

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)
	Office	FAX		
Krishi Vigyan Kendra At Durgapur (Badnera), Dist. Amravati 444701	0721-2992244	--	pckvkda2015@gmail.com	www.kvkdurgapur.in

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

Address	Telephone		E mail	Website address
	Office	FAX		
Shram Sadhana Amravati's, 57, Congress Nagar, Amravati-444602	0721-2992244	--	pckvkda2015@gmail.com	

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

Name	Telephone / Contact		
	Office	Mobile	Email
Dr. K. P. Singh	0721-2992244	9637717818	pc_kvka@yahoo.co.in/ pckvkda2015@gmail.com

1.4. Date and Year of sanction:1995

1.5. Staff Position (as on December, 2023)

Sl. No.	Sanctioned post	Name of the incumbent	Mobile No.	Discipline	If Permanent, Please indicate			If Temporary, pl. indicate the consolidated amount paid (Rs./month)
					Current Pay Band	Pay Matrix	Date of joining	
1.	Senior Scientist and Head (I/C)	Dr. K. P. Singh	9637717818	Plant Protection	--	--	--	
2.	Subject Matter Specialist	Sh. P. S. Jayale	9921333611	Agril. Extn.	56100-177500	110700	01.07.1996	
3.	Subject Matter Specialist	Dr. K. P. Singh	9637717818	Plant Protection	56100-177500	107500	21.09.1996	
4.	Subject Matter Specialist	Dr. Archana Kakade	9422830737	Home Science	56100-177500	98400	01.10.2001	
5.	Subject Matter Specialist	Sh. P. H. Mahalle	9850320710	Horticulture	56100-177500	92700	01.06.2004	
6.	Subject Matter Specialist	Dr. Harshadsingh V. Thakur	8308010038	Agronomy	56100-177500	65000	01.06.2018	
7.	Subject Matter Specialist	Mr. M. W. Akhud	9096989187	AHDS	56100-177500	56100	10.05.2023	
8.	Programme Assistant	Shri. R. S. Ghogare	8275288938	Food Tech	35400-112400	50500	12.01.2012	
9.	Computer Programmer	Ms. Arti S. Varma	9689983095	Computer	35400-112400	55200	17.06.1997	
10.	Farm Manager	Mr. A. P. Dharamkar	8552865208	MBA (Agri)	35400-112400	36500	01.01.2022	
11.	Accountant/Superintendent	Sh. S. G. Deshmukh	7020660534	Commerce	35400-112400	76500	01.07.1996	
12.	Stenographer	Sh. S. C. Vaidya	9403533937	Commerce	25500-81100	39800	02.12.1996	
13.	Driver 1	Sh. D. G. Shekhawat	8007427371		21700-69100	39400	01.07.1996	
14.	Driver 2	Sh. V. V. Jirafe	7261934842		21700-69100	39400	01.01.1998	
15.	Supporting staff 1	Sh. K. P. Shekhawat	9011212601		19900-63200	34400	01.07.1996	
16.	Supporting staff 2	Sh. D. V. Jirafe	9130181923		19900-63200	34400	08.07.1996	

1.6. Total land with KVK (in ha):

S. No.	Item	Area (ha)
1	Under Buildings	2.50
2.	Under Demonstration Units	1.00
3.	Under Crops	6.50
4.	Horticulture	6.00

5.	Pond	
6.	Others if any (Specify)	4.00

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	26.12.1998 31.03.2006	447.04	31.75 34.99			
2.	Farmers Hostel	ICAR		305.00				
3.	Staff Quarters (6)	ICAR	31.03.2001	526.88	35.57			
4.	Shade for vehicles, workshop, Implements, Animal, Goat & Sheep, Poultry (04 nos)	ICAR	26.12.1998	299.80	10.20			
5.	Entrance Gate, Watchman Cabin, Fencing, Irrigation & Farm roads	ICAR	31.03.2001	--	15.02			
6.	Rain Water harvesting system	ICAR	31.03.2007	--	8.61			
7.	Threshing floor	ICAR	31.03.2012		2.00			
8.	Farm godown	ICAR	31.03.2012		5.00			
9.	Irrigation System	ICAR	31.03.2012		5.00			
10.	Electrification	ICAR	31.03.2012		3.00			
11.	Extension of Admn. Building	ICAR	31.03.2012	92.00	10.00			
12.	Soil and water testing lab							
13.	Mini soil testing Kit							
14.	Sell Contour							
15.	Demo unit							
16.	ICT lab	ICAR-E-Linkage	31.03.2009					
17.	Solar Panel							
18.	counter seal							
	Other pl mention							

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Running	Present status
Mahindra Xylo Ex 4	2011-12	989652	259332	Condemn
Tractor (Mahindra)	2006-07	450000	7567.1	Condemn
Two Wheeler (Suzuki)	1996-97	36308		Condemn
Bicycle (2)	1996-97	1450		Condemn
	1996-97	1510		Condemn

C) Equipment & AV aids

Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
Portable Projector	1996-97	16147	Condemn
Slide Projector, SP Lamp, & Screen Tripod Stand	1996-97	15720	Condemn
Camera with flash gun	1996-97	7850	Condemn
Cassette recorder with speaker etc	1996-97	10283	Condemn
Mike Stand	1998-99	1395	Condemn
Office Equipments			
Typewriter	1997-98	11900	Condemn
Xerox Machine	2004-05	88000	Condemn
Fax Machine	2004-05	9500	Condemn
Laptop	2006-07	50000	Condemn
LCD Projector	2006-07	70000	Condemn
Genset	2007-08	255000	Satisfactory
Xerox Machine	2008-09	270000	Condemn
Fax Machine	2008-09	20000	Condemn
LCD Projector	2008-09	100000	Satisfactory
Farm Implements	2008-09	80000	Condemn
Atomic Absorption Spectrophotometer	2008-09	1000000	Satisfactory

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	Agriculture
2	Horticulture + Agriculture
3	Agriculture + Animal Husbandry
	Horticulture + Agriculture + Animal Husbandry

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

a) Soil type

S. No.	Agro-climatic Zone	Characteristics
1	Assured Rainfall Zone	The whole district except tehsil Warud & eastern part of tehsil Tiwasa and Chandur railway fall within this zone about 81.07% area is under this zone. The annual precipitation varies from 800 to 900 mm, however it exceeds often in hilly Melghat tract of this zone. More than 75% rainfall, in this zone is received in kharif season and hence, the kharif cropping system predominates in the zone. The climate is usually hot & dry. Dharni, Chikhaldara, Daryapur, Anjangaon Surji, Bhatkuli, Amravati, Nandgaon Kh, Achalpur, Chandur bazaar, a little part of Morshi and western part of Tiwasa and Chandur Rly tehsil are included in this zone. The area wise characters of soil & the prevalent cropping pattern is furnished below. AES I, II, III and IV fall under this zone. An area of tehsil Dharni and Chikhaldara in this zone is hilly and occupies by mountain Satpura, popularly known as Melghat range. Land is extremely sloppy. Soils are very shallow to shallow. Forest occupies substantial area in these tehsils. Kharif sorghum, soybean, minor millets and rice in some patches are the important crops of this region. The area is inhabited by tribal farmers. This tract gives good scope for development of dry land horticulture and forage crops. The soils in tehsil Achalpur, Chandur Bz, Morshi, Amravati and Nandgaon Kh. Are moderate to deep & Predominantly vertisols and with situation of ill drainage and crop suffering from more of wet condition, during the year of relatively higher rains, irrigation management in these soils poses some problems. Cotton predominant over sorghum. Other crops grown are soybean, tur, mug, udid etc in kharif season and wheat and gram are the rabi crops wherever irrigation water is available. The soils in Bhatkuli, Daryapur, Southern part of Anjangaon surji tehsil are vertisol, deep and saline to saline alkali in reaction. Open well intract have saline water, as result of which, the same cannot be utilized for irrigation purposes. Cotton, Soybean, sorghum, tur, mug and Udid are the major crops of the tract together with rainfed Wheat, B. Gram and sunflower during rabi season. Poor drainage during rainy season is rampant. Fields respectively plain. The soils in western part of Tiwasa and Chandur Rly. Tehsil are predominantly shallow to moderately deep with equal proportion of vertisols, entisols and inceptisols. Land is rolling and slopy. In this area also cotton predominates sorghum. Soybean is making its place in the cropping system. Pulses and ground nut are the important crops of the region.
2	Moderate to Moderately High Rainfall Zone	Total warud tehsil, part of Morshi and eastern part of Tiwasa and Chandur Rly tehsils are included in this zone. The average rainfall received in this tract usually exceeds 900 mm. The climate is hot and dry. 18.93% area of the district fall under this zone. The AES V falls under this zone. The soil in this area are moderate to deep having orange dominating cropping system, either on command or dug well irrigation with seasonal vegetables and also field crops like cotton, jowar, soybean, tur in kharif and mostly irrigated wheat in rabi season.

b) Topography

S. No.	Agro ecological situation	Characteristics
AES	Resource Rich	Resource Poor
I	Agriculture Agriculture + Horticulture	Agriculture Agriculture+Horticulture Agriculture+Animal Husbandry
II	Agriculture + Horticulture Hort. +Agril + A. H.	Agriculture Agriculture+Horticulture Agriculture+Animal Husbandry

III	Agriculture + Horticulture Hort. +Agril + A. H.	Agriculture Agriculture+Animal Husbandry
IV	Agriculture Agriculture + Animal Husbandry Agril. + A. H. + Hort.	Agriculture Agriculture+Animal Husbandry Agril. + A. H. + Hort.
V	Agriculture + Horticulture Hort. +Agril + A. H.	Agriculture Horticulture + Agriculture Agriculture+Animal Husbandry

2.3 Soil Types

S. No	Soil type	Characteristics	Area in ha
1	Black	The colour of the soil is Gray to Black, Depth is 25-50 cm, pH ranges from 7.5 to 8.5, less availability of the water, more content of the CN ratio, nitrogen available Phosphorus & Potash, Calcium content is more. Colour of the soil is gray to deep black, depth is 50-100 cm, pH ranges from 7.5 to 8.5, availability of CN ratio, nitrogen & available phosphorus is less & potash is more.	588948.00
2	Others (Light/Shallow)	The Colour of the Soil is gray & depth is 0 to 5 cm. pH 7-8, Less content of CN ratio, Nitrogen & available phosphorus. This soil occurs is Akola, Amravati & Buldhana district, salt % ranges from 0.5 to 6.00 desisimen. Sodium ranges from 3 to 50 %, pH ranges from 7-9, calcium content is more. Colour of the soil is gray, depth is 0-5 cm, pH ranges from 7-8, availability of CN ratio, Nitrogen & available phosphorus & Potash is medium	260356.00

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

S. No	Crop	Area (00 ha)	Production (000 T)	Productivity (Kg/ha)
	Major Field crops			
1	Kharif Rice	68.89	23.09	335.22
2	Kharif Jowar	108.38	47.00	433.64
3	Kharif Maize	205.16	497.54	2425.09
4	Pigeon pea	1116.59	669.96	600.00
5	Green gram	77.37	1.99	25.71
6	Black gram	19.06	0.54	28.55
7	Kharif Ground nut	4.27	1.18	277.35
8	Soybean	2536.82	1611.39	920.00
9	Cotton	2603.95	3439.58	325.00
10	Wheat	391.42	782.84	2000.00
11	Chick Pea	1393.98	2090.97	1500.00

Source: State Dept. of Agril

Area, Production and Productivity of Fruit crops (2023)

S. No	Crop	Area (ha)	Production (MT)	Productivity (MT/ha)
01	Mandarin Orange	69249.40	450711.71	9.09
02	Sweet Orange	1657.4	10073.91	6.08
03	Lemon	429.64	2456.87	10.42
04	Mango	392.97	2238.99	14.70
05	Guava	63.06	183.71	5.47
06	Banana	650.61	48749.94	77.68
07	Aonla	175.4	2198.98	21.96
08	Custard Apple	232.61	86.66	2.16
09	Pomogranate	84.9	43.25	03
10	Papaya	42.00	974.30	34.28
11	Sapota	21.68	72.12	11.88
12	Tamarind	25.00	195.35	8.29
13	Jamun	1.50	60.49	65.69
14	Ber	07.20	11.57	2.10

2.5. Weather data (2023)

Month	Normal RF(mm)	Normal Rainy days (number)	Temperature (° C)		Relative Humidity (%)	
			Maximum	Minimum	Maximum	Minimum
Jan	00	0	30	13		
Feb	00	0	33	16		
March	7.9	1	37	19		
April	27.3	3	41	23		
May	10.5	1	43	27		
June	67.7	9	38	27		
July	296.3	17	31	24		
August	41.8	7	29	23		
Sept	120.9	8	31	22		
Oct	5.7	1	32	19		
Nov	47.9	3	31	16		
Dec.	20.3	0	29	13		
Total						

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

Livestock Population in Maharashtra

Sr. No.	Species	Population	Specific Regional Breeds
1	Cattle	14 million	Gaolao, Mewati, Khillaretc
2	Buffalo	5.6 million	Pandharpuri, Marathwadi, Nagpuri

3	Goat	10.6 million	Osmanabadi, Surti, Sangamnerietc
4	Sheep	2.7 million	Deccani
5	Poultry	74.3 million	Local

(20th Livestock Census 2019)

Population of livestock in Amravati district (2019)

Category	Population	Production	Productivity
Cattle	464967	289.58	0.93
Buffalo	129627	505.77	3.07
Goat	340681	54.07	0.14
Sheep	83200	11886	--

JDA Office, Amravati 2019

2.7. Details of Operational area / Villages

Taluka / Block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
Plant Protection Amravati Bhatkuli, Daryapur, Nandgaon khandeshwar	Revsa Utamsara, Shivani, Parlam, Chandrapur Khallar, Sipgaon, Majri Masla, Pardi, Adgaon, Pala, Timtala Takali, Nimbora, Ajani, Pimpri Rithe,	Cotton, Oilseed, Pulses, Fruit Crops	<ul style="list-style-type: none"> • Incidence of Sucking pest in cotton. • Infestation of <i>Helicoverpa</i> in chickpea & Pigeonpea. • High use of chemical pesticide for the control of pests in cotton, Pigeonpea and chickpea. • Incidence of store grain pest. • Infestation of fungal diseases in Citrus. • Non availability of Biopesticide. • Unknown about natural enemies. • Attack of stem fly & spodoptera in Soybean crop. 	<ul style="list-style-type: none"> • Improving productivity of cotton. • Demonstration on improved variety. • Demonstration on IPM • Improve the productivity of Soybean. • Dissemination through training, field day & publication • Improve the production of pigeon pea.
Horticulture Nandgaon kh Amravati Warud Morshi	Mahuli chore Ajani,loni Anjangaon bari Arad,Timtala Loni, Belora Lehgaon,Nerpinglai,	orange Kagzi lime Onion Gaillardia Okra & other	<ul style="list-style-type: none"> • Declining yield & quality of Nagpur Mandarin. • Irregular flowering of Hasta Bahar in Kagzi Lime. • Export quality Orange production. • Non availability of quality planting material of Fruit crops. • Management of rain fed fruit crops. • Low productivity of vegetable and floriculture. • Post harvest management of fruit & vegetables. • Processing & value addition in fruit & vegetables 	<ul style="list-style-type: none"> • Improving productivity and quality of Nagpur Mandarin • Production of quality planting material of Nagpur Mandarin. • Improving the productivity of Kagzi Lime. • Improving the productivity of Rained fruit crops. • Improving the productivity of Vegetable and Floriculture. • Post harvest management of fruit & vegetables. • Processing & Value addition of Fruit & Vegetables.

Agronomy				
<p>Amravati Bhatkuli, Daryapur, Nandgao khandeshwar Anjangao Surji</p>	<p>Pala Durgapur Umri Umri Bajar Dhanora Gurav, Hartala, Katamla, Asona, Lohegaon, Lehegaon, Dabha</p>	<p>Agronomical Crops</p>	<ul style="list-style-type: none"> • Integrated Nutrient Management • Improving the sustainability through soil health analysis. • NRM technology • Soil testing based nutrient management • Contingency crop planning • Introduction of newly released high yielding varieties • Promotion of organic farming • Improved Dry land technologies • Use of bio fertilizers & Bio pesticide • Reclamation of saline and sodic soil 	<ul style="list-style-type: none"> • Training & Demonstrations on Weedicide applications in Soybean • Demonstration on improved variety of soybean, green gram, black gram, pigeon pea and chick pea • Disseminations through training, field day, diagnostic visits & articles • Demonstration on chickpea for potash application • Training & Demonstrations on mulching techniques in Chick pea & Ground nut. • Training on improved package and practices of Kharif and rabi crops
<p>Agril. Extension</p>				
<p>Bhatkuli Nandgaon kh Amravati Morshi Warud</p>	<p>Takali, Ajani, Nirsana, Khirsana, Timtala, Morgaon, Asona, Shirala, Pusda,</p>	<p>K- Cotton, Soybean pigeon pea, Green gram. R- Chick pea, wheat sunflower F- Orange, Lemon. Agri – Horti. – Dairy F- Orange, Lemon. F- Orange, Lemon. Soybean, Pigeonpea, Green Gram, Black Gram</p>	<ul style="list-style-type: none"> • Improper skill development, lack of knowledge about technology & marketing techniques. They are not known about agriculture growth rate. • Not known and aware about insurance schemes. • Totally unknown about whether forecasting & lack of IT in agriculture • Reduction of productivity due to mono-cropping . • Scattered groups with no specific objectives. • Change in timing & attitude. • Rich sources of renewable energy but lack of knowledge. • Totally not known about PVR & FR right -2001 • Not know germination test of seeds • Not known property seed production Technology 	<ul style="list-style-type: none"> • Expected growth of agriculture sector with 4% with intervention of new technology, human resources development & marketing intelligence. • Crop insurance scheme including all crops should reflect towards the community. • Forecasting information of Extreme weather event Hailstorm/Excess rainfall up to the root level. • Awareness of Crop Diversification. • Introduction & Importance of Renewable energy. • Motivation towards climate resilient in agriculture. • Awareness programme on provisions of PVP & FR Right act-2001 • Seed testing in plant Health Clinic. • Training and Demonstration of seed production technology.
<p>Home Science</p>				

Nandgao khandeshwar, Amravati, Bhatkuli	Nirsana, Khirsana, Timtala Jawra, Dabha, Amravati Wadura, Anjangaon Bari Uttamsara, Katamla Khallar, Parlam	Soybean, Millates, Storage Grain, Mushroom, Green Leafy Vegetables, Food	<ul style="list-style-type: none"> •Nutritional imbalance in diet, malnutrition in children. •Lack of awareness about preparation of low cost high nutrient diet •Poor Nutrition •Poor storage practices •Lack of awareness about drudgery reduction technologies in farming , household activities 	<ul style="list-style-type: none"> •Nutrition gardening •Enrich diet by using of bio fortified food grains. •Proper utilization of soybean in diet. •Value addition •Minimize Post harvest losses •Drudgery reduction in Farming & processing activity. •Recycling of agro/ kitchen waste through mushroom cultivation •Subsidiary income generating activities for farm women groups •Maintain health & sanitation of family & family members. •Strengthening the farm women group •Marketing strategies for processed product .
Food Tech Bhatkuli, Anjangaon Surji, Morshi	Bhatkuli, Anjangaon Surji, Morshi	Katamla Nirul Gangamai Nimkhed Bazar Hirapur Pandhari lehgaon Ambada	Horticulture Crops	<ul style="list-style-type: none"> • The main area is Post harvest technology of Fruits and vegetable, value addition and waste utilization. • Animal products Technology in this Milk and milk processing and Meat and Meat Products and fish and Egg etc. Value addition of these materials. • Cereals, Legumes and Oilseeds in this mainly major crops are included and easily farmer are processed the food grain and sale value added product.

2.8. Priority thrust areas:

Soybean	Agronomy	Improving the productivity of Soybean.
Cotton	Plant Protection	Improving the productivity of Cotton.
Pigeon pea	Agronomy	Improving the productivity of Pigeonpea
Chickpea	Plant Protection	Improving the productivity of Chickpea
Summer Gr.Nut	Agronomy	Improving the productivity of Summer Gr.Nut
Soil Health	Agronomy	Improving the Soil Health
Food processing	Food Tech	Improving the productivity through food processing.
Bio-pesticide production	Plant Protection	Preparation of biopesticide like <i>HaNPV</i> and <i>Trichoderma viridae</i> .
Mushroom	Home Science	Mushroom production & its value addition products.
Rain Water Harvesting	Agril. Extn	Soil & water conservation activities.
Natural Resource Management	Agri. Extn	Improving the ground water table through NRM activity
Dairy	Animal Husbandry	To breed a more profitable animal
Vermicompost production	Animal husbandry	Vermicompost production to promote organic farming.
Communication Media	Extension	Use of Mass Media
Mobile Messaging	Extension	Use of IT in Agriculture
Orange & Sweet Orange	Horticulture	Improving productivity of Orange & Sweet Orange

Kagzi Lime	Horticulture	Improving productivity of Kagzi Lime
Onion	Horticulture	Improving productivity & shelf life of Onion
Gaillardia & Marigold	Horticulture	Improving productivity of Floriculture crop
Post harvest technology	Engineering	Mechanisation in post harvest technology
Pest Management	Plant Protection	Integrated Pest Management
Nutritional Garden	Home Science	Enrich diet by using of bio fortified food grains. Oyster Mushroom production & its utilization Nutrition gardening Proper utilization of soybean in diet. Value addition Minimize Post harvest losses Drudgery reduction in Farming & processing activity. Maintain health & sanitation of family & family members. Subsidiary income generating activities for farm women groups Strengthening the farm women group Marketing strategies for processed product .

3. TECHNICAL ACHIEVEMENTS

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

OFT				FLD			
1				2			
Number of OFTs		Number of farmers		Number of FLDs		Number of farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
08	10	100	116	08	08	100	108

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
300	346	10000	12446	150	15000	160	18775

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

Target	Achievement	Target	Achievement
400	444.55	4000	4405

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
00	00		

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	Green Gram, Black Gram, Pigeon pea, Chick pea	Low yield, old variety, INM	610	Lohegaon, Dhanora Gurav, Asona	CFLD, Training
2	Soybean, pigeon pea, green gram and black gram	Soil pH, Reduction in organic carbon level, imbalance nutrient availability, over use of nitrogenous fertilizer, new varietal intervention, poor management of organic inputs no balanced use of fertilizer seed treatment INM	1350	Daryapur, Nandgaon Kh., Bhatkuli	CFLD, Training, OFTs
3	Grain storage local practices	Post harvest losses of fruit vegetables and grain due to lack of poor storage practices		Timtala Jawra	OFT Assessment
4	Orange	Decline in yield & quality	25000	Loni, Shirkhed, Nimkhed	OFT, FLD & Training
5	Kagzi Lime	Irregular Hastabahar	200	Mahuli,	FLD & Training
6	Onion	Low yield, bolting & twin bulb	410	Takli Ajni Uttamsara	OFT & Training
7	Okra	Low yield due to the heavy infestation of sucking pest	32	Anjagaon Bari, Uttamsara	OFT & Training
8	Gaillardia	Low yield due to use of local seeds/varities	20	Arhad, Kurhad, Gopalpur	OFT & Training
9	Green Gram, Black Gram, Pigeonpea, Chikckpea	Low yield, old variety, INM	2100	Nirsana , Khirsana, Timtala	CFLD, Training
10	Extension Management in Agril.	Knowledge attitude motivation	--	Nirsana , Khirsana, Timtala, Januna	Training
11	Integrated Pest	PBW has developed resistance to Bt cotton. Reduction in yield due to	1000	Dabha, Timtala, Januna,	FLD, Training,

	Management	Incidence of PBW		Chandikapur, Uttamsara,	
12	Integrated Pest Management	Reduction in yield due to incidence of pod borer complex	432	Takli Ajni Uttamsara	OFT & Training
13	Integrated Pest Management	Reduction in yield due to incidence of chickpea pod borer	210	Nirsana , Khirsana, Timtala, Januna	OFT & Training
14	Nutrition Management	Effect of feeding creep ration to enhance growth rate of Goat kids.	13	Timtala, Hrinmochan, Adgaon, Yawali shahid Warud	FLD, Training,
15	Production & Management	Supplementation of Sorted Semen,	13	Nirsana, Khirsana, Januna, Nanded khurd, Sarmasapur, Jasapur	FLD, Training,
16	Soybean, pigeon pea, green gram and black gram	Soil pH, Reduction in organic carbon level, imbalance nutrient availability, over use of nitrogenous fertilizer, new varietal intervention, poor management of organic inputs	13	Daryapur Nanadgaon Kh. Bhatkuli	FLD, Training,
17	Custard Apple	Due to shelf life and fluctuated market price of Custard Apple.	10	Amravati Block	OFT, Training, Literature
18	Onion	storage problem and fluctuated market price of onion	10	Anjangaon Block	OFT, Training, Literature
19	Millet	Less Use of Millet in diet.	Maximum	Dabha , Timtala	OFT , Training
20	Oyster Mushroom	Lack of awareness about different varieties of Oyster mushroom cultivation	Maximum	Anjangao, Timtala, Dabha	OFT, Training Method demonstration
21	Fruits & vegetable	Non availability of fresh fruits & vegetable for household purpose	Maximum	Nirsana , Khirsana, Timtala Dabha	FLD , Training , Visits,
22	Vegetable	Lack of awareness about use of Bamboo Solar dryer	Maximum	Dabha, Timtala	FLD , Training
23	Soybean harvesting	Lack of awareness about use of soy mittens	Maximum	Nirsana, Khirsana	FLD, Training
24	Soy nuts	Un aware about effect soy nuts on 3-6 years malnourished children	Maximum	Dabha ,Nirsana , Timtala	FLD , Training

* Support with problem-cause and interventions diagram

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			01			01				02
Varietal Evaluation		01								01
Integrated Pest Management		01	01							02
Integrated Crop Management										
Integrated Disease Management					01	01				02
Small Scale Income Generation Enterprises										
Weed Management										
Resource Conservation Technology										
Farm Machineries										
Integrated Farming System										
Seed / Plant production										
Value addition										
Drudgery Reduction										
Storage Technique										
Mushroom cultivation				01						01
Total		02	02	01	01	02				08

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	Pigeon Pea	Assessment of Impact of GA3 application @ 25 ppm (13.9 g per ha) on production of pigeon pea	01	07	2.8
	Orange	Integrated Nutrient Management in Orange for the improvement of quality and yield	07	07	1.4
Varietal Evaluation	Soybean	Assessment of AMS-100-39 and KDS - 726 variety of soybean over JS – 335 for higher production	01	07	2.8
Integrated Pest Management	Pigeon pea	Integrated Management of Pod Borer Complex in Pigeonpes	13	13	2.8
	Soybean	Integrated Management of Chickpea pod Borer (Helicoverpa armigera)	13	13	2.8
Integrated Crop Management	Onion	Foliar application of Turmeric special micronutrient	13	13	2.8
Integrated Disease Management					
Small Scale Income Generation Enterprises					
Weed Management					
Resource Conservation Technology					
Farm Machineries					
Integrated Farming System					

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trial covering all the Technological Options)
Seed / Plant production					
Value addition					
Drudgery Reduction					
Storage Technique					
Mushroom cultivation	Oyster mushroom	<i>Pleurotus Florida</i>	07	07	100 bags
	Oyster mushroom	<i>Pleurotus ostriatus</i>	07	07	100 bags
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	Oyster - <i>Pleurotus Florida</i> , <i>Pleurotus Ostriatus</i>	14	14
Apiary			
Vermicompost			
Tailoring			
Nutrition Garden			
Nursery Management			
Production and Management			
Entrepreneurship development			
Energy conservation			
storage techniques			
House hold food security			
organic farming			
mechanization			
Bee keeping			
Seed production			
post-harvest management	Processing And Value addition of Kutki- Little Millets through Cookies Making.	13	13
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	Oyster mushroom cultivation <i>Pluerotus Florida</i> <i>Pluerotus Ostriatus</i>	14	14
Health and Nutrition	Sorghum puff , Pearl millet puff (Bajra)	14	14 adolescent girls .
value addition			
Kitchen gardening			
nutrition security			
other			

C. 1. Results of Technologies Assessed Results of On Farm Trial

Assessment 1

Title of Technology Assessed	Impact of GA3 application @ 25 ppm (13.9 g per ha) on production of pigeon pea
Problem Definition	Moisture Stress
Details of technologies selected for assessment	T1: Farmers practice (No Application) T2: GA ₃ application @ 25 ppm (13.9 g per ha) T3: Foliar application of 1 % Humic Acid at Flowering and Pod Development stage
Source of technology	Dr. PDKV Akola 2019
Production system and thematic area	Integrated Nutrient Management
Performance of the Technology with performance indicators	27.34 % more yield of pigeon pea observed in the GA3 application over farmers practice
Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	Application of GA3 reduces the moisture stress Application of GA3 reduces the moisture stress
Final recommendation for micro level situation	Application of GA ₃ application @ 25 ppm (13.9 g per ha)
Constraints identified and feedback for research and developmental departments	-
Process of farmers participation and their reaction	Identification of farmers, group discussion, training, demonstration

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
Peon Pea	Rainfed	Moisture Stress	Impact of GA3 application @ 25 ppm (13.9 g per ha) on production of pigeon pea	07	T1: Farmers practice (No Application)	Yield (q/ha)	12.25	27.34 % more yield of pigeon pea observed in the GA3 application over farmers practice	Application of GA3 reduces the moisture stress	NIL	NIL
					T2: Foliar application of 1 % Humic Acid at Flowering and Pod Development stage.	No of Pods per Plant	147.5				
						Yield (q/ha)	14.38				
					T3: GA3 application @ 25 ppm (13.9 g per ha)	No of Pods per Plant	167.3				
						Yield (q/ha)	15.6				
					No of Pods per Plant	183.1					

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	B:C Ratio
13	14	15	16	17	18
T1: Farmers practice (No Application)	-	12.25	Quintal /Ha.	82370	3.18
T2: Foliar application of 1 % Humic Acid at Flowering and Pod Development stage.	-	14.38	Quintal /Ha	102514	3.66
T3: GA3 application @ 25 ppm (13.9 g per	Dr PDKV Akola Joint Agroscop-2019	15.6	Quintal /Ha	113230	3.85

ha)				
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Assessment 2

Title of Technology Assessed	Assessment of AMS-100-39 and KDS - 726 variety of soybean over JS – 335 for higher production
Problem Definition	Low productivity, incidence of stem fly, girdle beetle and shattering losses
Details of technologies selected for assessment	T1:Farmers practice (JS - 335) T2: PDKV Amba (AMS-100-39) T3: Phule Sangam (KDS-726)
Source of technology	Dr. P.D.K.V. Akola 2021 & MPKV Rahuri 2016
Production system and thematic area	Varietal evaluation
Performance of the Technology with performance indicators	PDKV Amba due to its moisture stress resistant character this year perform better than Phule Sangam
Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	Farmers adopting this variety because of its low shattering losses occurs at harvesting stage
Final recommendation for micro level situation	PDKV Amba variety is suitable where water logging as well as moisture stress conditions occurs
Constraints identified and feedback for research and developmental departments	-
Process of farmers participation and their reaction	Identification of farmers, group discussion, training, demonstration

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Soybean	Rainfed	Low productivity, Stem Fly and Girdle Beetle incidence	Assessment of AMS-100-39 and KDS - 726 variety of soybean over JS – 335 for higher production	07	T1:Farmers practice (JS-335)	Yield (q/ha)	14.24	27.80 % & 13.13 % more grain yield observed in T2 and T3 over farmers practice	PDKV Amba Is bold seeded high yielding medium duration variety which having resistant to moisture stress conditions	NIL	NIL
						No of Pods per Plant	43.62				
					T2: AMS-100-39 (PDKV Amba)	Yield (q/ha)	18.2				
						No of Pods per Plant	69.63				
					T3: KDS- 726 (Phule Sangam)	Yield (q/ha)	16.11				
						No of Pods per Plant	62.40				

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	B:C Ratio
13	14	15	16	17	18
T1:Farmers practice (JS-335)	-	14.24	Quintal /Ha.	30854	1.89
T2: AMS-100-39 (PDKV AMBA)	Dr. P.D.K.V. Akola 2021	18.2	Quintal /Ha	47910	2.33

T3: KDS-726 (Phule Sangam)	MPKV Rahuri 2016	16.11	Quintal /Ha	37696	2.03
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Assessment 03

Title of Technology Assessed	Assessment on millets to overcome anemia in Adolescent girls
Problem Definition	Less use of Millets in diet
Details of technologies selected for assessment	T1- Farmers Practice – Normal diet T2- Recommended diet- Normal diet + 100gm Sorghum puff T3- Normal diet + 100gm Pearl millet puff
Source of technology	Indian Institute of Millets Research , Hyderabad 2015, VNMKV , Parbhani, AICRP , Home Sci. College , Parbhani
Production system and thematic area	Farming System Through Nutrition
Performance of the Technology with performance indicators	Weight gain by 0.32 % in treatment II & Weight gain by 0.78 % in treatment III
Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	There is change in weight by 0.78 % which is better than recommended practice
Final recommendation for micro level situation	Both millet useful for health of adolescent girls but sorghum puffs are easily available & processed hence acceptable.
Constraints identified and feedback for research and developmental departments	Regular availability of millets puff is not possible as they are not grow it on their field because of animals attack on crop
Process of farmers participation and their reaction	Awareness , training , demonstration & observations were taken & data were interpreted for find out the result .Farmer farm women & adolescent girls were very much like to eat it.

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
Sorghum Pearl millet	Farming System for Nutrition		Assessment of Millet puff to overcome anemia in adolescent girls	14	T1- Farmers Practice – Normal diet	Wight(Kg)	30.35	Weight gain by 0.32% in treatment II Weight gain by 0.78% in treatment III	They very much like it to enter in their regular diet as increase in weight of girls	----	-----
					T2- Recommended diet- Normal diet + 100gm Sorghum puff	Wight(Kg)	30.67				
					T3- Normal diet + 100gm Pearl millet puff	Wight(Kg)	31.13				

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	B:C Ratio
13	14	15	16	17	18
T1- Farmers Practice – Normal diet		30.35	Kg	-	-
T2- Recommended diet- Normal diet + 100gm Sorghum puff	IIMR, Hyderabad	30.67	Kg	0.33kg	-

T3- Normal diet + 100gm Pearl millet puff	VNMKV , parbhani	31.13	Kg	0.78 kg	-
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Assessment : 4

Title of Technology Assessed	Assess different varieties of oyster mushroom cultivation
Problem Definition	Lack of awareness about differed varieties of Oyster mushroom cultivation
Details of technologies selected for assessment	T1- Farmers Practice – Cultivate Pleurotus sajor caju T2- Recom mended diet- Cultivation of pleurotus Florida T3- Recommended practice:- Cultivation of Pleurotus Ostreatus
Source of technology	DMR , Solan 2016
Production system and thematic area	Mushroom Production
Performance of the Technology with performance indicators	Change in yield by 8.68 % in a recommended practice T2 i.e.Pleurotus sajor Caju and 26.28 % in improved practice T3 i.e.Pleurotus Osreatus.
Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	There is change in yield 26.28 % which is better than recommended practice
Final recommendation for micro level situation	Improved practice ie T3 is give more and increase BC ratio1:3.1 hence highly acceptable.
Constraints identified and feedback for research and developmental departments	People less aware about the technicalities of mushroom production hence do work on it as it is an innovative activity.
Process of farmers participation and their reaction	Awareness , training , demonstration & observations were taken & data were interpreted for find out the result .Farmer farm women were very much like it.

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Oyster Mushroom	Kharif-Rabbi	Low yield Unaware about deferent varieties Oyster Mushroom for cultivation	To assess Different varieties of Oyster mushroom cultivation	14	T1 – pleurotus Sajorcaju	Yield /Unit/Year	111.27kg	The Yield of Pieurotus Ostreatus 26.28 % more than farmers practice	Farmer like to cultivate Pleurotus Ostreatus as its gives more yield in less efforts	----	-----
						Duration	42 days				
					T2 – pleurotus Florida	Yield /Unit/Year	128.62 kg				
						Duration	42 days				
					T3- Pleurotus Ostitus	Yield /Unit/Year	163.83 kg				
	Duration	60 days									

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	B:C Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice) T1 – pleurotus Sajor caju	DMR , Solan, HP, ICAR 2011	111.27 kg	Kg/Unit (200bags) / year	9636.70	1:2.1
Technology option 2(Recommended practice) T2 – pleurotus Florida		128.62 kg		12834.46	1:2.6

Technology option 3(Recommended practice) T3 - Pleurotus Ostitus		163.83 kg		17535.50	1:3
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Assessment 5:

Title of Technology Assessed	Integrated Nutrient Management in Orange for Improvement of Quality & Yield of fruit
Problem Definition	Low productivity due to imbalanced nutrition
Details of technologies selected for assessment	Application of 900:300:300 NPK gm / plant in five split doses +VAM 500gm + Azospirillum + PSB +Trichoderma 100gm each.1] Stress Release Stage-270:120:30 g/ plant,2] Pea size-270:105:30 g/ plant,3] Marble size- 180:75:90 g/plant,4]Egg size- 195:0:75 g/ plant,5] Premature- 90:0:75g/ plant
Source of technology	DR, PDKV, Akola
Production system and thematic area	Irrigated, Integrated Nutrient Management
Performance of the Technology with performance indicators	The Yield was 276.5 Qt/ha obtained also increases weight of fruit and reduce the fruit drop
Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	There is change in yield 26.28 % which is better than recommended practice
Final recommendation for micro level situation	The application of RDF 900:300:300 NPK gm/ plant in five split doses is superior for improving the quality and yield
Constraints identified and feedback for research and developmental departments	During rainy Season split doses of Fertilizes is difficult to apply in field
Process of farmers participation and their reaction	Interaction with farmers Farmer selection ,training, Input Distribution, Field day

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
Orange	Medium to black,Irrigated	Low yield due to imbalanced nutrition	Integrated Nutrient Management in orange for improving quality and yield	07	T1- Application of DAP 1000 gm or 10:26:26 1000 gm per plant without Biofertiliser	Yield (Q/Ha.) Weight of fruit (Gm) B:C Ratio	237.5 126.2 2.30	The yield is increased 16.42 % over Farmer Practice	During rainy Season split doses of Fertilizes is difficult to apply in field		
					T2- RDF 900:300:300 NPK gm per plant in five split doses at fruit development stage + VAM 500gm.+ Azospirillum + PSB + Trichoderma 100 gm each	Yield (Q/Ha.) Weight of fruit (Gm) B:C Ratio	276.5 139.6 3.0				

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) Application of DAP 1000 gm or 10:26:26 1000 gm per plant without Biofertiliser		237.5	Qt./ Ha.	160800/-	2.30
Technology option 2- RDF 900:300:300 NPK gm per plant in five split doses at fruit development stage + VAM 500gm.+ Azospirillum + PSB + Trichoderma 100 gm each	Dr. PDKV Akola	276.5	Qt./ Ha.	275700/-	3.0

Assessment 6:

Title of Technology Assessed	Assessment on Foliar application of micronutrient in Turmeric crop
Problem Definition	Low productivity, Deficiency symptoms on foliage
Details of technologies selected for assessment	Foliar spray application of Turmeric special micronutrient @5 gm per lit. at time of 60 to 90 days after planting
Source of technology	IISR,Calicut
Production system and thematic area	Irrigated, Integrated crop management
Performance of the Technology with performance indicators	the yield was more in assessed technology and also fresh rhizome weight increases
Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	
Final recommendation for micro level situation	Application of Turmeric special micronutrient is superior than to control & T3
Constraints identified and feedback for research and developmental departments	
Process of farmers participation and their reaction	Interaction with farmers Farmer selection ,training, Input Distribution, Field day

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
Turmeric	Medium, Irrigated	Low productivity ,Deficiency symptoms on foliage	Foliar application of Turmeric special micronutrient	13	T1- Foliar application Locally available micronutrient mixture	Yield (Q/Ha.)	209.5	The yield is in T2 increased 123.33 % over Farmer Practice and T3 practise	Application of Turmeric special micronutrient is superior than control & T3		
						Weight of fresh Rhizomes (Gm)	840				
						B:C Ratio	2.39				
					T2-Foliar spray application of Turmeric special micronutrient @ 5 gm/Lit. at time of 60 to 90 days after planting	Yield (Q/Ha.)	242				
						Weight of fresh Rhizomes (Gm)	1200				
						B:C Ratio	2.78				
					T3- Foliar application of Boron, Zn, Fe @ 375 gm/ acre at vegetative growth stage two spray at 25 days intervals	Yield (Q/Ha.)	229.5				
						Weight of fresh Rhizomes (Gm)	1068				
						B.C Ratio	2.61				

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	B:C Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice) T1- Foliar application Local available micronutrient mixture		209.5	Qt./ Ha.	217000	2.39
Technology option 2- Foliar spray application of Turmeric special micronutrient @ 5 gm/Lit. at time of 60 to 90 days after planting	IISR, Calicut	242	Qt./ Ha.	278800	2.78
Technology option 3 Foliar application of Boron, Zn, Fe @ 375 gm/ acre at vegetative growth stage two spray at 25 days intervals	TNAU, Coimbtur	229.5	Qt./ Ha.	245890	2.61

Assessment 7

Title of Technology Assessed	<u>Integrated Management of Pod Borer Complex In Pigeon pea</u>
Problem Definition	Heavy incidence of Pod Borer Complex
Details of technologies selected for assessment	Farmers Practice (T1) :2to 3 chemical pesticide sprays comprising of Profenophos 50 EC 40 ml, Flubendiamide 20 WG @ 5 g, Clorrantraniliprole 18.5 SC @2 ml per 10 lit water
	Assessed Practice (T2): 1st spray - Clorrantraniliprole 18.5 SC @3 ml per 10 lit water at 50 per cent flowering 2nd spray- Flubendiamide 39.35 SC @2 ml per 10 lit water at pod filling stage
	Assessed Practice (T3) :1st spray Azadirachtin 300 ppm 50 ml /10 lit water 50% flowering 2nd Spray Emamectin Benzoate 5 SG 4.4 g/10 lit water based on ETL 3rd spray Lamda cyhalothrin 5 EC 10 ml/10 lit water based on ETL
Source of technology	T2-Dr VNMKV Parbhani Joint Agrosco-2018 T3- Major uses of Pesticides, CIBRC publication 2018
Production system and thematic area	IPM
Performance of the Technology with performance indicators	Integrated pest management approach showing less incidence of pod borer which results in high yield
Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	IPM technology proven good control against chick pea pod borer
Final recommendation for micro level situation	T3 gives better yield
Process of farmers participation and their reaction	Training, Demonstration & discussion

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
Pigeonpea		Heavy incidence of Pod Borer Complex	Integrated Management of Pod Borer Complex In Pigeon pea	13	Farmers Practice (T1) :2to 3 chemical pesticide sprays comprising of Profenophos 50 EC 40 ml, Flubendiamide 20 WG @ 5 g, Clorrantraniliprole 18.5 SC @2 ml per 10 lit water	No. of pods/plant	133.6	Integrated approach of pest management significantly proven the less percent pod damage and also increase the yield			
						% of pod damage	16.40				
						Yield (q/ha)	11.37				
						B:C Ratio	2.29				
					Assessed Practice (T2) : 1st spray - Clorrantraniliprole 18.5 SC @3 ml per 10 lit water at 50 per cent flowering 2nd spray- Flubendiamide 39.35 SC @2 ml per 10 lit water at pod filling stage	No. of pods/plant	154.2				
						% of pod damage	8.70				
						Yield (q/ha)	14.22				
					Assessed Practice (T3) :1st spray Azadirachtin 300 ppm 50 ml /10 lit water 50% flowering 2nd Spray Emamectin Benzoate 5 SG 4.4 g/10 lit water based on ETL 3rd spray Lamda cyhalothrin 5 EC 10 ml/10 lit water based on ETL	B:C Ratio	2.60				
						No. of pods/plant	176.1				
						% of pod damage	5.66				
Yield (q/ha)	15.68										
B:C Ratio	2.84										

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	B:C Ratio
13	14	15	16	17	18
Farmers Practice (T1) :2to 3 chemical pesticide sprays comprising of Profenophos 50 EC 40 ml, Flubendiamide 20 WG @ 5 g, Clorrantraniliprole 18.5 SC @2 ml per 10 lit water		11.37	Quintal /Ha.	53830	2.29
Assessed Practice (T2) : 1st spray - Clorantraniliprole 18.5 SC @3 ml per 10 lit water at 50 per cent flowering 2nd spray- Flubendiamide 39.35 SC @2 ml per 10 lit water at pod filling stage	T2-Dr VNMKV Parbhani Joint Agrosco-2018	14.22	Quintal /Ha	78920	2.60
Assessed Practice (T3) :1st spray Azadirachtin 300 ppm 50 ml /10 lit water 50% flowering 2nd Spray Emamectin Benzoate 5 SG 4.4 g/10 lit water based on ETL 3rd spray Lamda cyhalothrin 5 EC 10 ml/10 lit water based on ETL	T3- Major uses of Pesticides, CIBRC publication 2018	15.68	Quintal /Ha	90430	2.84

Assessment 8

Title of Technology Assessed	Integrated management of chickpea pod borer (<i>Helicoverpa armigera</i>)
Problem Definition	Heavy Incidence of Pod Borer
Details of technologies selected for assessment	Farmers Practice (T1) :2 to 3 chemical pesticide sprays comprising of <u>Profenophos 50 EC 40 ml</u> , <u>Flubendiamide 20 WG @ 5 g</u> , <u>Clorantraniliprole 18.5 SC @2 ml per 10 lit water</u>
	Assessed Practice (T2) : ETL based spray of <u>Lambda cyhalothrin 5% EC 1.25 ml/lit of water</u> followed by <u>Ethion 50 EC 2 ml/ lit of water 15 days after first spraying</u>
	Assessed Practice (T3) :Clean cultivation and deep summer ploughing , Mixing 100 g Jowar seeds at the time of sowing, Sowing two rows of coriander and mustard around the crop, Installation of <u>bird perches @50/ha</u> , Installation of <u>pheromone traps 5/ha</u> Spraying NSE 5% at 50% flowering, Spraying <u>HNPV 500 LE/ha</u> at the time of pod formation, <u>Spray Emamectin benzoate 5SG @ 4g/10 lit water at pod filling stage</u>
Source of technology	CIB & RC
Production system and thematic area	Integrated Pest Management
Performance of the Technology with performance indicators	Improve the yield
Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	IPM technology proven good control against chick pea pod borer
Final recommendation for micro level situation	T3 gives better yield
Constraints identified and feedback for research and developmental departments	
Process of farmers participation and their reaction	Training, Demonstration & discussion

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
Chickpea		Heavy Incidence of Pod Borer	Integrated management of chickpea pod borer (<i>Helicoverpa armigera</i>)	13	Farmers Practice (T1) :2 to 3 chemical pesticide sprays comprising of Profenophos 50 EC 40 ml, Flubendiamide 20 WG @ 5 g, Clorantraniliprole 18.5 SC @2 ml per 10 lit water	% of pod damage	11.02	Integrated approach of pest management significantly proven the less percent pod damage and also increase the yield			
						No of Pods per plant	39.64				
						Yield (q/ha)	12.7				
						B:C Ratio	1.51				
					Assessed Practice (T2) : ETL based spray of Lambda cyhalothrin 5% EC 1.25 ml/lit of water followed by Ethion 50 EC 2 ml/ lit of water 15 days after first spraying	% of pod damage	5.13				
						No of Pods per plant	45.38				
						Yield (q/ha)	15.9				
						B:C Ratio	1.82				
					Assessed Practice (T3) :Clean cultivation and deep summer ploughing Mixing 100 g Jowar seeds at the time of sowing, Sowing two rows of coriander and mustard around the crop, Installation of bird perches @50/ha, Installation of pheromone traps 5/ha Spraying NSE 5% at 50% flowering, Spraying HNPV 500 LE/ha at the time of pod formation, Spray Emamectin benzoate 5SG @ 4g/10 lit water at pod filling stage	% of pod damage	4.28				
						No of Pods per plant	52.27				
						Yield (q/ha)	17.3				
						B:C Ratio	1.92				

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	B:C Ratio
13	14	15	16	17	18
Farmers Practice (T1) :2 to 3 chemical pesticide sprays comprising of Profenophos 50 EC 40 ml, Flubendiamide 20 WG @ 5 g, Clorantraniliprole 18.5 SC @2 ml per 10 lit water		12.7	Quintal /Ha.	24670	1.51
Assessed Practice (T2) : ETL based spray of Lambda cyhalothrin 5% EC 1.25 ml/lit of water followed by Ethion 50 EC 2 ml/ lit of water 15 days after first spraying	CIB & RC	15.9	Quintal /Ha	33720	1.82
Assessed Practice (T3) :Clean cultivation and deep summer ploughing , Mixing 100 g Jowar seeds at the time of sowing, Sowing two rows of coriander and mustard around the crop, Installation of bird perches @50/ha, Installation of pheromone traps 5/ha Spraying NSE 5% at 50% flowering, Spraying HNPV 500 LE/ha at the time of pod formation, Spray Emamectin benzoate 5SG @ 4g/10 lit water at pod filling stage		17.30	Quintal /Ha	40548	1.92

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		
					No. of villages	No. of farmers	Area in ha

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.**)

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	Orange	INM	INM	Kharif 2023	2	2	02	8	10	
2	Onion	Varietal	Bhima Shakti	Summer 2023	2	2	10	10	10	

Details of farming situation

Crop	Season	Farming situation (RE/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Orange	Kharif 2023	Irrigated	Medium to black	Low	Low	High	Orange	Ambia Bahar 2023	Nov.2023	296.3	17
Onion	Summer 2023	Irrigated	Medium	Low	Low	High	Soybean	09/01/2022	12/05/2023	296.3	17

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	Orange
	Integrated approach for control of Ambia bahar fruit drop found good yield and also reduce fruit drop.
2	Kagzi Lime
	In heavy black cotton soil it is difficult to water stress for plant

Farmers' reactions on specific technologies

S. No	Feed Back
1 Orange	Farmers were satisfied by using Integrated approaches for controlling of fruit drop & increased yield
2. Kagzi Lime	Adopting this technique farmers getting good market rate.

Extension and Training activities under FLD

Sl. No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	02		43	
2	Farmers Training	04		56	
3	Media coverage	03		38	
4	Training for extension functionaries	01		12	

C. Performance of Frontline demonstrations

Frontline demonstrations on oilseed crops

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Soybean	IPM	Management of Soybean Stem FLY	PDKV Amba	20	08	16.39	14.50	15.75	13.26	23.60	22500	59526	37026	2.64	24450	51560	27110	2.10

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	IPM	Integrated Management of Fusarium wilt Of pigeon pea		20	08	15.84	13.00	13.50	12.78	23.94	34580	131200	96620	3.79	33650	101600	67950	3.01

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
Vegetables																			
Onion	Varietal	Varietal demonstration of Bhima Shakti onion variety	10	2	253.5	180.2	241.5	203.5	18.67	120	108	59100	1912300	132130	3.23	53221	151650	98429	2084
Fruit Crop																			
Orange	INM	Integrated Nutrient Management	10	2	241.2	182.3	226.2	193.5	16.9	135	127.2	133410	277600	144190	2.08	126300	224322	98022	1.77

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)
	Processing & Value Addition	10	10	100					15000	22200	7200	1.48				
	Processing & Value Addition	10	10	100					12000	17400	5400	1.45				

FLD on Women Empowerment

Category	Name of technology	No. of demonstrations	Name of observations		Demonstration		Check
Farm Woman	use of mittens in harvesting of soybean	14	Time required for 0.4 ha harvesting No. of scratches		1.55 --		2.08 14

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	Household food security through kitchen gardening	700	14	14	533	142	2.83	6	5	13580	20110	6530	2.07	2435	4335	1900	1.28

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	01	125	10	135	15	05	20	140	15	155
Cropping Systems	01	110	10	120	17	10	27	127	20	147
Integrated Farming	02	145	35	180	25	20	45	170	55	225
Seed production	07	545	50	595	110	25	135	655	75	730
Soil & water conservation	01	110	--	110	15	-	15	110	15	125
Total	12	1035	105	1140	182	60	242	1202	180	1382
II Horticulture										
a) Vegetable Crops										
Off-season vegetables	01	21	05	26	02	-	02	23	05	28
Protective cultivation	01	21	01	22	03	-	03	24	01	25
Others (pl specify)										
Total (a)	02	42	06	48	05	--	05	47	06	53
b) Fruits										
Layout and Management of Orchards	02	41	05	46	08	04	12	49	09	58
Cultivation of Fruit	01	21	-	21	05	-	05	24	-	24
Total (b)	03	62	05	67	13	04	17	73	09	82
d) Plantation crops										
Processing and value addition	03	23	15	38	04	03	07	27	18	45
Total c)	03	23	15	38	04	03	07	27	18	45
IV Livestock Production and Management										
Dairy Management	04	61	07	68	11	03	14	72	10	82
Poultry Management	01	05	--	05	08	04	12	13	04	17
Piggery Management	--	--	--	--	--	--	--	--	--	--
Rabbit Management	--	--	--	--	--	--	--	--	--	--
Animal Nutrition Management	02	34	05	39	10	04	14	44	09	53
Disease Management	04	83	17	100	22	08	30	105	25	130
Feed & fodder technology	02	29	07	36	04	02	06	33	09	42
Production of quality animal products	--	--	--	--	--	--	--	--	--	--
Others (pl specify)	--	--	--	--	--	--	--	--	--	--
Total	13	212	36	248	55	21	70	267	57	324
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	02	02	37	39	00	15	15	02	52	54
Gender mainstreaming through SHGs	01	00	13	13	00	14	14	00	27	27
Storage loss minimization techniques	01	00	10	10	00	01	01	00	11	11
Women empowerment	02	02	34	36	01	07	08	01	41	44
Location specific drudgery reduction technologies	01	00	09	09	00	04	04	00	13	13
Total	7	4	103	107	1	41	42	3	144	149
VII Plant Protection										
Integrated Pest Management	05	122	31	153	15	13	28	137	44	181
Bio-control of pests and diseases	01	28	02	30	14	02	16	42	4	46
Total	06	150	33	183	29	15	44	179	48	227
X Capacity Building and Group Dynamics										
Leadership development	05	135	25	160	45	20	65	180	45	225
Group dynamics	03	55	17	72	15	9	24	70	26	96
Formation and Management of SHGs	05	155	45	200	25	10	35	180	55	235
Mobilization of social capital	05	110	35	145	25	10	35	135	45	180

Entrepreneurial development of farmers/youths	02	24	06	30	10	05	15	34	11	45
Awareness of Crop Management	02	67	7	74	7	5	12	74	12	86
Fodder and Feed Management Awareness	02	76	-	76	15	-	15	91	--	91
Awareness of Natural Resource Management	03	58	12	70	05	7	12	63	19	82
Resource Conservation Technology	02	67	06	73	12	10	22	79	16	95
Total	29	747	153	900	159	76	235	906	229	1135
XI Agro-forestry										
Production technologies	03	58	12	70	05	7	12	63	19	82
Nursery management	02	67	06	73	12	10	22	79	16	95
Total	5	125	18	143	17	17	34	142	35	177
GRAND TOTAL	80	2400	474	2874	465	237	696	2846	726	3574

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	03	110	--	110	25	--	25	110	25	135
Resource Conservation Technologies	02	75	--	75	15	--	15	90	--	90
Crop Diversification	02	135	15	150	17	10	27	152	25	177
Integrated Farming	02	47	10	57	05	05	10	52	15	67
Micro Irrigation/irrigation	02	55	15	70	10	09	19	65	24	89
Seed production	03	157	--	157	25	--	25	182	--	182
Total	14	579	40	619	97	24	121	651	89	740
II Horticulture										
a) Vegetable Crops										
Production of low value and high volume crops	02	35	09	44	07	03	10	51	12	63
Export potential vegetables	01	24	-	24	04	-	04	28	04	32
Total (a)	3	59	9	68	11	3	14	79	16	95
b) Fruits										
Layout and Management of Orchards	03	54	13	67	12	03	15	66	16	82
Cultivation of Fruit	03	51	09	60	10	04	14	61	13	74
Management of young plants/orchards	01	24	-	24	11	-	11	35	-	35
Total (b)	7	129	22	151	33	7	40	162	29	191
d) Plantation crops										
Processing and value addition	03	28	24	52	03	01	04	31	25	56
Total (d)	03	28	24	52	03	01	04	31	25	56
f) Spices										
Production and Management technology	01	23	-	23	04	-	04	27	-	27
Total (f)	01	23	-	23	04	-	04	27	-	27
IV Livestock Production and Management										
Dairy Management	01	12	04	16	07	02	09	19	06	25
Poultry Management	01	15	03	18	12	05	17	27	08	35
Piggery Management	--	--	--	--	--	--	--	--	--	--
Rabbit Management	--	--	--	--	--	--	--	--	--	--
Animal Nutrition Management	02	53	11	64	11	05	16	64	16	80
Disease	02	62	18	80	08	04	12	70	22	92

Management										
Feed & fodder technology	01	18	03	21	03	01	04	21	04	25
Production of quality animal products	--	--	--	--	--	--	--	--	--	--
Others (pl specify)Management of Quail chicks	--	--	--	--	--	--	--	--	--	--
Total	07	160	39	199	41	17	58	201	56	257
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	04	02	97	99	02	22	24	04	119	123
Location specific drudgery reduction technologies	01	00	16	16	00	04	04	00	20	20
Women and child care	03	49	39	88	09	15	24	58	54	112
Total	8	51	152	203	11	41	52	62	193	255
VII Plant Protection										
Integrated Pest Management	18	27	14	41	8	5	13	35	19	54
Integrated Disease Management	02	37	00	37	12	00	12	49	00	49
Total	20	64	14	78	20	5	25	84	19	103
XI Agro-forestry										
PMFBY Insurance Scheme and its Importance	03	225	40	265	35	15	50	260	55	315
Awareness about New Government Scheme for Rural Youth	02	50	10	60	05	05	10	55	15	70
Communication Skill for effective Transfer of Technology	02	65	15	80	25	15	40	90	30	120
Total	7	340	65	405	65	35	100	405	100	505
GRAND TOTAL	104	2726	615	3341	528	255	777	3221	914	4137

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	4	235	10	245	40	5	45	275	15	290
Resource Conservation Technologies	2	75	0	75	15	0	15	90	0	90
Cropping Systems	1	110	10	120	17	10	27	127	20	147
Crop Diversification	2	135	15	150	17	10	27	152	25	177
Integrated Farming	4	192	45	237	30	25	55	222	70	292
Micro Irrigation/irrigation	2	55	15	70	10	9	19	65	24	89
Seed production	10	702	50	752	40	0	40	742	50	792
Total	25	1504	145	1649	169	59	228	1673	204	1877
II Horticulture										
a) Vegetable Crops										
a) Vegetable Crops	2	35	9	44	7	3	10	51	12	63
Off-season vegetables	1	21	5	26	2	0	2	23	5	28
Protective cultivation	1	24	0	24	4	0	4	28	4	32
Others (pl specify)	1	21	1	22	3	0	3	24	1	25
Total (a)										
b) Fruits	5	95	18	113	20	7	27	111	25	136
Layout and Management of Orchards	4	72	9	81	15	4	19	85	13	98
Cultivation of Fruit	1	24	0	24	11	0	11	35	0	35
Total (b)										
d) Plantation crops	1	23	0	23	4	0	4	27	0	27
Processing and value addition	6	33	39	90	7	4	11	58	43	101
Total	22	348	81	447	73	18	91	442	103	545
IV Livestock Production and Management										
Dairy Management	05	73	11	84	18	05	23	91	16	107
Poultry Management	02	20	03	23	20	09	29	40	12	52

Piggery Management	--	--	--	--	--	--	--	--	--	--
Rabbit Management	--	--	--	--	--	--	--	--	--	--
Animal Nutrition Management	04	87	16	103	21	09	30	108	25	133
Disease Management	06	145	35	180	30	12	42	175	47	222
Feed & fodder technology	03	47	10	57	07	03	10	54	13	67
Total	20	372	75	447	96	38	134	468	113	581
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	06	04	134	138	02	37	39	06	171	177
Design and development of low/minimum cost diet										
Gender mainstreaming through SHGs	01	00	13	13	00	14	14	00	27	27
Storage loss minimization techniques	01	--	10	10	--	01	01	00	11	11
Value addition										
Women empowerment	02	02	34	36	01	07	08	03	41	44
Location specific drudgery reduction technologies	02	00	25	25	00	08	08	00	33	33
Women and child care	03	49	39	88	09	15	24	58	54	112
Total	15	55	255	310	12	82	94	67	337	404
VII Plant Protection										
Integrated Pest Management	23	149	45	194	23	18	41	172	63	235
Integrated Disease Management	02	37	00	37	12	00	12	49	00	49
Bio-control of pests and diseases	01	28	02	30	14	02	16	42	4	46
Production of bio control agents and bio pesticides										
Others (pl specify)										
Total	26	214	47	261	49	20	69	263	67	330
X Capacity Building and Group Dynamics										
Leadership development	05	135	25	160	45	20	65	180	45	225
Group dynamics	03	55	17	72	15	9	24	70	26	96
Formation and Management of SHGs	05	155	45	200	25	10	35	170	55	225
Mobilization of social capital	05	110	35	145	25	10	35	135	45	180
Entrepreneurial development of farmers/youths	02	24	06	30	10	05	15	34	11	45
WTO and IPR issues										
Others (pl specify)										
Awareness of Crop Management	02	67	7	74	7	5	12	74	12	86
Fodder and Feed Management Awareness	02	76	-	76	15	-	15	76	15	91
Awareness of Natural Resource Management	03	58	12	70	05	7	12	63	19	82
Resource Conservation Technology	02	67	06	73	12	10	22	79	16	95
Total	29	747	153	900	159	76	235	881	244	1125
PMFBY Insurance Scheme and its Importance	03	225	40	265	35	15	50	260	55	315
Awareness about New Government Scheme for Rural Youth	02	50	10	60	05	05	10	55	15	70
Communication Skill for effective Transfer of Technology	02	65	15	80	25	15	40	90	30	120
Total	7	340	65	405	65	35	100	405	100	505
GRAND TOTAL	144	3580	821	4419	623	328	951	4199	1168	5367

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	01	18	04	22	03	02	05	21	06	27
Commercial fruit production	01	20	04	24	04	02	06	24	06	30
Integrated farming	02	43	08	51	07	03	10	50	11	61

Planting material production	01	23	04	27	03	03	06	26	07	33
Vermi-culture	02	50	32	82	13	11	24	63	43	106
Mushroom Production	10	134	55	189	29	15	44	163	70	233
Value addition	05	14	16	58	04	23	27	46	39	85
Small scale processing	08	107	80	187	23	10	33	130	190	320
Post Harvest Technology	08	110	55	165	25	20	40	135	75	210
Extension Management in Agriculture	02	50	10	60	15	07	22	65	17	82
Market Type and market Management	02	40	15	55	15	9	24	55	24	79
Small Agri. Bussiness Management	01	30	15	45	05	05	10	35	20	55
Future Agriculture Commodities Trading Techniques	01	25	07	32	--	--	--	25	07	32
House hold food security by Kitchen Gardening and Nutritional gardening	01	-	21	21	-	04	04	-	25	25
Location specific drudgery reduction technology	01	-	19	19	-	06	06	-	25	25
TOTAL	46	664	345	1009	146	120	266	810	465	1275

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Seed production	03	76	25	101	15	07	22	91	32	123
Vermi-culture	02	50	10	60	15	10	25	65	20	85
TOTAL	5	126	35	161	30	17	47	156	52	208

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	01	18	04	22	03	02	05	21	06	27
Commercial fruit production	01	20	04	24	04	02	06	24	06	30
Integrated farming	02	43	08	51	07	03	10	50	11	61
Seed production	03	76	25	101	15	07	22	91	32	123
Production of organic inputs										
Planting material production	01	23	04	27	03	03	06	26	07	33
Vermi-culture	04	100	42	142	28	21	49	128	63	191
Mushroom Production	10	134	55	189	29	15	44	163	70	233
Value addition	05	14	16	58	04	23	27	46	39	85
Small scale processing	08	107	80	187	23	10	33	130	190	320
Post Harvest Technology	08	110	55	165	25	20	40	135	75	210
Sheep and goat rearing	2	28	03	31	05	03	08	33	06	39
House hold food security by Kitchen Gardening and Nutritional gardening	01	-	21	21	-	04	04	-	25	25
Location specific drudgery reduction technology	01	-	19	19	-	06	06	-	25	25
Total	51	790	380	1170	176	136	312	966	516	1483

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Integrated Pest Management	03	102	00	102	22	00	22	124	00	124
Integrated Nutrient management	01	26	02	28	03	03	06	31	05	36

Processing and value addition	08	110	55	165	25	20	40	135	75	210
Others (pl. specify)										
Total	08	110	55	165	25	20	40	135	75	210
Farm machinery										
Livestock and fisheries										
Livestock production and management	01	--	--	--	--	08	08	--	08	08
Animal Disease Management	06	53	22	75	202	153	355	255	175	430
Total	07	53	22	75	202	161	363	255	183	438
Home Science										
Household nutritional security	01	--	21	21	--	04	04	--	25	25
Drudgery reduction of women	01	--	19	19	--	06	06	--	25	25
Mushroom Production	02	33	03	36	08	01	09	41	04	45
Total	04	33	43	76	8	11	19	41	54	95
Agricultural Extension										
CapacityBuilding and Group Dynamics	16	510	210	720	50	20	70	560	230	790
Total	16	510	210	720	50	20	70	560	230	790
GRAND TOTAL	38	839	344	1183	311	215	521	1150	559	1709

Details of vocational training programmes carried out by KVKs for rural youth

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management										
Commercial floriculture										
Commercial fruit production	01	20	04	24	04	02	06	24	06	30
Commercial vegetable production	02	43	08	51	07	03	10	50	11	61
Total	03	63	12	75	11	05	16	74	17	91
Post harvest technology and value addition										
Value addition	08	110	55	165	25	20	40	135	75	210
Total	08	110	55	165	25	20	40	135	75	210
Livestock and fisheries										
Dairy farming	08	102	39	141	64	19	83	166	58	224
Poultry farming	08	158	05	163	49	11	60	207	16	223
Total										
Income generation activities										
Mushroom cultivation	08	101	52	153	21	14	35	122	66	188
Total	08	101	52	153	21	14	35	122	66	188
Grand Total	35	534	163	697	170	69	234	704	232	936

3.5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services (Other than KMAS)	64	235	15	250
Diagnostic visits	09	76	07	83
Field Day	08	498	08	506
Field Day	02	188	03	191
Group discussions	0	0	0	0
Kisan Ghosthi	05	125	06	131
Film Show	0	0	0	0
Self -help groups	0	0	0	0
Kisan Mela	01	449	05	454
Exhibition	05	12750	10	12760

Scientists' visit to farmers field	13	82	03	85
Plant/animal health camps	01	63	00	63
Farm Science Club	0	0	0	0
Ex-trainees Sammelan	0	0	0	0
Farmers' seminar/workshop	02	210	03	213
Method Demonstrations	03	127	03	130
Celebration of important days	04	358	17	375
Special day celebration	02	465	27	492
Exposure visits	01	50	02	52
Sankalpa Yatra	40	2870	120	2990
Total	160	18546	229	18775

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

Details of other extension programmes:

Particulars	Number
Electronic Media (CD./DVD)	05
Extension Literature	05
Newspaper coverage	32
Popular articles	04
Radio Talks	21
TV Talks	00
Animal health camps (Number of animals treated)	210
Social Media (No. of platforms Used)	05
Others (pl. specify)	
Total	282

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				
	Total				
B	Farmers scientist's interaction programme				
	Total				
C	Farmers seminars				
	Total				
D	Expert lectures				
	Total				
E					

1	Meetings	Webex	Meeting on Natural Farming Cropsap	2	30
2		Zoom	SREP Preparation	1	35
3		Zoom	Kisan Sarathi Portal	15	356
		Google Meet	Seed Hub Pulses	05	86
		Zoom	PMFME Review Meeting	07	56
		Google Meet	KVK with ATARI	04	65
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						
	Wheat	PDKV, Sardar, WHM-1472		18	63000	27
Oilseeds						
	Soybean	PDKV-AMBA, KDS-992, KDS-726, KDS-753, MAUS-612, Suvarna Soya		116	928000	74
Pulses	Chickpea	RVG-204, RVG-203, RVG-202, Phule Vishwaraj, Phule Vikrant, Phule Vikram		42	336000	38
	Pigeonpea	BDN-716, PDKV Ashlesha		6	120000	104
Commercial crops						
	Cotton	Armita 2778		12.05	82500	48
Vegetables						
	Onion	Akola Safed		3.5	420000	32
Flower crops						
	Marigold	Ladu		35	87500	26
Spices						
	Turmeric	Selam, Pragati		31	143000	57
Fodder crop seeds						
	Hybrid Napier	DHN-10		180	160000	88
Total				444.55	2340000	494

Production of planting materials by the KVK

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Fruits	Orange	Nagpur Orange		846	14212	11
	Custard Apple	Balanagar		557	21060	23
	Kagzi Lime	Sai sarbati		1856	98350	13
	Mango	Keshar, Dasher		1136	102240	19
Ornamental plants		Royal Palm		10	2565	04
Total				4405	238427	70

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity	Value (Rs.)	No. of Farmers
		Kg/Lit		
Bio-Fertilizers	Azotobactor	1044 ltr.	3,65,400	
	Rhizobium Sp.	927.25 ltr.	3,24,538	
	P.S.B	1682.75 ltr.	5,88,963	
	K.S.B	401 ltr.	1,40,350	
	Liquid Cosortia	650 ltr.	2,73,000	
	Decomposer	1610 ltr.	80,500	
Bio-Fungicides	Trichoderma Sp.	35 tones	35,00,000	
Bio-Pesticides	Neem 1500PPM	751 ltr.	4,13,050	
	Neem 10000PPM	246 ltr.	2,19,000	
	Neem Power	1425 ltr.	14,82,000	
Total		7188	7386801	

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/Ton)	Quantity (Avg)	Value (Rs.)	No. of Farmers
Dairy animals							
Cows	03	Local					
Buffaloes	27	Murrah, Jaffarabad iNagpuri	Milk	Lit	38000	2200000	35
Calves	16						
FYM			FYM	Tonne	70	210000	Utilised on Farm
Goat	17	Local Non Discript	Finishers Stock	No.	12	32000	5 reared
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	Citation/ Title	Authors name	Number
Popular articles	IPM	Dr. K. P. SINGH	
	Natural Farming	Dr. H. V Thakur	
Extension literature	Cultivation Practices of Soybean	Dr. H. V Thakur	500
	Production Technology of Gram	Dr. H. V Thakur	500
	Biofungus Trichoderma	Dr. K. P. SINGH	5000
	Bifertiliser Production	Dr. K. P. SINGH	1000
	Shade Net Cultiavation	Mr. P. H. Mahalle	500
	Fruit & Vegetable Processing	Mr. R. S. Ghogare	500
	Mushroom Cultivation	Dr. A. N. Kakade	1000
	FPO/FPC Formation	Mr. P. S. Jayale	500
	Importance of ICT in Agriculture	Mrs. A. C. Yeotikar	500
	Foot & Mouth Disease in Animal	Mr. M. W. Akhud	500
	Seed Production Technology of Pigeonpea	Dr. H. V Thakur	1000
	Importance of Agro Weather Advisory	Dr. Sachin Mundhe	5000
	Soil Test Based Nutrient Application	Dr. H. V Thakur	1000
Nursery Management in Citrus	Mr. P. H. Mahalle	1000	
Cultivation Practices of Tomato	Mr. P. H. Mahalle	500	
Cultivation Practices of Chilly	Mr. P. H. Mahalle	500	
TOTAL			19500

D. Details of Social Media Platforms Created / Used

S. No.	Type of social media platform	No of events (uploaded video/post/story etc.	Title of social media	Number of Followers/ Subscribers
1	YouTube Channel (no of video uploaded)	22	KVK Durgapur/DAMU	
2	Facebook page/ Account (no of Post)	04	KVK Durgapur	
3	Mobile Apps	00		
4	WhatsApp groups	275		
5	Twitter Account	01	KVK Durgapur	
6	Any other (Pl. Specify)			

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).

KRISHI VIGYAN KENDRA, DURGAPUR (BADNERA), AMRAVATI

Sr. No.	Particulars	Details
1	Name of Farmer	Mr. Mukund Tukaram Kolamkar
2	Village, T q & District	Umri Itbarpur Tq: Daryapur Dist Amravati
3	Date of Birth & Age	26/05/1984&38
4	Education	BA
5	Mobile No	9370955939
6	Land holding	2.00 ha
7	Subsidiary Occupation	Doing additional 7 ha land on rent basis
8	Notable Work in agriculture	Irrigation with the help of Drip irrigation system in Saline Tract Fruit plantation on all the borders of field Host farmer for the training Early adoption of new technology Promoter of zero tillage cultivation Water melon production on mulching
9	List of Awards	Rajyastariya Pik Spardha puraskar 2020-21 for highest production of Chick Pea Syngenta best innovative farmer award
10	Involvement in ToT activities	Create Awareness among the farm women's regarding adoption of new technology. As a Host farmer for farmers training, it is very much helpful for ToT in easy way
11	Annual Turnover	10-12 Lakh
12	Employment generation	30 man days work for 2 women per month
13	Any Other relevant Information	Getting Training From Krishi Vigyan Kendra Durgapur of INM, IPM and Fruit cultivation KVK CFLDs demonstration conducted on the field of Umri Itbarpur



Watermelon plantation on mulching



Shetmauli Raswanti Additional Enterprises

syngenta

सन्मानपत्र
सन २०२१-२०२२

मा. श्री. मुकुंद तुकारामजी कोळमकर
गाव : विहीगाव

आपण खरीप २०२१ चीक हंगामात सिजेन्ट इंडिया प्रा. लिमिटेड, च्या पीक संरक्षण कार्यक्रमाचा अवलंब करून दर्जेदार व अधिक उत्पादन प्राप्त केले आहे. तसेच या कार्यक्रमाची माहिती आपल्या जवळील शेतकरी बांधवांना देऊन त्यांना दर्जेदार व अधिक उत्पादन घेण्यासाठी प्रोत्साहित करित आहाम.

आपल्या या सहभागासाठी आणि उत्कृष्ट सहकार्याबद्दल आम्ही हे सन्मानपत्र देऊन आपणास सन्मानित करीत आहोत.

शैलेश इंदुलकर (विभागीय प्रबंधक)
विनोद ठाकरे (विभागीय विपणन प्रबंधक)
उज्ज्वल काकर (स्यवसाय प्रबंधक)

महाराष्ट्र शासन
कृषि विभाग

सन्मानपत्र

रब्बी हंगाम २०२०-२१
राज्यस्तरीय पिक स्पर्धा विजेते

श्री./ श्रीमती मुकुंद तुकाराम कोळमकर
गाव - उमरी इत. तालुका - दर्यापूर जिल्हा - अमरावती
पिक - हरभरा
हेक्टर ३३ किं. ०० किलो
एवढे उच्चांकी उत्पादन घेऊन सर्वसाधारण/ आदिवासी गटात
तालुकास्तर क्रमांक २
मिळविल्याबद्दल हे प्रशस्तीपत्र देऊन आपला सन्मान करण्यात येत आहे.

ठिकाण :
दिनांक : १ जुलै २०२१

जिल्हा अधिकांक कृषी अधिकारी
अमरावती

KRISHI VIGYAN KENDRA, DURGAPUR (BADNERA), AMRAVATI

Sr. No.	Particulars	Details
1	Name of Farmer	Mr. Sachin Devidasrao Wankhade
2	Village, Tq & District	Village: Adgaon Tq: Morshi Dist: Amravati
3	Date of Birth & Age	13/06/1985 & 37
4	Education	BA ATD & Animation Film making
5	Mobile No	8104167287
6	Land holding	7 ha
7	Subsidiary Occupation	Farming and Moringa Processing
8	Notable Work in agriculture	Successful Moringa Processing Entrepreneur Developed organic farm
9	List of Awards	
10	Involvement in ToT activities	Giving Training to the farmers for organic farming and moringa cultivation.
11	Annual Turnover	02-04 Lakh
12	Employment generation	Giving employment to 3-4 peoples
13	Any Other relevant Information	Technical guidance From Krishi Vigyan Kendra Durgapur




KRISHI VIGYAN KENDRA, DURGAPUR (BADNERA), AMRAVATI

Sr. No.	Particulars	Details
1	Name of Farmer	Mrs. Kiran Vasudevrao Lohakare
2	Village, Tq & District	Village: Loni Tq: Nandgaon Kh. Dist: Amravati
3	Date of Birth & Age	17/04/1975 & 47
4	Education	BA
5	Mobile No	9158966463
6	Land holding	1.5 ha
7	Subsidiary Occupation	Farming, Khandu chikka oil and powder processing Masala udyog and dehydration of vegetables
8	Notable Work in agriculture	Developed Khandu chakka oil and powder
9	List of Awards	Innovation Award Taluka Level Innovation Award District Level Hirkani Award ITC Mission – Sunhara Kal by BIAF
10	Involvement in ToT activities	Giving Training to the farmers for Jivamrut, Dashaparni Ark and other organic inputs
11	Annual Turnover	1-2 Lakh
12	Employment generation	Giving employment to 5-6 womens
13	Any Other relevant Information	Technical guidance From Krishi Vigyan Kendra Durgapur




1. Shri. Mukund Kolamkar from Village: Umari (Etbarpur), Taluka: Daryapur, District: Amravati, Maharashtra.

Name of farmer	Shri Mukund Tukaramji Kolamkar	
Address	Village: Umari (Etbarpur), Taluka: Daryapur, District: Amravati, Maharashtra.	
Age	45 Years	
Education	Graduated	
Landholding	5 acres	
Area under Project	2.5 acre	
Source of Irrigation	Borewell	
Guidance received from implementing centre	Krishi Vigyan Kendra, Durgapur (Badnera), Dist. Amravati.	
Yield (qt/ha)	50.85 Qtl Approximate	
Yield in non CS field (qt/ha)	36.25 Qtl Approximate	

Shri. Mukund Kolamkar is a resident of Umari Village, Daryapur Taluka, Amravati Dist. He associated with farming for last 18 years, owned 5 acres land under rainfed and irrigated condition and witnessed reduction in yield of Bt cotton due to infestation of pink bollworm since last 2 to 3 years. During 2019-20, he cultivated cotton over 2.5 acres area and incurred crop losses due to the heavy infestation of pink bollworm which caused 50 to 60% of crop loss. The cost of cultivation increased and the margin of profit was very low. During 2023-24, he cultivated cotton crop over same area with technical guidance and motivation from Scientists of KVK, Durgapur, Amravati. He got the opportunity to participate in the cotton pilot project: **Targeting technologies to agro-ecological zones- large scale demonstrations of best practices to enhance cotton productivity**. Under the project, KVK staff regularly provided the guidance during entire season, training and participatory field visits and Field Day Program. He followed the strategies such as installation of pheromone traps, spraying of Chamtkar (Mepiquat Chloride), ETL based spraying of pesticides, IPM practices etc. With the implementation of strategies included in CS as compared to non-CS farmers, he gained approximate 37.99% more yield, reduction of 02 sprays and BC ratio 2.81:1.

2. Shri. Shekhar Ramkrusna Chavne from Village: Gholchindi, Taluka: Daryapur, District: Amravati, Maharashtra.

Name of farmer	Shri Shekhar Ramkrusna Chavne	
Address	Village: Gholchindi, Taluka: Daryapur, District: Amravati, Maharashtra.	
Age	41 Years	
Education	Graduated	
Landholding	3 acre	
Area under Project	3 acre	
Source of Irrigation	Irrigated	
Guidance received from implementing centre	Krishi Vigyan Kendra, Durgapur (Badnera), Dist. Amravati.	
Yield (qt/ha)	28.50 Qtl Approximate	
Yield in non-CS field (qt/ha)	20.75 Qtl Approximate	

Shri. Shekhar R Chavne is a resident of Gholchindi Village, Daryapur Taluka, Amravati Dist. He associated with farming for last 20 years, owned 3 acres land under rainfed and Irrigation Condition and witnessed reduction in yield of Bt cotton due to infestation of pink bollworm since last 3 to 4 years. During 2017-21, he cultivated cotton over 3 acres area and incurred crop losses due to the heavy infestation of pink bollworm which caused 60 to 70% of crop loss. The cost of cultivation increased and the margin of profit was very low. During 2023-24, he cultivated cotton crop over same area with technical guidance and motivation from Scientists of KVK, Durgapur, Amravati. He got the opportunity to participate in the cotton pilot project: **Targeting technologies to agro-ecological zones- large scale demonstrations of best practices to enhance cotton productivity**. Under the project, KVK staff regularly provided the guidance during entire season, training and participatory field visits. He followed the strategies such as installation of pheromone traps, spraying of Chamtkar (Mepiquat Chloride), ETL based spraying of pesticides, IPM practices etc. With the implementation of strategies included in CS as compared to non-CS farmers, he gained approximate 37.34 % more yield, reduction of 02sprays and BC ratio 2.81:1.

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

- Mass Use of Pheromone Traps for the control of *Helicoverpa* in Chickpea.
- Upgradation of local goats by Osmanabadi bucks.
- Low cost module for Rain Water Harvesting.
- Low cost Sustainable dry land agriculture.
- Biopesticide production & its application.
- Liquid biofertiliser technology.
- Preparation of Ambadi Sharbat.
- Enrichment of wheat straw by urea treatment.
- Introduction of Galardia in floriculture.
- Preparation of Beejamrut & Jeevamrut as a ITK

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
1	Cotton	Cotton seed with 304 seeds of green gram	Green manuring
2	Grain Storage	Use of Neem leaf 10:1 kg	Control of Store grain pest
3	Cotton	Use of ash	Control of Sucking pest
4	Agril Crop	Neem seed extract + cow urine	Control pest in cotton
5	Organic Farming	Use of soil of Banyan Tree	For providing nutrients
6	Dairy Management	Local application of crude extract of annona sqvamesalinn (sitaphal) leaves with white petroleum jelly on alternate day till the complete recovery without any side effect.(NO untoward reaction)	Evaluated against natural infections of sarcoptic mange caused by sarcoptes scabiei which is highly contagious and debilitating disease and posses a threat to animal health. The efficacy was ascertained on the basis of clinical improvement and disappearance of mites in skin scraping.
7	Field crops	Seed treatment with beejamrut & jeevamrut	To increase the microbes & germination percentage
8	Field Crops & Horticultural Crops	Spraying of Dashparni	To avoid infestation of sucking pest.

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

A. Practicing Farmers

- PRA
- Problem identified from Matrix
- Field level observations
- Farmer group discussions

B. Rural Youth

- PRA
- Problem identified from Matrix
- Field level observations
- Farmer group discussions

C. In-service personnel

- PRA
- Problem identified from Matrix
- Field level observations
- Farmer group discussions

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) –Daryapur, Bhatkuli, Morshi, Amravati, NandgaonKh., Anjangaon Surji
- ii. No. of farm families selected per village : 100 adopted, 100 Non adopted
- iii. No. of survey/PRA conducted :03
- iv. No. of technologies taken to the adopted villages-07
- v. Name of the technologies found suitable by the farmers of the adopted villages:
1. Seed Production, 2. FPOs, 3. Use of Bioagents, 4.Natural Seed Production,5. INM, 6. Soil Test Based Fertiliser Management, 7. Lumpy disease & its Management
- 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 organization	Nature of linkage
Dr. P.D.K.V., Akola	Joint Implementation of FLD, Participation in meeting,
S.G.B. Amravati University	Training & Technical Guidance
District Rural Development Agency.	Joint Implementation of Soil moisture conservation technique, Women SHG Agro based trainings
State Department of Agriculture	Joint implementation of training programme, demonstration and database information.
M.C.A.E.R., Pune	FSN Project
Regional Bio fertilizer Development Centre, Nagpur	Technical guidance, demonstration of bio fertilizers.
C.I.C.R. Nagpur	Technical guidance & HDPS Cotton Project
N.R.C.C. Nagpur	Technical guidance
I.I.P.R., Kanpur	Seed Hub (Seed Processing Plant)
Y.C.M.O.U., Nashik	Agriculture study centre at KVK, Joint implementation.
ATMA, Amravati	Joint implementation of projects. & Natural Farming
RRC, Amravati	Technical Collaboration
Department of Biotechnology, New Delhi	DBT Project, Mushroom Project
RAMETI, Amravati	Technical training
Municipal Corporation, Amravati	Dissemination of technology for the control of Pyrrhenum spp.
National Bank for Agriculture & Rural Development (NABARD)	Group formation at village level
Vidyabharati College of Pharmacy, Amravati	Food testing lab technical guidance
State Government department of Animal husbandry	Training
Maharashtra Animal and fishery science University, Nagpur	Demonstration and technical guidance
Nagpur veterinary college, Nagpur	Demonstration and technical guidance
Maharashtra shedhi Vikas Mahamandal , Pohara	Technical guidance
National Horticulture Mission	Technical & Financial Assistance
Rashtriya Krishi Vikas Yojna	Financial Assistance
MANAGE, Hyderabad	Technical & Financial assistance
I& B, Ministry of Agriculture through ATMA	Community Radio Station
NIPHM, Hyderabad	Technical Guidance for Biofertiliser & Biopesticide residue
National Skill Development Corporation	Financial Assistant
NCIPM, New Delhi	Technical guidance for pest surveillance & pest management
IMD, Pune	DAMU Project
UMED - MSRLM	Product Development & Training
MCED	Training
MCDC	Training

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.)

C. Details of linkage with ATMA

a) Is ATMA implemented in your district Yes/No

If yes, role of KVK in preparation 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	Planning of Millet Processing Exhibition	01	00	07
02	Research projects				
03	Training programmes	02	00	02	47
04	Demonstrations				
05	Extension Programmes				
	Mahila Kisan Diwas	Mahila Kisan Diwas	17	01	45
06	Publications				
07	Other Activities (Pl.specify)				

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:

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

Period of observing Technology Week: From 15.10.2023 to 17.10.2023

Online / Offline: Offlines

Total number of farmers visited : 2931

Total number of agencies involved : 2

Number of demonstrations visited by the farmers within KVK campus: 9

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies	3	69	Soybean, Cotton, Dairy Management
Lectures organized	7	320	Production Technology, Disease Management
Exhibition	01	410	Technology Intervention
Film show	00	00	
Fair	00	00	
Farm Visit	03	547	Technology Intervention
Diagnostic Practical's	09	340	Technology Intervention
Supply of Literature (No.)	03	1210	Need Based Technology Intervention
Supply of Seed (q)	120	45	Certified Seed
Supply of Planting materials (No.)	710	25	Mango, Sapota, Citrus
Bio Product supply (Kg)	1200	250	Awla Candy, Amla Juice, Powder
Bio Fertilizers (q)	520	55	Trichoderma, Azotobactor, PSB, Rhizobium
Supply of fingerlings	00	00	
Supply of Livestock specimen (No.)	00	00	
Total number of farmers visited the technology week	05	2931	Technology Intervention

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
Total			

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)
Protective Cultivation of Vegetables in Shadenet	20 (20)	16.66	6500	40000
Introduction of Onion Variety Akola Safed	350 (88)	25.14	15000	23600
Introduction of Citrus Special	100(19)	19.00	20100	27000

Micronutrient				
Use of Growth regulator for control of Fruit Drop	267 (62)	23.22	18700	25000
Intercropping of Black Gram in cotton	150 (25)	16.66		
Limited Irrigation for Wheat Production	70 (18)	25.71		
Vegetable Production of BBF for Mulching	250 (69)	27.06		
Use of BBF for Cotton ill drained soil	400 (131)	32.75		
Production of Mandaring orange planting material in Polyethen Bag	50 (3)	6.00	200000	300000
Orange Proecessing	200	13.5	10	50
Aonla Processing	50	34.00	8	40
Dev Ambadi Processing	33	18.18	200	700
Wheat Processing	20	40.00		40
Dal Making	80	15.00		100
Use of Azola in animal feed	10			
Yashwant a Year round Green Fodder	150 (15)	10.00		
Upgradation of local goats by Usmanabadi	120 (120)	16.66	5600	6000
Giriraj Bird for Backyard Poultry	350 (50)	14.28	400	1000
Green Fodder cultivation by Hydraponic	15 (1)	6.66		
Enrichment of wheat straw by urea treatment	110 (12)	10.90		
Use of Liquid Bio Fertilizer in Chikpea	540 (89)	16.48	24000	26400
Use of <i>Tricoderma</i> as a seed treatment for the control of Fusarium in chickpea	600 (108)	18.00	Nil	1800
Use of <i>Beuveria bassina</i> for the control of defoliators in soybean	187 (41)	21.92	Nil	2500
Soybean Floor making	410	37.00	--	1200
Soybean Tofu Making	410 (18)	28.00	--	1000
Application of Fertilizer on the Basis of Soil Test based	500	25.50	24000	26500
Application of Micronutrient on basis of Soil Analysis	500	22.00	10000	11200
Seed Production technology for pulses Crop	250	9.00	24000	28800
Farm Bunding	127	12.05	--	2450
Insitu Soil Moisture Conservation	324	18.00	--	6500
Mushroom Cultivation	37	20.00	--	2200

**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	38	36548	03
Feb 2023	26	23568	04
March 2023	13	65780	02
April 2023	15	23854	03
May 2023	09	27850	05
Jun 2023	135	45750	53
Jul 2023	08	25860	03
Aug 2023	13	32684	04
Sept 2023	12	51250	03
Oct 2023	07	26780	02
Nov. 2023	17	37860	05
Dec. 2023	09	136589	03
Total	302	534373	40

Cotton	10.06.2022	15.01.2023	0.60	Armita-2778	Lint	12.5	27000	82500	
Spices & Plantation crops									
Floriculture									
Marigold	02.07.23	22.10.23	0.40	Ladu	Flower	35	26000	87500	
Fruits									
Mango	02.07.1998	29.04.2023	0.60	Dasherri	Fruit	18	32000	108000	
Sapota	07.07.2000	05.04.2023	0.80	Kalipatti	Fruit	11	12000	66000	
Guava	02.07.2002	04.12.2022	1.00	L-49	Fruit	4	8000	25000	
Vegetables									
Leafy Vegetables	22.10.2023	04.12.2023	0.40	Dinkar Kasuri	Leafy Vegetables		9000	27000	
Others (specify)									
Onion	28.10.2022	04.04.2023	0.80	Akola Safed	Seed	3.5	60000	420000	
Turmeric	08.06.2022	12.03.2023	0.60	Selam, Pragati	Dry Fingers	31	53000	143000	

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

Sl. No.	Bio Products	Name of the Product	Qty (kg/lit)	Amount (Rs.)		Remarks
				Cost of inputs	Gross income	
	Bio-Fertilizers	Azotobactor	1044 ltr.	109620	3,65,400.00	
		Rhizobium Sp.	927.25ltr.	97361.4	3,24,538.00	
		P.S.B	1682.75ltr.	176688.9	5,88,963.00	
		K.S.B	401ltr.	42105	1,40,350.00	
		Liquid Cosortia	650 ltr.	81900	2,73,000.00	
		Decomposer	1610ltr.	24150	80,500.00	
	Bio-Fungicides	Trichoderma Sp.	35 tones	1050000	35,00,000.00	
	Bio-Pesticides	Neem 1500PPM	751 ltr.	123915	4,13,050.00	
		Neem 10000PPM	246 ltr.	65700	2,19,000.00	
		Neem Power	1425 ltr.	444600	14,82,000.00	

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	
01	Buffalo	Murrah, Nagpuri, Jaffarabadi	Milk & FYM	38000 lit & 70 Tonnes	1400000	2400000	Yielded Calves 16 FYM Utilised on Farm
02	Goat	Local	Finisher Stock	17	18000	32000	5 reared on farm

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	18	18	
February 2023	20	18	
March 2023	46	21	
April 2023	00	00	No Residential Training Conducted
May 2023	00	00	
June 2023	00	00	
July 2023	27	02	
August 2023	00	00	No Residential Training

17. FINANCIAL PERFORMANCE

A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute	Bank of Baroda	Amravati	DBMIDC	SHRAM SADHANA AMRAVATI	73310100015874	444012106	BARB0DBMIDC
With KVK	Bank of Baroda	Amravati	DBMIDC	Sadhana Krushi Vigyan Kendra	73310100015316	444012106	BARB0DBMIDC

B. Utilization of KVK funds during the year 2023-24 (Rs. in lakh) (Till Dec, 2023)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	20650000	16662000	17098880
2	Traveling allowances			124735
3	Contingencies			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)			26047
B	POL, repair of vehicles, tractor and Equipments			356411
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)			106841
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	1700000	1205000	10437
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			15000
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			35100
G	Training of extension functionaries			00
H	Maintenance of buildings			51640
I	Establishment of Soil, Plant & Water Testing Laboratory			0
J	Library			0
TOTAL (A)		22350000	17867000	17825091
B. Non-Recurring Contingencies				
1	Works	0	0	0
2	Equipments including SWTL & Furniture	0	0	0
3	Vehicle (Four wheeler/Two wheeler, please specify)	0	0	0
4	Library (Purchase of assets like books & journals)	0	0	0
TOTAL (B)		0	0	0
C. REVOLVING FUND		0	0	0
GRAND TOTAL (A+B+C)		22350000	17867000	17825091

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

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance in hand as on 1 st April of each year
April 2018 to March 2019	118.39	243.95	193.70	168.64
April 2019 to March 2020	168.64	194.34	227.80	135.18
April 2020 to March 2021	135.18	117.57	175.11	77.64
April 2021 to March, 2022	77.64	176.33	207.82	46.15
April 2022 to March 2023	46.15	298.54	226.91	117.78
April 2023 to March 2024	117.78	524.17	479.17	162.78

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
Mr. P. S. Jayale	SMS (Agri. Extension)	Good Agricultural Practices for Fruit Crops	IIM, Nagpur	Offline	03.01.2023 to 06.01.2023
Mr. P. S. Jayale	SMS (Agri. Extension)	Training on Natural Farming	YCMOU, Nashik	Offline	24.10.2023 to 25.10.2023
Mrs. Arti Varma	Prog. Asstt. (Computer)	Video production & Dissemination	Dr. PDKV, Akola	Offline	10.07.2023 to 12.07.2023
Mr. Rahul Ghogare	Prog. Asstt. (Food Tech)	Capacity Building Training	CIPHET, Ludhiyana	Offline	07..8.2023 ro 11.08.2023

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
01	Swachhata Pakhwada	02	345
02	Cleaning of KVK Campus	03	65
03	Awareness Workshops	02	321
04	Microbial Based Agricultural Waste Management by Vermicomposting	02	49

Sr. No	Name of KVK	Date	Activity	No of VIPs	No of Farmers	Others	Total
01	Amravati II	9.01.2023	Cleaning of KVK Campus	0	7	19	26
02	Amravati II	25.01.2023	Cleaning of KVK Campus	0	0	21	21
03	Amravati II	02.02.2023	Cleaning activity in Adopted Villages	2	42	5	49
04	Amravati II	15.02.2023	Vermicompost from Waste	02	23	4	29
05	Amravati II	05.03.2023	Cleaning of Office & Cabins	00	00	21	21
06	Amravati II	20.07.2023	Cleaning Activity & Awareness	0	25	5	30
07	Amravati II	09.08.2023	Cleaning Activity & Awareness	0	29	4	33
08	Amravati II	25.09.2023	Cleaning Activity & Awareness	0	37	3	40
09	Amravati II	16.10.2023	Vermicompost from Waste	00	55	5	60
10	Amravati II	14.11.2023	Cleaning Activity & Awareness	00	62	7	69
11	Amravati II	16.12.2023	Cleaning of KVK Campus	00	35	00	35

12	Amravati II	17.12.2023	<i>Awareness regarding Swacchata Activity</i>	00	42	00	42
13	Amravati II	18.12.2023	<i>Health & Hygiene</i>	00	65	0	65
14	Amravati II	19.12.2023	<i>Drainage Cleaning</i>	00	56	00	56
15	Amravati II	20.12.2023	<i>Agriculture Waste Management</i>	00	37	00	37
16	Amravati II	21.12.2023	<i>Production of Vermicompost</i>	00	55	00	55
17	Amravati II	22.12.2023	<i>Use of Vermicompost</i>	00	47	00	47
18	Amravati II	23.12.2023	Cleaning Activity & Awareness	00	00	30	00
19	Amravati II	24.12.2023	<i>Cleaning of KVK Campus</i>	00	61	00	61
20	Amravati II	25.12.2023	<i>Awareness regarding Swacchata Activity</i>	00	22	00	22
21	Amravati II	26.12.2023	Cleaning Activity & Awareness	00	25	02	27
22	Amravati II	27.12.2023	Vermicompost from Waste	00	38	00	38
23	Amravati II	28.12.2023	<i>Production of Vermicompost</i>	00	42	03	45
24	Amravati II	29.12.2023	Cleaning Activity & Awareness	00	70	00	70
25	Amravati II	30.12.2023	<i>Cleaning of KVK Campus</i>	00	40	00	40
26	Amravati II	31.12.2023	<i>Production of Vermicompost</i>	00	63	2	65

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	144	4199	1168	5367
Rural youths	51	966	516	1482
Extension functionaries	10	122	94	216
Sponsored Training	38	1150	559	1709
Vocational Training	35	704	232	936
Total				

2. Frontline demonstrations

Crops/Enterprise	No. of Farmers	Area(ha)	Units/Animals
Oilseeds	20	08	
Pulses	20	08	
Cereals	00	00	
Vegetables	10	02	
Other crops	10	02	
Hybrid crops	00	0	
Total	60	20	
Livestock & Fisheries	00	00	
Other enterprises	48	48	
Total	48	48	
Grand Total	108	68	

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	08	74	74
Livestock	00	00	00
Various enterprises	02	27	27
Total	10	101	101
Technology Refined			
Crops			
Livestock			
Various enterprises			
Total	00	00	00
Grand Total	10	101	101

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	160	18775
Other extension activities	282	00
Total	442	18775

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	
	Text only	96	15	132	12	22	25	302
	Voice only							
	Voice & Text both							
	Total Messages	96	15	132	12	22	25	302
	Total farmers Benefitted	114877	35658	276965	46785	36572	23516	534373

6. Seed & Planting Material Production

	Quintal/Number	Value (Rs.)
Seed (q)	444.55	2340000
Planting material (No.)	4405	238427
Bio-Products (kg)	7188	7386801
Livestock Production (No.)	00	00
Fishery production (No.)	00	00

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value (Rs.)
Soil-3729	3729	943770
Water-284	250	56800
Plant-12	11	11400
Other-23	23	52160
Total	4013	1064130

8. HRD and Publications

Sr. No.	Category	Number
1	Abstract	00
2	Workshops	02
3	Conferences	00
4	Meetings	12
5	Trainings for KVK officials	04
6	Visits of KVK officials	01
7	Book published	00
8	Training Manual	00
9	Book chapters	00
10	Booklet	00
11	Leaflets/ Folder/ Pamphlet	19500
12	Research papers	00
13	Technical Bulletin	00
14	Popular article	02
15	Lead papers	00
16	Seminar papers	00
17	Extension folder	00
18	Proceedings	00
19	Award & recognition	00
20	On-going research projects	00
21	Other	00

