**	**15**	**16**	**17**	**18**
Spraying of pesticides (Profenophos 50 EC, Trizophos 40 EC, Dichlorovos 76 EC		**35.31**	**Q/ha**	**37673.5**	**2.36**
Technology option 2 : When the incidence of FAW noticed Two Spraying of Spinetoram 11.7 % SC@5 ml OR Chlorantraniprol 18.5 SC @ 4	**CIB Faridabad**	**39.23**	**Q/ha**	**45475.5**	**2.68**

ml Pre 10 lit. Water at 15 days interval					
Technology option 3: . Two Spraying of Metarhizium (Nomuraea) rileyi (1x 10^8 CFU/g)1.15WP OR Metarhizium anisopliae 1x 10^8 CFU/g) 1.15WP @ 50 gm per 10 lit of water at 15 days interval.	MPKV Rahuri	42.69	Q/ha	49926.5	3.03

<table>
<tr><td>1</td><td>Title of Technology Assessed :</td><td colspan="4">Management of fall army worm in maize.</td></tr>
<tr><td>2</td><td>Problem Definition : for assessment</td><td colspan="4">Maize is the major cereal crop grown in all tahsils of Nandurbar district. Incidence of Fall army worm was found in kharif & rabi maize, affecting the yield of maize.</td></tr>
<tr><td>3</td><td>Details of technologies selected</td><td colspan="4">T_2 – Improved Technology
When the incidence of FAW noticed
Two Spraying of Spinetoram 11.7 % SC@5 ml
OR Chlorantraniprol 18.5 SC @ 4 ml Pre 10 lit.
Water at 15 days interval
T3 Improved Technology
When the incidence of FAW noticed
Two Spraying of Metarhizium (Nomuraea) rileyi (1x 10^8 CFU/g)1.15WP OR
Metarhizium anisopliae 1x 10^8 CFU/g) 1.15WP @ 50 gm per 10 lit of water
at 15 days interval.</td></tr>
<tr><td>4</td><td>Source of technology</td><td colspan="4">MPKV Rahuri</td></tr>
<tr><td>5</td><td>Production system and thematic area</td><td colspan="4">Integrated Pest Management</td></tr>
<tr><td rowspan="4">6</td><td rowspan="4">Performance of the Technology with performance indicators</td><td>Performance indicators</td><td>Farmers practice T1</td><td>Improved practice T2</td><td>Improved practice T3</td></tr>
<tr><td>Yield Q/ha</td><td>35.31</td><td>35.31</td><td>35.31</td></tr>
<tr><td>FAW infestation</td><td>6.95</td><td>3.95</td><td>2.90</td></tr>
<tr><td>Plant Protection Cost</td><td>4100</td><td>3500</td><td>2000</td></tr>
<tr><td>7</td><td>Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques</td><td colspan="4">Spraying of Metarhizium anisopliae was found effective and economical for the control of Fall Army Worm.</td></tr>
<tr><td>8</td><td>Final recommendation for micro level situation</td><td colspan="4">Cost effective technology for the management of Fall army worm.</td></tr>
<tr><td>9</td><td>Constraints identified and feedback for</td><td colspan="4">-</td></tr>
</table>

	research and developmental departments	
10	Process of farmers participation and their reaction	Training programme Farmers meeting Method demonstration

Results of On Farm Trial -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
Maize	Irrigated	Onion is the major kharif crop grown in eastern part of Nandurbar tahsil. From last 3-4 years infestation of white grub was increased in onion growing areas that reduce the yield of onion.	Management of white grub in onion.	13	Farmers Practice Application of chemicals like phorate @10kg/ha, chlorpyrifos@ 25-30 ml/ lit. cypermethrin 10 ml/lit water etc. interval. T2 : Soil application of *Metarhizium anisopliae* @ 4 Kg/Ha T3 : Castor fermented trap: Place the mud pot with the capacity of 5 litre each where	White grub inciddence 1. Plant protection cost 2.Yield(Q/h)	1.05/m 0.3/m 0.12/m Rs 13500 Rs 11950 Rs 10500 118.15 Q 124.62 Q 129.65 Q	Low incidence of white grub was observed in T3 as compared to T2 and farmers practice. Yield increase was observed in T3 technology over T2 & farmers practice.	Castor fermented traps found effective for attracting white grub beetles.	--	==.

					placed in 1 ace field. Add 2 lit.of fermented Solution to each pot and fill there maining portion with water.						

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	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice) Spraying of pesticides (profenophos 50 EC, Trizophos 40 EC, Dichlorovos 76 EC)	--	118.15	qt/ha	118632.5	2.53
Technology option 2 When the incidence of FAW noticed Two Spraying of Spinetoram 11.7 % SC@5 ml OR Chlorantraniprol 18.5 SC @ 4 ml Pre 10 lit Water at 15 days interval	MPKV Rahuri	124.62	Qt/ha	130061	3.06

Technology option 3 Two Spraying of Metarhizium (Nomuraea) rileyi (1x 10^8 CFU/g)1.15WP OR Metarhizium anisopliae 1x 10^8 CFU/g) 1.15WP @ 50 gm per 10 lit of water at 15 days interval.	=	129.65	Qt/ha-	139267.5	3.25

C2. Details of On Farm Trial for assessment: 2

1. Title of Technology Assessed	Management of white grub in onion.
2. Problem Definition	Onion is the major kharif crop grown in eastern part of Nandurbar tahsil. From last 3-4 years infestation of white grub was increased in onion growing areas that reduce the yield of onion.
3. Details of technologies selected for assessment	T_1 - Farmers practice: Application of chemicals like phorate @10kg/ha, chlorpyrifos@ 25-30 ml/ lit. cypermethrin 10 ml/lit water etc. T_2 – Technology Assessed: Soil application of *Metarhizium anisopliae* @ 4 Kg/Ha T3 Improved Technology Castor fermented trap: Place the mud pot with the capacity of 5 litre each where placed in 1 ace field. Add 2 lit.of fermented Solution to each pot and fill there maining portion with water.
4. Source of technology	MPKV, Rahuri
5. Production system and thematic area	: Integrated Pest Management
6. Performance of the Technology with performance indicators	T1. White grub infestation-1.05 %, Plant protection cost- Rs 13500 T2- White grub infestation- 0.3 %, Plant protection cost-Rs 11950 T3- White grub infestation- 0.12 %,Plant protection cost-Rs 10500
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	Castor fermented traps found effective for attracting white grub beetles
8. Final recommendation for micro level situation	==
9. Constraints identified and feedback for research	--
10. Process of farmers participation and their reaction	- Training,Farmers meeting,Field visits

Results of On Farm Trial – 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
Okra	Irrigated	Okra is the major vegetable crop grown in summer season. Heavy infection of yellow vein mosaic disease was observed on okra in summer season.Farmers using heavy chemicals for the control of yellow vein mosaic.	Management of yellow vein mosaic in Okra.	13	Farmers Practice - Sowing of Arka Anamika / Private Okra Varieties T2 : Introduction of Phule Vimukta okra variety	1Yellow mosaic infestation- 2. Plant protection cost 3.Yield(Q/h)	-8.75 % -3.05 % Rs 14050 Rs 12250 93.5 108.55	Low incidence of yellow mosaicwas observed in T2 as compared to farmers practice. Yield increase was observed in T2 technology over farmers practice.	Phule vimukta variety found resistant to yellow mosaic disease.	--	==.

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	BC Ratio
13	14	15	16	17	18
Farmers Practice - Sowing of Arka Anamika / Private Okra Varieties	--	93.5	qt/ha	90625	2.67
Technology option 2 Introduction of Phule Vimukta okra variety	MPKV Rahuri	108.5	Qt/ha	116175	3.23

C2. Details of On Farm Trial for assessment: 2

11. Title of Technology Assessed	Management of yellow vein mosaic in Okra.
12. Problem Definition	Okra is the major vegetable crop grown in summer season. Heavy infection of yellow vein mosaic disease was observed on okra in summer season.Farmers using heavy chemicals for the control of yellow vein mosaic.
13. Details of technologies selected for assessment	T_1 - Farmers practice: - Sowing of Arka Anamika / Private Okra Varieties T_2 – improved Technology - Introduction of Phule Vimukta okra variety
14. Source of technology	MPKV, Rahuri
15. Production system and thematic area	: Integrated Pest Management
16. Performance of the Technology with performance indicators	T1. Yellow mosaic infestation- 8.75 %, Plant protection cost-Rs 14050 T2- White grub infestation-3.05 %, Plant protection cost-Rs 12250
17. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	Phule vimukta variety found resistant to yellow mosaic disease
18. Final recommendation for micro level situation	==
19. Constraints identified and feedback for research	--
20. Process of farmers participation and their reaction	- Training,Farmers meeting,Field visits

Results of On Farm Trial (Bullock drawn Twin blade hoe with fertilizer applicator**)**

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
Farm implement	Rainfed	Increased cost of intercultur ing and fertilizer application	Bullock drawn Twin blade hoe with fertilize r applicat or	1 3	Bullock drawn Twin blade hoe with fertilizer applicat or	Field capacity , ha/hr Cost of operatio n	0.125 1400	44 % saving in cost of operation. Fertilizer is applied in double band method	The new implement is very useful for applying fertilizer along with hoeing.		

C. 2. Details of each On Farm Trial for assessment (Bullock drawn Twin blade hoe with fertilizer applicator)

1	Title of Technology Assessed :	**Bullock drawn Twin blade hoe with fertilizer applicator**		
2	Problem Definition : for assessment	Generally, the cotton growers apply fertilizers, even Urea also above the soil, which leads loss of fertilizers. The fertilizers should be applied near the plants and should be covered with soil. After traditional method of hoeing, the farmers have to carry out manual weeding for removal of the weeds from the area closer to the plants. These two traditional methods increase the cost of cultivation of cotton.		
3	Details of technologies selected	The use of twin blade hoe with ferti drill carries two operations i.e, drilling of fertilizers in continuous bands on one or both sides of the row (row placement) and hoeing closer to the plants. Thus there is saving of labour for weeding and fertilizer application.		
4	Source of technology	MPKV,Rahuri		
5	Production system and thematic area	**Farm implement and machinery**		
6	Performance of the Technology with performance indicators	**Performance indicators**	**Improved practice**	**Farmers practice**
		Field capacity, ha /hr,	0.125	0.0625
		Total cost of operation, Rs/ha	1400	2500
7	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring Techniques			
8	Final recommendation for micro level situation	The new implement is very useful fertilizer for applying along with hoeing		
9	Constraints identified and feedback for research and developmental departments	There are some efforts for cleaning the blades of the hoe.		
10	Process of farmers participation and their reaction	The farmers were trained for the importance and functioning of the implement. Method demonstration was also carried out. The farmers liked the implement useful for weeding and fertilizer application in one operation.		

C. 2. Details of each On Farm Trial for assessment (To asses Insulated fish bags for superior quality and price)

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
Fishery		Quality of fish (shelf life), unhygienic condition	To asses Insulated fish bags for superior quality and price	13	**T1 Farmers practice-** Regular practice using Terminal boxes - **T2- Technology assessment :** Insulated fish bags	1)Shelf life of fish/hr 2)Sensorial quality parameters (gills colour and smell) 3)Market Rate			1. Insulated bag design should be horizontal. 2. Bag capacity minimum 20 kg.		

Contd..

<table>
<tr><td>1</td><td>Title of Technology Assessed :</td><td colspan="3">To asses Insulated fish bags for superior quality and price</td></tr>
<tr><td>2</td><td>Problem Definition : for assessment</td><td colspan="3">Quality of fish (shelf life), unhygienic condition</td></tr>
<tr><td>3</td><td>Details of technologies selected</td><td colspan="3">Insulated fish bag</td></tr>
<tr><td>4</td><td>Source of technology</td><td colspan="3">ICAR-CIFT MUMBAI</td></tr>
<tr><td>5</td><td>Production system and thematic area</td><td colspan="3">Storage loss minimization</td></tr>
<tr><td rowspan="4">6</td><td rowspan="4">Performance of the Technology with performance indicators</td><td>Performance indicators</td><td>Improved method</td><td>Farmers method</td></tr>
<tr><td>1)Shelf life of fish (/hr)</td><td>10 to 12 hr</td><td>4 to 5</td></tr>
<tr><td>2)Sensorial quality parameters(gills colour and smell)</td><td>No change in colour and also smell</td><td>Oder smell and colour changed</td></tr>
<tr><td>3)Market rate (kg)</td><td>110 Rs /kg</td><td>70 to 60 Rs /kg</td></tr>
<tr><td>7</td><td>Feedback, matrix scoring of various technology parameters done through farmer’s participation / other scoring techniques</td><td colspan="3">1. Insulated bag design should be horizontal .
2. Bag capacity minimum 20 kg.</td></tr>
<tr><td>8</td><td>Final recommendation for micro level situation</td><td colspan="3"></td></tr>
<tr><td>9</td><td>Constraints identified and feedback for research and developmental departments</td><td colspan="3">Less awareness , illiteracy</td></tr>
<tr><td>10</td><td>Process of farmers participation and their reaction</td><td colspan="3">Training, method demonstration</td></tr>
</table>

C2. Details of On Farm Trial for assessment : 2(Malnourishment of infants, toddler, adolescent girls and women in tribal area due to lack of iron, calcium, protein rich food**)**

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
Family	Rainfed	Malnourishment of infants, toddler, adolescent girls and women in tribal area due to lack of iron, calcium, protein rich food		13	Farmers practice Regular diet Technology Assessed- Bio fortified Pearl millet (Dhanshakti)	1) Weight kg- Initial wt(kg) Final Wt (kg) Initial wt(kg) Final Wt (kg) 2.Hemoglobe n percentage Before HB level After HB level	45.054 45.563 43.025 44.125 8.4 9.12	Weight of women had increasing 2.53% and Hemoglobi n level had increased 1.5% compared to other women	New verity of bio fortified pearl millet to increasin g the weight and increasin g he hemoglob in		

1	Title of Technology Assessed :	**To study the efficiency of Iron rich food for family**		
2	Problem Definition : for assessment	Malnutrition and deficiency of iron		
3	Details of technologies selected	Bio fortified Pearl millet (Dhanshakti)		
4	Source of technology	MPKV,Rahuri		
5	Production system and thematic area	Women and child care		
6	Performance of the Technology with performance indicators	**Performance indicators**	**Improved practice**	**Farmers practice**
		Initial weight, kg	43.025	45.054
		Final weight, kg	44.125	45.563
7	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	New verity of bio fortified pearl millet to increasing the weight and increasing hemoglobin		
8	Final recommendation for micro level situation	Weight of women had increasing 2.53% and Hemoglobin level had increased 1.5% compared to other women		
9	Constraints identified and feedback for research and developmental departments	Less awareness , illiteracy and low income of family		
10	Process of farmers participation and their reaction	Farmers meeting, training		

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 2023 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		
1	Bengal gram	Varietal evaluation	Improved Variety	Training, Farmer meeting, Demonstration, Field day	20	500	390
2	Rabi Jowar	Crop management	Five point method technology	Training, Farmer meeting ,Demonstration, Field day	18	320	157
3	Cotton	Integrated pest management	IPM	Training,FLD,Field day,demostration,Radio talk	35	650	450
4	Papaya	IPM	Control of mealy Bug by using bio agent	Training, Farmer meeting, Demonstration.	20	250	280
5	Brinjal	IPM	Management of shoot & fruit borer	Training, Farmer meeting ,Demonstration, Field day	08	125	130
6	Chilli	IDM	Management of Leaf curl virus	Training, Farmer meeting ,Demonstration, Field day	07	80	80
7							

B. Details of FLDs implemented during 2023 **(Kharif 2023, Rabi 2022-23, Summer 2023)** (Information is to be furnished in the following **three tables** for **each category** i.e. **cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops**.)

Cereals

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	Rabi Jowar	Integrated farming	Five point method of rabi sorghum	Rabi 2022	KVK	5.00	5.00	--	13	13
2	Rabi Jowar	Integrated pest management	Control of shoot fly	rabi-2022	KVK	5.00	5.00	13	00	13

Pulses

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Source of funds	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
						Proposed	Actual	SC/ST	Others	Total	
1	Bengal gram	Varietal evaluation	High yielding variety	Rabi-2022	5	5	0	13	0	13	Bengal gram
2											

Horticultural crops

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Source of funds	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
						Proposed	Actual	SC/ST	Others	Total	
1	Brinjal	Integrated pest management	IPM	Summer-2023	KVK	5.00	5.00	15	00	15	
2	Chilli	IDM	Management of leaf curl in chilli	Kharif 2023	KVK	2.6	2.6	02	11	13	

Cotton and commercial crops

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Source of funds	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
						Proposed	Actual	SC/ST	Others	Total	
1	cotton	Integrated pest management	IPM	Kharif -2022	KVK	8.00	8.00	10	05	15	--

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					
Rabi Jowar	Rabi 2022	Rain fed	Medium	L	M	H	Soybean Fellow G.Gram,	4st week October 2023	4th week February		

							Black gram		2023		
Rabi Jowar	Rabi	Rain fed	Medium	L	M	H	Soybean Fellow G.Gram, Black gram	4st week sep & 1st week October	4th week feb & 1st week march 23		

Pulses

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					
Bengal gram	Rabi-2022	Irrigated	Shallow to Medium	Low	Medium	High	Green gram,Black gram	Nov.2022	Feb 2023	640	38

Horticultural crops

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					
Brinjal	Summer 23	Irrigated	Medium	L	M	H	Paddy, Maize, Jowar, Soybean	4th week Jan & 1st,2nd week Feb.2023	May to July 2023		
Chilli	Kharif 2023	Irrigated	Medium	L	M	H	Bengal gram, Cotton, Wheat	July- 1st & 2nd week	Nov, Dec 2023 Jan 2024		

Cotton and commercial crops

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					
Cotton (IPM)	Kharif 23	Rain fed	Medium	L	M	H	Cotton Soybean Maize Jower B.Gram	4th week June & 1st week july	4th week dec. & Jan 1st week		

Technical Feedback on the demonstrated technologies
Cereals crops

S. No	Feed Back
Rabi jowar (Five point method)	1.five point method use of rabi sorghum to gate in addition yield of 3.90 qt 2.plant height is more ie demo plot 145cm and check plot 121 cm

Pulses

S. No	Feed Back
1 Bengal gram	1.Phule vikram variety good for mechanical harvesting 2.More no of pods per plant in demo plot 123 & check plot 94

Farmers' reactions on specific technologies
Cereals

S. No	Feed Back
1 Rabi jowar (Five point method)	1.1000 grain wt in demp plot was 21.82 gm and check plot is 16.17 gm 2.Yield increase 30.76 percent
Rabi jowar (Control of shoot fly)	Simple fishmeal traps needs to be developed.

Pulses

Sr. No	Feed Back
1 Bengal gram	1.100 grain wt in demp plot was 31.74 gm and check plot is 23.22 gm 2.Yield increase 39.75 percent

Horticultural crops

S. No	Feed Back
21.Brinjal (IPM)	--
2.Chlilli (management of leaf curl)	In potrays technology, dipping of seedling was not possible.

Cotton and commercial crops

S. No	Feed Back
1.cotton (IPM)	Grey mildew was observed on Bt cotton

Farmers' reactions on specific technologies
Cereals

S. No	Feed Back
1 Rabi jowar (Five point method)	1.five point method use of rabi sorghum to gate in addition yield of 3.85 qt 2.plant height is more ie demo plot 141cm and check plot

	122 cm 3.1000 grain wt in demo plot was 21.64 gm and check plot is 16.29 gm 4.Yield increase 37 percent
Rabi jowar (Control of shoot fly)	• Seed treatment of thimethoxam found effective for the control of shoot fly.

Pulses

Sr. No	Feed Back
1 Bengal gram	Phule vikram variety good for mechanical harvesting 2.More no of pods per plant in demo plot 112 & check plot 87 3.100 grain wt in demo plot was 31 gm and check plot is 23 gm

Horticultural crops

S. No	Feed Back
1.Brinjal(IPM)	● IPM practices reduce the plant protection cost. ● Wota T traps found effective for fruit flies collection.
2.Chilli(control of leaf curl virus)	• Soil application of neem powder helps to control soil borne diseases viz.Wilt,root rot as well as sucking pests. • Low incidence of leaf curl was observed in recommended practice as compared to farmers practice.

Cotton and commercial crops

S. No	Feed Back
1 Cotton(IPM)	IPM Package helps to reduce plant protection cost. Heavy attack of pink bollworm was observed in the month of December. Para wilt was observed due to uneven rainfall

Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days				
	Bengal gram	01	05.01.2022	42	
2	Farmers Training				
	Bengal gram	03	09.02.2022	76	
	Rabi Jowar	02	20.10.2022	40	
3	Media coverage				
4	Training for extension functionaries	01	19.04.2022	30	

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										
Groundnut																		
Sesamum																		
Mustard																		
Safflower																		
Linseed																		
Sunflower																		

Soybean	Integrated Crop Mismanagement	ICM	Phule Sangam	25	10	24.33	18.12	21.86	16.12	35.61	24300	123509	99209	5.08	22750	91078	68328	4.00
Castor																		

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										
Pigeonpea	Integrated Crop Mismanagement	ICM	BDN 711	25	10	21.48	13.23	18.57	13.32	39.41	21300	129990	108690	6.10	19450	93240	73790	4.79
Blackgram																		
Greengram																		

Chickpea	Varietal evaluation	High Yielding Variety	Phule Vikram	13	5	16.11	13.27	21.27	15.22	39.75	21550	121239	99689	5.62	19400	86254	67354	4.44
Fieldpea																		
Lentil																		
Horsegram																		
Cowpea																		

FLD on Other crops

Category & Crop	Thematic Area	Name of the technology	No. of Farmers	Area (ha)	Yield (q/ha)				% Change in Yield	Other Parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demo			Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Average												
Cereals																			
Paddy																			

Waterlogged Situation																			
Coarse Rice																			
Scented Rice																			
Wheat																			
Wheat Timely sown																			
Wheat Late Sown																			
Mandua																			
Barley																			

Maize																			
Amaranth																			
Millets																			
Rabi Jowar	Resource Conservation Technologies	Five point method of Rabi Sorghum under rainfed condition of Navapur tahsil	13	05	15.37	12.33	16.58	12.68	30.76			16350	44766	28416	2.74	14750	34236	19486	2.32
Rabi Jowar	IPM	Control of shoot fly	13	5	16.85	14	15.91	12.82	24.10			23650	60458	36808	2.56	22800	48716	25916	2.14
Bajra																			
Barnyard millet																			

Finger millet																			
Vegetables																			
Bottlegourd																			
Bittergourd																			
Cowpea																			
Sponge gourd																			
Petha																			
Tomato																			
Frenchbean																			
Capsicu																			

m																			
Chilli																			
IDM	IDM	Management of of leaf curl virus	13	2.6	161	138	150.76	127.08	18.63			121000	391976	2709766	3.24	129100	330408	201308	2.56
Brinjal																			
IPM	IPM	IPM in Brinjal	13	5	201	167	185.27	154.53	19.89			79050	231587.5	152537.5	2.93	82500	193162.5	110662.5	2.29
Vegetable pea																			
Softgourd																			
Okra																			
Colocasia (Arvi)																			
Broccoli																			
Cucumb																			

er																			
Onion																			
Coriend er																			
Lettuce																			
Cabbag e																			
Cauliflo wer																			
Elephan t fruit																			
Any other (Pl specify)																			
Flower crops																			
Marigol																			

d																			
Bela																			
Tuberose																			
Gladiolus																			
Any other (Pl. specify)																			
Fruit crops																			
Mango																			
Strawberry																			
Guava																			
Banana																			

Papaya																			
Muskmelon																			
Watermelon																			
Any other (Pl. specify)																			
Spices & condiments																			
Ginger																			
Garlic																			
Turmeric																			
Any other (Pl. specify)																			

Commercial Crops																			
Sugarcane																			
Potato																			
Cotton																			
IPM	IPM	IPM in cotton	15	8	15.75	12.85	14.22	11.76	20.92			39650	100251	60601	2.53	40500	82908	42408	2.055
Any other (Pl. specify)																			
Medicinal & aromatic plants																			
Menthol ment																			
Kalmegh																			
Ashwagandha																			

Any other (Pl. specify)																			
Fodder Crops																			
Sorghum (F)																			
Cowpea (F)																			
Maize (F)																			
Lucern																			
Berseem																			
Oat (F)																			
Napier																			

Grasses																			

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										

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																	
Buffalo																	
Buffalo Calf																	

Dairy																		
Poultry																		
Sheep & Goat																		
Vaccination																		

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)**
Common Carps																	
Composite fish culture																	

Feed Management																		

FLD on Other enterprises

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

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)
Vermi Compost																
Sericulture																

FLD on Women Empowerment

Category	Name of technology	No. of demonstrations	Name of observations	Demonstration	Check
Solar dryer	Drying of Vegetables by DBSKKV Dapoli	13	1) drying / hr		
			• Onion	1.4	13.7
			• Tomato	9.6	15.7
			• Spinach	5.6	9.9
			• Mahua flower	13.3	26.6
			• Fenugreek leaves	5.6	9.9
			2) Shelf life in Laminated packaging	9 months	4 months
Rava Grinding machine for millet	To see the efficiency of Improved Multipurpose	13	**1.** Output(kg /hours Rava	39	21
			2. Time requirement	2	3
			3. Rava recovery (%)	85	45

	Rava Grinding machine for millet				

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 preparation	Sowing	Weeding	Total	Land preparation	Intercultureoperation	Irrigation	Total
Bullock drawn three tyned hoe	Maize	Bullock drawn three tyned hoe	13	5	Field capacity	0.188 ha	0.1 ha	88			0.66	0.66		580		580

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)
Vegetables and fruit vegetables seed kit	Nutritional management	200	30	30	255	210	45			1300	3400	1900	2.27	100	1520	645	0.44

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						
Oilseed crop													
Pulse crop													
Cereal crop													
Vegetable crop													
Fruit crop													

Other (specify)													

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

Farmers' Training including sponsored training programmes (on campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming	5	34	2	36	126	19	145	160	21	181
Micro Irrigation/irrigation										
Seed production										
Nursery management										
Integrated Crop Management	2	5	10	20	25	0	25	30	35	65
Soil & water conservation										
Integrated nutrient management	3	48	11	59	17	22	39	65	33	98
Production of organic inputs										
Others (pl. specify) Natural Farming	14	189	34	223	348	45	393	537	79	616
Total										
II Horticulture										
a) Vegetable Crops										
Production of low value and high value crops										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective										

cultivation										
Others (pl specify)										
Total (a)										
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl specify)										
Total (b)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl specify)										
Total (c)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (d)										
e) Tuber crops										
Production and Management technology										
Processing and										

value addition										
Others (pl specify)										
Total (e)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (f)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl specify)										
Total (g)										
Grand Total (a to g)										
III Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated Nutrient Management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Balance use of fertilizers										
Soil and Water Testing										
Others (pl specify)										
Total										
IV Livestock Production and										

Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Disease Management										
Feed & fodder technology										
Production of quality animal products										
Others (pl specify)										
Total										
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	02	52	14	66	44	13	57	96	27	123
Design and development of low/minimum cost diet	1	10	15	25	58	54	122	68	69	137
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition	08	25	48	73	47	86	133	72	134	206
Women empowerment	1	00	00	00	00	18	18	00	18	18
Location specific drudgery reduction technologies										

Rural Crafts										
Women and child care	03	18	0	18	59	18	77	77	18	95
Others (pl specify)										
Total	**15**	**105**	**77**	**182**	**208**	**189**	**407**	**313**	**266**	**579**
VI Agril. Engineering										
Farm Machinery and its maintenance	5	34	12	46	76	4	80	110	16	126
Installation and maintenance of micro irrigation systems	1	0	0	0	21	0	21	21	0	21
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl specify)										
Total										
VII Plant Protection										
Integrated Pest Management	01	**36**	**12**	**48**	**32**	**00**	**32**	**68**	**12**	**80**
Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl specify) Sericulture	01	**00**	**00**	**00**	**18**	**00**	**18**	**18**	**00**	**18**
Vermi composting	01	**00**	**00**	**00**	**03**	**16**	**19**	**03**	**16**	**19**
Total										
VIII Fisheries										
Integrated fish farming										
Carp breeding and hatchery										

management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl specify)										
Total										
IX Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										

Mushroom Production										
Apiculture										
Others (pl specify)										
Total										
X CapacityBuilding and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
Others (pl specify)										
Total										
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
Total										
GRAND TOTAL										

Farmers' Training including sponsored training programmes (off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming	7	85	0	85	136	43	179	221	43	264

Micro Irrigation/irrigation										
Seed production										
Nursery management										
Integrated Crop Management	10	5	0	5	279	67	346	284	67	351
Soil & water conservation										
Integrated nutrient management	2	15	0	15	19	3	22	34	3	37
Production of organic inputs										
Others (pl specify) Natural Farming	7	39	40	79	110	75	185	149	115	264
Total										
II Horticulture										
a) Vegetable Crops										
Production of low value and high value crops										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl specify)										
Total (a)										
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										

Plant propagation techniques										
Others (pl specify)										
Total (b)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl specify)										
Total (c)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (d)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (e)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (f)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and										

value addition										
Others (pl specify)										
Total (g)										
Grand Total (a to g)										
III Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated Nutrient Management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Balance use of fertilizers										
Soil and Water Testing	2	55	5	60	2	0	2	57	5	62
Others (pl specify)										
Total										
IV Livestock Production and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Disease Management										
Feed & fodder technology										
Production of quality animal products										
Others (pl specify)										
Total										
V Home										

Science / Women empowerment										
Household food security by kitchen gardening and nutrition gardening	02	04	10	13	32	104	136	36	114	150
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques	01	00	00	00	17	03	20	17	03	20
Value addition										
Women empowerment	2	0	44	44	42	53	95	42	97	139
Location specific drudgery reduction technologies										
Rural Crafts										
Women and child care	1	00	00	00	08	88	96	08	88	96
Others (pl specify) Nutritional management	02	1	3	4	3	75	78	4	78	82
Post harvest management	1	0	0	0	8	13	21	8	13	21
Household Nutritional security	02	00	00	00	28	56	84	28	56	84
Total	**11**	**05**	**57**	**61**	**138**	**392**	**530**	**143**	**449**	**592**
VI Agril. Engineering										
Farm Machinery and its maintenance	2	21	0	21	30	17	47	51	17	68
Installation and maintenance of micro irrigation systems	2	0	0	0	80	5	85	80	5	85

Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl specify)										
Total										
VII Plant Protection										
Integrated Pest Management	09	70	4	74	155	12	167	225	16	241
Integrated Disease Management	02	00	00	00	23	4	27	23	4	27
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl specify)										
Total										
VIII Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										

Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl specify)										
Total										
IX Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom Production										
Apiculture										
Others (pl specify)										
Total										
X Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial										

development of farmers/youths										
WTO and IPR issues										
Others (pl specify)										
Total										
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
Total										
GRAND TOTAL										

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

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming	12	119	2	121	262	62	324	381	64	445
Micro Irrigation/irrigation										
Seed production										
Nursery management										
Integrated Crop Management	12	10	10	20	304	92	396	314	102	416
Soil & water conservation										
Integrated nutrient management	5	63	11	74	36	25	61	99	36	135
Production of organic inputs										
Others (pl specify) Natural Farming	21	228	74	302	458	120	578	666	194	860
Total										
II Horticulture										
a) Vegetable Crops										

Production of low value and high value crops										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl specify)										
Total (a)										
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl specify)										
Total (b)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl specify)										
Total (c)										
d) Plantation crops										
Production and Management technology										
Processing and										

value addition										
Others (pl specify)										
Total (d)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (e)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (f)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl specify)										
Total (g)										
Grand Total (a to g)										
III Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated Nutrient Management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Balance use of fertilizers										
Soil and Water Testing	2	55	5	60	2	0	2	57	5	62

Others (pl specify)										
Total										
IV Livestock Production and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Disease Management										
Feed & fodder technology										
Production of quality animal products										
Others (pl specify)										
Total										
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	04	56	24	80	76	117	193	132	141	273
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques	01	00	00	00	17	03	20	17	03	20
Value addition	08	25	48	73	47	86	133	72	134	206
Women empowerment	03	00	44	44	42	71	113	42	115	157
Location specific drudgery reduction technologies										

Rural Crafts										
Women and child care	04	18	01	19	126	104	170	84	192	276
Others (pl specify) Nutritional management	02	1	3	4	3	75	78	4	78	82
Post harvest management	1	0	0	0	8	13	21	8	13	21
Household Nutritional security	01	00	00	00	28	56	84	28	56	84
Total	**24**	**100**	**120**	**220**	**347**	**525**	**812**	**387**	**732**	**1119**
VI Agril. Engineering										
Farm Machinery and its maintenance	7	55	12	67	106	21	127	161	33	194
Installation and maintenance of micro irrigation systems	3	0	0	0	101	5	106	101	5	106
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl specify)										
Total										
VII Plant Protection										
Integrated Pest Management	10	106	16	122	187	12	309	293	28	321
Integrated Disease Management	02	0	0	0	23	4	27	23	4	27
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl specify) Sericulture	01	**00**	**00**	**00**	**18**	**00**	**18**	**18**	**00**	**18**
Vermi composting	01	**00**	**00**	**00**	**03**	**16**	**19**	**03**	**16**	**19**
Total										
VIII Fisheries										
Integrated fish farming										

Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl specify)										
Total										
IX Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom Production										

Apiculture										
Others (pl specify)										
Total										
X Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
Others (pl specify)										
Total										
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
Total										
GRAND TOTAL										

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**		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming	02	**25**	**05**	**30**	**35**	**5**	**40**	**60**	**10**	**70**
Seed production										

Production of organic inputs	2	8	0	8	22	5	27	30	5	35
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping	01	**10**	**00**	**10**	**20**	**00**	**20**	**30**	**00**	**30**
Sericulture	04	**74**	**0**	**74**	**50**	**0**	**50**	**124**	**0**	**124**
Repair and maintenance of farm machinery and implements	1	0	0	0	20	0	20	20	0	20
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Installation and maintenance of micro irrigation systems	3	25	20	45	45	5	50	70	25	95
Organic farming	01	00	00	00	25	00	25	25	00	25

women and child care	1	13	52	65	08	07	15	21	59	80
Design and development of low / minimum diet	1	10	15	25	58	54	122	68	69	137
Women empowerment	2	20	19	39	06	36	22	26	65	81
TOTAL										

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		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production	01	00	00	00	20	10	30	20	10	30
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements	2	12	0	12	26	2	28	38	2	40
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										

Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Installation and maintenance of micro irrigation systems	1	0	0	0	32	3	35	32	3	35
Nutritional management	1	**00**	**00**	**00**	**00**	**42**	**42**	**00**	**42**	**42**
TOTAL										

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**		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit										

production										
Integrated farming (IPM)	02	25	05	30	35	5	40	60	10	70
Seed production										
Production of organic inputs	2	8	0	8	22	5	27	30	5	35
Planting material production										
Vermi-culture										
Mushroom Production	01	00	00	00	20	10	30	20	10	30
Bee-keeping	01	10	00	10	20	00	20	30	00	30
Sericulture	04	74	0	74	50	0	50	124	0	124
Repair and maintenance of farm machinery and implements	3	12	0	12	46	2	48	58	2	60
Value addition	1	02	01	03	29	02	31	31	03	34
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Installation and	4	25	20	45	77	8	85	102	28	130

maintenance of micro irrigation systems										
Organic Farming	01	00	00	00	25	00	25	25	00	25
Nutritional management	1	00	00	00	00	42	42	00	42	42
women and child care	1	13	52	65	08	07	15	21	59	80
Design and development of low / minimum diet	1	10	15	25	58	54	122	68	69	137
Women empowerment	2	20	19	39	06	36	22	26	65	81
TOTAL										

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**		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Productivity enhancement in field crops	**03**	**35**	**9**	**44**	**75**	**10**	**85**	**110**	**19**	**129**
Integrated Pest Management	**03**	42	2	44	17	3	20	59	5	64
Integrated Nutrient management	**02**	**25**	**5**	**30**	**47**	**11**	**58**	**72**	**16**	**88**
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements	2	23	5	28	24	6	30	47	11	58
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care	1	11	09	20	07	09	16	18	18	36

Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security	2	2	44	46	0	12	12	2	56	58
Micro irrigation /Irrigation	2	25	6	31	27	5	32	52	11	63
Nutritional management	1	26	03	29	02	05	07	28	03	31
TOTAL										

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**		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Productivity enhancement in field crops	**1**	**0**	**27**	**27**	**0**	**22**	**22**	**0**	**49**	**49**
Integrated Pest Management	**01**	74	14	88	82	14	96	156	28	184
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery										

and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Micro irrigation /Irrigation										
TOTAL										

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		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	04	35	36	71	75	32	107	110	68	178
Integrated Pest Management	04	116	16	132	99	17	116	215	33	248
Integrated Nutrient management	02	25	5	30	47	11	58	72	16	88
Rejuvenation of old orchards										
Protected cultivation										

technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements	2	23	5	28	24	6	30	47	11	58
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care	1	11	09	20	07	09	16	18	18	36
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security	2	2	44	46	0	12	12	2	56	58
Micro irrigation /Irrigation	2	25	6	31	27	5	32	52	11	63
Nutritional management	1	26	03	29	02	05	07	28	03	31
TOTAL										

Sponsored training programmes

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management										
Increasing production and productivity of crops										
Commercial production of vegetables										
Production and value addition										
Fruit Plants										
Ornamental plants										
Spices crops										
Soil health and fertility management										
Production of Inputs at site										
Methods of protective cultivation										
Others (pl. specify)										
Total										
Post harvest technology and value addition										
Processing and value addition										
Others (pl. specify)										
Total										
Farm machinery										

Farm machinery, tools and implements										
Others (pl. specify)										
Total										
Livestock and fisheries										
Livestock production and management										
Animal Nutrition Management										
Animal Disease Management										
Fisheries Nutrition										
Fisheries Management										
Others (pl. specify)										
Total										
Home Science										
Household nutritional security										
Economic empowerment of women										
Drudgery reduction of women										
Others (pl. specify)										
Total										
Agricultural Extension										
CapacityBuilding and Group Dynamics										
Others (pl. specify)										
Total										
GRAND TOTAL										

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management										
Commercial floriculture										
Commercial fruit production										
Commercial vegetable production										
Integrated crop management										
Organic farming	**01**	**00**	**00**	**00**	**25**	**00**	**25**	**25**	**00**	**25**
Others (pl. specify)										
Total										
Post harvest technology and value addition										
Value addition										
Others (pl. specify)										
Total										
Livestock and fisheries										
Dairy farming										
Composite fish culture										
Sheep and goat rearing										
Piggery										
Poultry farming										
Others (pl. specify)										
Total										
Income generation activities										

Vermi composting										
Production of bio-agents, bio-pesticides,	**01**	**03**	**00**	**03**	**12**	**00**	**12**	**15**	**00**	**15**
bio-fertilizers etc.										
Repair and maintenance of farm machinery										
and implements										
Rural Crafts										
Seed production	**1**	**0**	**0**	**0**	**20**	**0**	**20**	**20**	**0**	**20**
Sericulture										
Mushroom cultivation										
Nursery, grafting etc.										
Tailoring, stitching, embroidery, dying etc.										
Agril. para-workers, para-vet training										
Others (pl. specify)										
Total										
Agricultural Extension										
Capacity building and group dynamics										
Others (pl. specify)										
Total										
Grand Total										

3.5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	01	507	45	552
Diagnostic visits	240	398	00	398
Field Day	06	321	09	330
Group discussions	32	405	45	450
Kisan Ghosthi	02	40	10	50
Film Show	02	55	00	55
Self -help groups	0	0	0	0
Kisan Mela	08	1065	70	1135
Exhibition	06	2050	350	2400
Scientists' visit to farmers field	01	710	00	710
Plant/animal health camps	02	130	0	130
Farm Science Club	0	0	0	0
Ex-trainees Sammelan	0	0	0	0
Farmers' seminar/workshop	2	105	10	115
Method Demonstrations	28	950	38	988
Celebration of important days	03	396	12	408
Special day celebration	08	902	39	941
Exposure visits	07	230	8	238
Others (pl.specify)				
Total	**344**	**12858**	**684**	**13542**

Details of other extension programmes:

Particulars	Number
Electronic Media (CD./DVD)	01
Extension Literature	10
Newspaper coverage	55
Popular articles	12
Radio Talks	16

TV Talks	02
Animal health camps (Number of animals treated)	118
Social Media (No. of platforms Used)	05
Others (pl. specify)	0
Total	**219**

3.6 Online activities during year 2023

S. No.	Activity Type	Mode of implementation (Video conferencing / Audio Conferencing / Facebook Live / YouTube Live / Zoom / Google meet / Webex etc.)	Title of Program	No. of Programmes	No. of Participants / Views
A	Farmers training				
1					
2					
3					
	Total				
B	Farmers scientist's interaction programme				
1					
2					
3					
	Total				
C	Farmers seminars				
1					
2					
3					
	Total				
D	Expert lectures				
1					
2					
3					
4					
	Total				
E	Any other (Pl. specify)				
1					

2					
3					
4					
	Total				
	Grand Total (A+B+C+D+E)				

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
Cereals						
	Rice	Indrayani		4.80	28800	50
	Jawar	Dudhmojra		0.20	1200	20
Oilseeds						
Pulses						
	Red Gram	BON-711		1.5	15000	90
	Gram	Phule Vikram		13	130000	52
Commercial crops						
Vegetables						
Flower crops						
Spices						
Fodder crop seeds	Jawar	COFS 29		2.3	138000	200
Fiber crops						
Forest Species						

Others	Little millets	Phule Ekadashi		0.50	3000	25
Total				**22.30**	**316000**	**447**

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
Commercial						
Vegetable seedlings	cjhillie			125000	150000	42
	Brinjal	Panna		28000	28000	52
	Tomato	Local		3000	3600	30
Fruits	Drumstick	PKM-1		4000	48000	37
Ornamental plants						
Medicinal and Aromatic						
Plantation						
Spices						
Tuber						
Fodder crop saplings	COFS -29	COFS - 29		15000	15000	35
Forest Species						
Others						

Total				**175000**	**244600**	**196**

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg/Lit	Value (Rs.)	No. of Farmers
Bio Fertilizers				
	Rhizobium	190	45600	220
	PSB	300	72000	140
	Azetobactor	150	36000	250
Bio-pesticide				
	Verticillium	200	48000	210
	Beaveria	100	24000	29
	Metarrihium	100	24000	45
	Paecilomyces	50	12000	26
	Peudomonas	50	12000	18
Bio-fungicide				
	Trichoderma	400	96000	185
Bio Agents	Neem powder	2000	40000	45
Others	Vermi compost	2500	15000	22
Total		**6040**	**424600**	**1190**

Production of livestock materials

Particulars of Live stock	Name of the animal / bird / aquatics	**Name of the breed**	Type of Produce	unit (no./ lit/kg)	Quantity	**Value (Rs.)**	**No. of Farmers**
Dairy animals							
Cows							
Buffaloes							
Calves							
Others (Pl. specify)							
Poultry							
Broilers							
Layers							
Duals (broiler and layer)							
Japanese Quail							
Turkey							
Emu							
Ducks							
Others (Pl. specify)							
Piggery							
Piglet							

Others (Pl.specify)							
Fisheries							
Indian carp							
Exotic carp							
Others (Pl. specify)							
Total							

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

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

B. Literature developed/published

Item	Title	Authors name	Number
Research papers			
Technical reports	CFLD	Mr. U. D. Patil	01
	Pink bollworm Management	Mr. P C Kunde	01
News letters			
Technical bulletins			
Popular articles	ICM in Soybean	Mr. U. D. Patil	01
	Importance of soil testing	Mr. U. D. Patil	01
	Drought Management	Mr.P C Kunde	01
	Management of pink bollworm in cotton	Mr.P C Kunde	01
	Sericulture	Mr.P C Kunde	01
	Bee keeping	Mr.P C Kunde	01
Extension literature			
	Importance Of Millet	Arati Deshmukh	1000
	Importance of bajra in our daily diet	Arati Deshmukh	1000

Training Manual	Small organic cultivator	Mr.P C Kunde	100
Others (Pl. specify) Poster presentation	Backyard Nutrition Gardens; A Solution To Address Malnutrition	Mrs.Arati Deshmukh	01
TOTAL			

C. Details of Electronic Media Produced

S. No.	Type of media (CD / VCD / DVD/ Audio-Cassette)	Title of the programme	Number

D. Details of Electronic Media Produced

S. No.	Type of social media platform	Title of social media	Number of Followers/ Subscribers
1	YouTube Channel	Krishi vigyan Kendra,Nandurbar and KVK GKMS-DAMU Nandurbar	134
2	Facebook page/ Account	Krishi vigyan Kendra,Nandurbar and जिल्हा कृषि हवामान केंद्र, कृषि विज्ञान केंद्र, नंदुरबार, महाराष्ट्र	5456
3	Mobile Apps	-	-
4	WhatsApp groups	Krishi vigyan Kendra,Nandurbar and 124 whats app groups (KVK कृषिहवामान)	19264
5	Twitter Account	Krishi vigyan Kendra,Nandurbar and District Agromet Unit, KVK, Nandurbar, Maharashtra	71
6	Telegram	6 groups (KVK कृषिहवामान)	372

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

S. No.	Package and practices	Details
1.	**Name of farmer**	Shri.Vishwanth Tarachand Dhangar
2.	**Mobile number**	9423496919 / 9767806083

3.	**Village, tehsil, district, state, KVK& nodal officer names**	At. Aakrale tq. Nandurbar Dist. Nandurbar, Maharashtra, Krishi Vigyan Kendra, Nandurbar, Maharashtra Nodal officer- Mr. P. C. Kunde
4.	**Intervention adopted on soil type**	Medium
5.	**Hybrid used, seed rate**	Vitthal- Green Gold Seeds **Seeds, 1.425kg/Acre**
6.	**Totally raised as Rainfed or life saving / protected irrigation given after cessation of monsoon RF**	Two Protective Irrigation given after cessation of monsoon RF
7.	**Yield achieved, % increase over conventional (control) , number of pickings, second crop of any**	Yield achieved- 14.10 / Acre % increase over conventional- 94.48 % No. of Picking - 5
8.	**Any field day conducted in this field, number of fellow farmers attended**	Field day conducted at field where **85** Farmers attend this programme
9.	**Specific feed back if any & future adoption**	Technology is simple & economical for increasing cotton production.
10.	**Farmer photo, field photo**	  
11.	**Also, KVKs May give quotes of feedback of First time farmers adopting HDPS/CS & new hybrids & any special attainment that is noteworthy-**	Increases seed cost. Hoeing is not possible after 60 DAS Vitthal Variety is best suitable for the Dada Lad Technology (CS)

Special project on cotton – Dada Lad Technology

Background

Shri.Vishwanath Dhangar is a medium farmer of Akrale village of Nandurbar district. He cultivated rain-fed cotton in his medium soil. He has been growing cotton from last twelve years and getting average yield of seven to eight quintals. This year Krishi Vigyan Kendra Nandurbar implemented the CICR-CICR: special project of cotton. In the project, demonstration of Dada Lad technology with closer spacing has been conducted on his one acre area.

3) Interventions adopted:

Closer Spacing Dada Lad Technology

► Sowing of cotton at 3 X 1 Ft

► Removal of monopodia at 40-45 DAS
► De topping at 85 – 90 DAS
► IPM strategies for pest management.

4) Out put:

Plots	Yield /Acre	Avg. No of bolls/ Plant	Avg. Boll weight (gms)	Avg. No of branches/Plant	Cost of cultivation/Acre	Gross income	Net income	C:B Ratio
Demonstration Plot	14.10	27.6	3.855	7.4	24850	95880	71030	1:3.86
Conventional Method	7.25	44.50	3.025	11.8	24500	49300	24800	1:2.01

By adopting Dada Lad technology he harvested yield (14.10 Qtl/Acre),Gross income of Rs 95880 /Acre, Net income Rs 71030 /Acre, BC ratio (3.86) & cost of Cultivation (Rs.24850/Acre) over **Conventional Method** yield (7.25 Qtls/Acre),Gross income of Rs.49300 /Acre, Net income Rs 24800 /Acre, BC ratio (2.01) & cost of Cultivation (Rs.24500/Acre)

He has been adopted integrated pest Management strategies for pest & disease management. By adopting this technology he saved plant protection cost of Rs 1250 /Acre.

5) Social Impact

Before participating, he was unaware about Dada Lad Technology. But after participation he became a trained person. Other farmers were taken guidance about Dada Lad Technology in cotton from him. Farmers of nearby villages, Agriculture officers from state Agriculture Department & ATMA were visited his plot.

Programmes like training, method demonstration & field day was organised on his field.

9. Feed back of the farmer:

- Technology is simple & economical for increasing cotton production.
- Increases seed cost.
- Hoeing is not possible after 60 DAS

Photographs

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

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

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

A. Practicing Farmers

a) Field visits
b) Group discussion
c) Individual discussion
d) Questionnaire

B. Rural Youth

a) Individual discussion
b) Group discussion
c) Questionnaire regarding skill

C. In-service personnel

a) Discussion
b) Group meetings

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
v) Others if any

For FLD:

i) New variety/technology
ii) Poor yield at farmers level
iii) Existing cropping system
iv) Others if any

5.3. Field activities

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

ii. No. of farm families selected per village : 30

iii. No. of survey/PRA conducted : 05

iv. No. of technologies taken to the adopted villages 15

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

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

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

6. LINKAGES

A. Functional linkage with different organizations

Name of the Organisation / Institutions	Nature of Linkage
Dept. of Agriculture	Sponsored Training programme.
ATMA	Sponsored Training programme & projects
NABARD	Joint implementation
MPKV, Rahuri (SAU)	Joint implementation
IGNOU, New Delhi	Training
Directorate of Onion and Garlic, Rajgurunagar	Onion Seed production
National Institute of Abiotic stress Management, Baramati	Joint implementation
Dr. B. A. Marathwada University's Sub-Centre, Osmanabad	Field level training
Oil Seed Research Station, Jalgaon	Multi location trials & Resource person
Banana Research Station, Jalgaon	Demonstration
Zonal Agri. Research Station, Igatpuri	Demonstration
DRDA, Nandurbar.	Sponsored training
MAVIM, Nandurbar	Sponsored training
Wheat Research Station, Niphad	Participation in meeting
BAIF, PDKV, Akola MAFSU, Bharati Vidyapeeth, MPKV, Rahuri (Consortium)	Joint implementation
Pulse improvement project, MPKV, Rahuri	Demonstration
Bajara improvement scheme, Agril. College, Dhule	Demonstration
Sorghum research station, MPKV, Rahuri	Demonstration
BAIF, (MITTRA) Shahada	Training & Demonstration
ARS, Radhanagari,Kolhapur	Seed & Demonstration
AICRP on farm implements and machineries MPKV, Rahuri	Training & Demonstration
AICRP on ground water, MPKV,Rahuri	Training & Demonstration
Zonal Agri. Research Station,	TSP programme

Solapur	
MGIRI, Wardha	Vocational training
Khadi Gramodyog, Nandurbar	Training
IGFRI,Dharwad	TSP programme
CICR,Nagpur	Training
CIAE, Bhopal	Training/Demo
Animal Husbandry Department	Demonstration
Maize Research station, Godhara	Demonstration
IIHR, Bangalore	Technical guidance
CPDO, Goregaon	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.)
Cropsap	June	State Department of Agriculture	20000

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-

KVK Subject Matter specialists were the coordinators of each team constituted for various agro ecological situations formed for compilation of SREP of the district.

Coordination activities between KVK and ATMA

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	No of Farmers attending
01	**Meetings**		**8**	**8**	
02	**Research projects**		**0**	**0**	
03	**Training programmes**	**Dr Panjabrao Naisargit Sheti mission**	**8**	**8**	**320**
			7	**3**	**318**
04	**Demonstrations**		**4**	**3**	
05	**Extension Programmes**				
	KisanMela		**2**	**5**	
	Technology Week		**1**	**1**	

	Exposure visit		**3**	**2**	
	Exhibition		**2**	**2**	
	Soil health camps		**0**	**0**	
	Animal Health Campaigns		**0**	**0**	
	Others (Pl. specify)	**FFS**	**1**	**0**	
		Capacity development	**5**	**2**	
06	**Publications**				
	Video Films		**2**	**0**	
	Books		**0**	**0**	
	Book chapter				
	Extension Literature				
	Pamphlets				
	Others (Pl. specify)				
07	**Other Activities** (Pl.specify)				
	Watershed approach				
	Integrated Farm Development				
	Agri-preneurs development				

D. Give details of programmes implemented under National Horticultural Mission

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

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

F. Details of linkage with RKVY

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

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

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

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

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

7. Convergence with other agencies and departments:

8. Innovative Farmers Meet

Sl.No.	Particulars	Details
	Have you conducted Farm Innovators meet in your district?	Yes/ 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

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

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

Little millets (OFT):

1.Biofertilizers seed treatment found effective for good germination.
2. Variety performed better for achieving growth and yield components compared to traditional variety. 3.Number of productive tillers/plant (10.82), panicle length (12.43 cm), number of grains/panicle (412) and test weight (3.11 g) is better than control plot. 4.Yield increased 41%

Foxtail millet : (OFT)

1.Biofertilizers seed treatment found effective for good germination.
2. Variety performed better for achieving growth and yield components compared to traditional variety.
3.Plant height (112),No of tillers/ M square (60.90), Earehead lengh (12.30cm) and test weight (3.15 g) is better than control plot. 4.Yield increaed 32%

Cotton (OFT):

1.less amount of water
2.Maximum Sympodial branches/plant is demo plot 25 and check plot 14
3.Availability of nutrients is very high
4.Fertilizer use efficiency is increased from 80 to 90 % of fertigation(6 split)

Rabi Jowar (OFT):

1. Soak the seeds in the solution of potassium nitrate (0.05%) for good germination.2. Foliar spraying of 2% potassium nitrate at 55 DAS for effetive vegetative growth as weel as plant height (114 cm) 3.1000 seed wt.(22.8gm) 4. Yield increase 30%

Rabi Jowar (FLD) :

1.five point method use of rabi sorghum to gate in addition yield of 3.90 qt
2.plant height is more ie demo plot 145cm and check plot 121 cm
3.1000 grain wt in demp plot was 21.82 gm and check plot is 16.17 gm
4.Yield increase 30.76 percent

Bengal gram (FLD) :

1.Phule vikram variety good for mechanical harvesting
2.More no of pods per plant in demo plot 123 & check plot 94
3.100 grain wt in demp plot was 31.74 gm and check plot is 23.22 gm
4.Yield increase 39.75 percent

Ipm in cotton (FLD)

IPM Package helps to reduce plant protection cost.
Heavy attack of pink bollworm was observed in the month of December.
Para wilt was observed due to uneven rainfall

Grey mildew was observed on Bt cotton

Management of leaf curl in chilli

• Soil application of neem powder helps to control soil borne diseases viz.Wilt,root rot as well as sucking pests.
• Low incidence of leaf curl was observed in recommended practice as compared to farmers practice.
In potrays technology, dipping of seedling was not possible.

IPM in Brinjal

- IPM practices reduce the plant protection cost.
- Wota T traps found effective for fruit flies collection.

Control of shoot fly in Rabi Jowar

- IPM Practices reduces the incidence of shoot flies.
- Simple fishmeal traps needs to be developed.

11. Technology Week celebration during 2023: Yes/No, If Yes

Period of observing Technology Week: From to
Online / Offline:
Total number of farmers visited : 1050
Total number of agencies involved : 25
Number of demonstrations visited by the farmers within KVK campus: 20

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies	0	0	
Lectures organized	12	850	Crop tecnnhnologies
Exhibition	06	650	Crop tecnnhnologies
Film show	4	140	Crop tecnnhnologies
Fair	0	0	
Farm Visit	0	0	
Diagnostic Practical's	2	8	
Supply of Literature (No.)	6	525	Crop tecnnhnologies
Supply of Seed (q)	0.5	50	
Supply of Planting materials (No.)	0	25	
Bio Product supply (Kg)	0	0	
Bio Fertilizers (q)	2	45	
Supply of fingerlings	0	0	
Supply of Livestock specimen (No.)	0	0	
Total number of farmers visited the technology week	12	1025	

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

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**
Total			

D. Animal health camps organized

State	**Number of camps**	**No.of animals**	**No. of farmers**
Total			

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

State	**Crops**	**Quantity (qtl)**	**Coverage of area (ha)**	**Number of farmers**
Total				

F. Large scale adoption of resource conservation technologies

State	**Crops/cultivars and gist of resource conservation technologies introduced**	**Area (ha)**	**Number of farmers**

Total			

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
Total												

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)

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

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

14. Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
Jan 2023	56	12142	112
Feb 2023	56	13425	117
March 2023	63	14526	148
April 2023	63	14952	120
May 2023	63	15246	114
Jun 2023	56	16425	201
Jul 2023	63	17249	178
Aug 2023	63	17985	198
Sept 2023	63	18142	204
Oct 2023	56	18835	204
Nov. 2023	63	19107	217
Dec. 2023	63	19427	229

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marke-ting	Aware-ness	Other enterp	Total

							rise	
	Text only	728	728	728	-	124	-	2308
	Voice only	728	728	728	-	106	-	2290
	Voice & Text both	1456	1456	1456	-	230	-	2459
	Total Messages	**1456**	**1456**	**1456**	**-**	**230**	**-**	**4598**
	Total farmers Benefitted	**19427**	**19427**	**19427**	**-**	**19427**	**-**	**19427**

15. PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Nursery	2006	0.03	Chilli	Seedling	125000	----	150000	
				Brinjal	Seedling	28000	----	28000	
				Drum stick	Seedling	1500	----	15000	
3	Vermicomposting	2007	0.03	----	Vermi compost Vermi culture	25000	----	----	
4	Goatry	2006	002	Osmanabadi	Kids	05	----	----	
5	Deshi Cow	2006	0.05	Gear	Cow dunk & urine	22000 kg 250 Lit.	----	----	
6	Mineral mixture	2018	0.01	----	Area specific mineral mixture	3.60	----	40300	

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	
Cereals									
Jowar	02.07.23	15.11.23	0.30	Dudh	Grain	8.0	8500	18800	

				mogra					
Bajara	25.07.23	29.10.23	0.30	Dhan shakti	Grain	3.5	3200	11200	
Jowar	26.06.23	30.10.23	1.20	Yashoda	Grain	14.50	9600	40550	
Maize	28.06.23	26.10.23	1.40	----	Grain	40.30	17250	65900	
Wheat	20.12.23	----	0.40	Green gold	Grain	----	9200	----	Yet not harvest
Pulses									
Red gram	23.06.23	15.01.23	2.50	BDN 711	Seed	2.20	4200	22500	
Bengal gram	26.12.22	15.02.23	1.20	Phule Vikrant	Seed	12.50	16000	96000	
Oilseeds									
Fibers									
Deshi Cotton	18.06.23	19.11.23	0.40	N 539	Seed cotton	7.80	10550	55800	
Cotton	18.06.23	23.11.23	0.40	Moksha	Seed cotton	8.50	12300	63750	
Cotton	23.06.23	15.12.23	0.20	Shakti	Seed cotton	4.50	11700	33750	
Cotton	25.06.23	23.11.23	0.40	Super coat	Seed cotton	6.50	11900	48750	
Cotton	27.06.23	18.11.23	1.60	Viththal	Seed cotton	12.40	27750	93000	
Cotton	25.06.23	18.11.23	1.60	Bindhas	Seed cotton	16.23	40650	120000	
Cotton	26.06.23	17.12.23	2.20	PCH 857	Seed cotton	26.20	46600	188600	
Spices & Plantation crops									
Floriculture									
Fruits									
Papaya	04.05.23	25.02.24	0.40	T 786	Fruit	185	46000	112000	
Guava	15.07.18	----	0.20	L 49	Fruit	----	8600	----	
Custard Apple	June 2002	15.11.23	0.40	Bala nagar	Fruit	5.0	3200	2200	
Guava	June 2002	25.12.23	0.40	L 49	Fruit	8.0	3800	----	
Ber	June 2006	13.02.24	0.40	Umrani	Fruit	----	3500	----	
Aonla	June 2006	12.12.23	0.40	N 7	Fruit	----	4200	3840	
Jambhul	June 2022	----	0.30	Bahdoli	Fruit	----	12000	----	
Vegetables									
Bittle guard	07.07.23	25.12.23	0.10	----	Vegetable	----	3600	----	
Drum stick	25.06.21	25.02.24	0.20	PKM 1	Seed & Vegetable	----	5400	12000	
Others (specify)									
Perennial	15.06.22	15.11.23	0.40	CoFS 29	Fodder &	0.75	15000	48500	

jowar					Slip, Seed				
Hybrid Neppiyer	15.07.20	28.11.23	0.20	Phule Gunvant	Slip & Fodder	----	4000	6000	
Hedge Lucern	15.07.22	30.11.23	0.10	Dashrath	Seed, Fodder	----	4000	----	

B. 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	
	Bio-Fertilizers	Rhizobium,PSB,Azetobactor	640	113600	113600	
	Bio-Fungicides	Trichoderma	400	96000	96000	
	Bio-pesticides	Beaveria,Metarhizium,Veticilliu m	500	120000	120000	
	Bio-Agents	Neem Powder,Vermi compost	4500	35000	55000	

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	

E. Utilization of hostel facilities

Accommodation available (No. of beds):

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
January **2023**	15	45	--
February **2023**	17	51	--
March **2023**	27	55	--
April **2023**	85	208	--
May **2023**	27	102	--
June **2023**	16	32	--
July **2023**	24	48	--
August **2023**	13	39	--
September **2023**	14	28	--
October **2023**	13	13	--

November **2023**	27	85	--
December **2023**	07	14	--

F. Database management

S. No	Database target	Database created
01	11000	9000

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

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

H. Performance of Nutritional Garden at KVK farm
If Nutritional Garden developed at KVK farm / Village Level? Yes / No
If yes,

Nutritional Garden developed at KVK farm

Area under nutritional garden (ha)	Component of Nutritional Garden	No. of species / plants in nutritional garden	No. of farmers visited
0.03	Vegetable crops	Brinjal, Tomato, Onion, Cucumber, Bitter gourd, Green peas, Beetroot, Carrot, Ridged gourd, Spinach, Bottle gourd, Radish, Okra, Lady's finger, fenugreek, coriander, Amaranthus	15000
	Fruit crops	Pappya	
	Others if any	Curry leave, lemon , drum stick	

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
36	Vegetable crops	Brinjal, Tomato, Onion, Cucumber, Bitter gourd, Green peas, Beetroot,	1130

		Carrot, Ridged gourd, Spinach, Bottle gourd, Radish, Okra, Lady's finger, fenugreek, coriander, Amaranthus	
	Fruit crops		
36	Others if any	Drum stick and Perennial tur	4200

H. Details of Skill Development Trainings organized

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

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
Mrs.Arati Deshmukh	SMS Home science	Exposure visit	MGP Aurangabad KVK & Jalna KVK	**Offline**	14.02.23 to 15.02.23
Mrs.Arati Deshmukh	SMS Home science	National interactive meet	NCERT Delhi	**Offline**	27.02.23 to 28.02.23
Mrs.Arati Deshmukh	SMS Home science	Millet SHG exhibition	MAVIM, NABARD Agri. Dept.	**Offline**	21.03.23 to 24.03.23

Mrs.Arati Deshmukh	SMS Home science	Training program for capacity building of agricultural extension professional of ATARI Zone-VIII to promote agro processing	ICAR-CIPHET	**Offline**	07.08.23 to 11.08.23
Mrs.Arati Deshmukh	SMS Home science	1 day exhibition on millet	Agri. Dept. Rotary Club of NABARD millet adda	**Offline**	01.09.23
Mrs.Arati Deshmukh	SMS Home science	Meeting with MAVIM, CYDA NABARD & KVK start up millet+ unit	NABARD, CYDA, MAVIM, KVK	**Offline**	28.09.23
Mrs.Arati Deshmukh	SMS Home science	Millet empowering women & providing nutrition (National Webinar)	Hindusthan agricultural research welfare society & IIMI university Meerat	**Online**	15.10.23

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)**

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**

20. Details of Progress of ARYA Project

Name of Enterprise	No of Training Conducted	No of Beneficiaries	No of Extension Activities	No of Beneficiaries	No of Unit established	Change in income		No. Of Groups Formed
						Before	After	

21. Details of 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	**Claiming camps , how to prepared vermin composting, awareness programme , swchatta oaths**	41	2207

Sr. No	Name of KVK	Date	*Activity*	No of VIPs	No of Farmers	Others	Total
1	Nandurbar	2 oct to 31 oct 2023	Awareness programme	0	740	100	840
2	Nandurbar	2 oct to 31 oct 2023	Swachatta otha	0	440	125	565
3	Nandurbar	Nov 2023	Awareness porgramm on swachata	0	220	50	270
4	Nandurbar	Dec 2023	Awareness porgramm on swachata and otha	2	480	150	532

21. Books published 2023-24

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

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

APR SUMMARY

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

1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	31	851	207	1058
Rural youths	1	15	5	20
Extension functionaries	9	182	84	266
Sponsored Training				
Vocational Training	1	20	0	20
Total	**42**	**1068**	**296**	**1364**

2. Frontline demonstrations

Crops/Enterprise	No. of Farmers	Area(ha)	Units/Animals
Oilseeds			
Pulses	13	5	1
Cereals	13	5	1
Vegetables			
Other crops			
Hybrid crops			
Total	**26**	**10**	**02**
Livestock & Fisheries			
Other enterprises	03		
Total	**03**	**00**	**00**
Grand Total	**29**	**10**	**02**

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	4	52	52
Livestock			
Various enterprises	02	26	26
Total	**06**	**78**	**78**
Technology Refined			
Crops			
Livestock			
Various enterprises			
Total	**00**	**00**	**00**
Grand Total	**06**	**78**	**78**

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	348	8106
Other extension activities	98	2500
Total	**895**	**119200**

Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marke-ting	Aware-ness	Other enterprise	Total
	Text only	728	728	728	-	124	-	2308
	Voice only	728	728	728	-	106	-	2290
	Voice & Text both	1456	1456	1456	-	230	-	2459
	Total Messages	**1456**	**1456**	**1456**	**-**	**230**	**-**	**4598**
	Total farmers Benefitted	**19427**	**19427**	**19427**	**-**	**19427**	**-**	**19427**

5. Seed & Planting Material Production

	Quintal / Number	Value (Rs.)
Seed (q)	22.33	316000
Planting material (No.)	175000	244600
Bio-Products (kg)	6040	424600
Livestock Production (No.)	----	----
Fishery production (No.)	----	----

6. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value (Rs.)
Soil	1265	189765
Water	425	64000
Plant	-	-
Total	**1690**	**253756**

7. HRD and Publications

Sr. No.	Category	Number
1	Abstract	05
2	Workshops	05
3	Conferences	02

4	Meetings	18
5	Trainings for KVK officials	12
6	Visits of KVK officials	28
7	Book published	00
8	Training Manual	02
9	Book chapters	02
10	Booklet	01
11	Leaflets/ Folder/ Pamphlet	06
12	Research papers	01
13	Technical Bulletin	00
14	Popular article	12
15	Lead papers	00
16	Seminar papers	02
17	Extension folder	06
18	Proceedings	02
19	Award & recognition	00
20	On-going research projects	02
21	Other	--