ICAR-ATARI, Pune

DETAILS OF ANNUAL PROGRESS REPORT OF KVKs DURING 2021

(January 2021 to December 2021)

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	0721-2580606	--	pc_kvka@yahoo.co.in/ 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	0721-2580606	--	pc_kvka@ yahoo.co.in/ pckvkda2015@gmail. com	

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

Name	Telephone / Contact		
	Office	Mobile	Email
Dr. K. A. Dhapke	0721-2580606	9922410177	pc_kvka@yahoo.co.in/ pckvkda2015@gmail.com

1.4. Date and Year of sanction: 1995

1.5. Staff Position (as on December, 2021)

					If Permanent, Please indicate			If Temporary, pl. indicate the consolidated amount paid (Rs./month)
Sl. No.	**Sanctioned post**	**Name of the incumbent**	**Mobile No.**	**Discipline**	**Current Pay Band**	**Current Grade Pay**	**Date of joining**	
1.	Senior Scientist and Head	Dr. K. A. Dhapke	9922410177	Agril. Extn	131400-210200	204700	11.11.1997	
2.	Subject Matter Specialist	Sh. P. S. Jayale	9921333611	Agril. Extn.	56100-177500	104400	01.07.1996	
3.	Subject Matter Specialist	Dr. K. P. Singh	9637717818	Plant Protection	56100-177500	101400	21.09.1996	
4.	Subject Matter Specialist	Dr. Archana Kakade	9422830737	Home Science			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	87400	01.06.2018	
7.	Subject Matter Specialist	Vacant			56100-177500	61300		
8.	Programme Assistant	Shri. R. S. Ghogare	8275288938	Food Tech	35400-112400	46200	12.01.2012	
9.	Computer Programmer	Ms. Arti. C. Yeotikar	9689983095	Computer	35400-112400	52000	17.06.1997	
10.	Farm Manager	Vacant						
11.	Accountant/Superintendent	Sh. S. G. Deshmukh	7020660534	Commerce	35400-112400	72100	01.07.1996	
12.	Stenographer	Sh. S. C. Vaidya	9403533937	Commerce	25500-81100	37500	02.12.1996	
13.	Driver 1	Sh. D. G. Shekhawat			21700-69100	37200	01.07.1996	
14.	Driver 2	Sh. V. V. Jirafe			21700-69100	37200	01.01.1998	
15.	Supporting staff 1	Sh. K. P. Shekhawat	9011212601		19900-63200	32400	01.07.1996	
16.	Supporting staff 2	Sh. D. V. Jirafe	9130181923		19900-63200	32400	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	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			
	Extension of Admn. Building	ICAR	31.03.2012	92.00	10.00			

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Running	Present status
Mahindra Xylo Ex 4	2011-12	989652	167493	Good
Tractor (Mahindra)	2006-07	450000	6077.2	Condemn
Two Wheeler (Suzuki)	1996-97	36308		Condemn
Bicycle (2)	1996-97 1996-97	1450 1510		Condemn Condemn

C) Equipments& 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

1.8. Details of SAC meeting conducted in the year:

Date	Name and Designation of Participants	Salient Recommendations	Action taken
11.01.2022	Dr. Lakhan Singh, Director, ATARI, Pune Dr. Rajendra Gade, Director of Extension Education, Dr. PDKV, Akola Dr. K. S. Mule, JDA, State Department, Amravati Dr. Sunil Mahajan, Chief Scientist, ICAR-CICR, Nagpur Shri. Sunil Sose, District Coordinator, MAVIM, Amravati	1. Work to be done by kvk with allied discipline like Dairy, Poultry & Other 2. Work to be done in Orange area with Horizontal Spread of technologies. 3. Identify innovative farmers and work to be done on end to end, group marketing. 4. Customer to Farmer % can be increase. 5. Work to be done New Ideas from farmers & Entrepreneurs. 6. Market intervention with FPO with development of Business plan 7. Convergence with other departments. 8. Documentation is more Important	In Progress

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 tehasil Warud & eastern part of tehsil Tiwasa and Chandur railway fall within this zone about 81.07% area is under this zone.The annual precipitation ovaries from 800 to 900 mm, however it exceeds offenly in hilly Melghat tact 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 dall 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 extreamly sloppy. Soils are very shallow to shallow. Forest occupies substantial area in these tehsils. Kharif sorghum, soybean, minor millets or and rice in same patches are the important crops of this region. The area is inhibited by triable 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 posses some problems. Cotton predominant over sorghum. Other crops grown are soybean, tur, mug, udid tec in kharif season and wheat and gram are the rabbi crops wherever irrigation water is available. The soils in Bhatkuli, Daryapur, Southern part of Anjangaon surji tehsil are vertisoil, 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 is 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 irs 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 estern 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 o fhte 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 (2021)

S. No	Crop	Area (ha)	Production (MT)	Productivity (q./ha)
1	Kh. Jawar	139.180	56.632	406.900
2	Sesame	0.790	0.069	150.00

3	Soybean	2387.260	1893.909	798.340
4	Pigeonpea	1100.120	910.547	827.680
5	Green Gram	126.780	17.470	137.800
6	Black Gram	55.890	9.289	166.200
7	Kh. G. Nut	6.700	5.257	784.600
8	Cotton Lint	2760.780	4750.053	290.030
9	Wheat	430.463	878.157	2040.030
10	Chickpea	947.828	1278.359	1349.780
11	Summer G. Nu	17.620	39.764	2200.00

Source: District agriculture department.

2.5. Weather data (2021)

Month	Rainfall (mm)	Temperature (^{0} C)		Relative Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
January	0	31.93	17.46	70.87	49.83
February	0	30.12	14.35	56.00	36.13
March	11.8	38.25	21.38	56.67	32.03
April	9.8	41.37	23.94	42.10	25.13
May	51.6	40.81	26.07	51.33	37.20
June	212.6	35.36	23.86	85.57	68.57
July	208.80	32.65	24.16	89.17	75.00
August	151.60	31.51	22.97	92.43	78.83
September	429.40	30.21	21.88	94.63	85.37
October	163.4	32.41	19.99	79.57	66.47
November	8.2	17.39	0.27	63.17	52.03
December	5.8	28.91	14.18	67.13	59.63
Total	1253				

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

Category	Population (No.)	Production (Per unit)	Productivity (Per unit)
Cattle			
Cattle *Crossbred*	28286	184.99	6.755
Cattle *Indigenous*	499782	289.58	0.937
Buffalo	119881	505.77	3.078
Sheep Crossbred	01	--	--
Sheep *Indigenous*	24662	11886	--
Goats	284381	54.07	0.143
Pigs *Crossbred*	84	--	--
Pigs *Indigenous*	9647	--	--
Rabbits	95	--	--

Poultry Hens			
Poultry *Desi*	116268	141.52	--
Poultry *Improved*	85547	79.02	--
Ducks	204	--	--
Turkey and others	149	--	--

2.7. Details of Operational area / Villages

Taluka / Block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
Animal Husbandry				
Amravati Bhatkuli, Daryapur, Nandgao khandeshwar Morshi, Anjangao Surji Warud	Shendurjanaghat Timtala Mokhad Hrinmochan Adgaon Yawli Shahid Chincholi Ramasau Umari Itbapur	Cow, Buffalow, Poultry, Goatry	• . Unawareness about the importance of mineral mixture in lactating animals. • Anoestrous, emaciation and hypogalactia in livestock. • Lack of marketing facilities for livestock products and by products. • Lack of expert veterinary services. • Less fodder production coupled with low quality grasses. • Increasing feed cost. • Imbalanced feeding practices. • No supplementary diet. • Poor animal husbandry practices. • High mortality in new born kids and calves. Indiscriminate breeding. • Poor weight gain & yield in local breed. • Low reproductive rate.	• Increase in area under fodder crop and productivity of livestock. • Feed cost reduction through exploiting nutrient efficient local resources. • Self-employment generation through income generating activity. • To increase productivity and to reduce metabolic diseases through proper feeding and balanced diet. • Corrective measures for various common ailments in livestock. • Better profitability through market driven production. • Mortality of kids in Goat Farming • Repeat breeding and anoestrus problems
Plant Protection Amravati Bhatkuli, Daryapur, Nandgao khandeshwar	Gopalpur, Nandura, Revsa Utamsara, Shivani, Parlam, Chandrapur Khallar, Landi, Nalwada Sipgaon, Majri Masla, Pardi, Adgaon, Pala, Timtala Takali, Nimbora, Ajani, Pimpari Rithe,	Cotton, Oilseed, Pulses, Fruit Crops	• Incidence of Sucking pest in cotton. • Infestation of *Helicoverpa* 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.	• 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	• 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	• 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				
Amravati Bhatkuli, Daryapur, Nandgao khandeshwar Anjangao Surji	Pala Durgapur Umri Umri Bajar Dhanora Gurav	Agronomical Crops	• 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	• 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
Agril. Extension				

Bhatkuli Nandgaon kh Amravati	Takali, Ajani, Nirsana, Khirsana, Timtala, Morgaon,	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	• 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. • They are totally not known about weather & Climate. • Totally not known about PVR & FR right - 2001	• 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. • Skill base formation of groups. • Remedies on farm labour management in agricultural field. • Introduction & Importance of Renewable energy. • Motivation towards climate resilient in agriculture. • Awareness programme on provisions of PVP & FR Right act-2001
Home Science				
Nandgao khandeshwar, Amravati, Bhatkuli	Nirsana, Khirsana, Timtala Jawra, Dabha, Amravati Wadura, Anjangao Bari Uttamsara, Katamla Khallar, Parlam	Soybean, Millates, Storage Grain, Mushroom, Green Leafy Vegetables, Food	•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	•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 Iehgaon Ambada	Horticulture Crops	• 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:

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
10	**13**	**81**	**71**	**09**	**09**	**78**	**78**

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
61	61	1500	1548	10	08	373	444

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
100	124.41	15000	18920

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
		10000	10441

3.1. B. Operational areas details during 2021

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	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.)*
2	Soybean, Anganwadi Meal for nutritional of children	Nutrional health problem in women and children	Affected by Problem in district	Dabha, Timtala, Januna, Chandikapur, Uttamsara,	OFT Assessment
3	Produce send to market	Poor nutrional		Nirsana Khirsana	OFT Assessment
4	Grain storage local practices	Post harvest losses of fruit vegetables and grain due to lack of poor storage practices		Timtala, Jawra	OFT Assessment
5	Orange	Decline in yield & qaulity	25000	Loni, Shirkhed, Nimkhed	OFT, FLD & Training
6	Kagzi Lime	Irregular Hastabahar	200	Mahuli,	FLD & Training
7	Onion	Low yield, bolting & twin bulb	410	Takli Ajni Uttamsara	OFT & Training
8	Okra	Low yield due to the heavy infestation of sucking pest	32	Anjagaon Bari, Uttamsara	OFT & Training
9	Gaillardia	Low yield due to use of local seeds/vaeities	20	Arhad, Kurhad, Gopalpur	OFT & Training
10	Green Gram, Blakc Gram, Pigeonpea, Chikcpea	Low yield, old varity, INM	2100	Nirsana , Khirsana, Timtala	CFLD, Training
11	Extension Managementin Agril.	Knowledge attitude motivation	--	Nirsana , Khirsana, Timtala, Januna	Training
12	Integrated Pest Management	PBW has developed resistance to Bt cotton. Reduction in yield due to Incidence of PBW	1000	Dabha, Timtala, Januna, Chandikapur, Uttamsara,	FLD, Training,
13	Integrated Pest Management	Reduction in yield due to incidence of pod borer complex	432	Takli Ajni Uttamsara	OFT & Training
14	Integrated Pest Management	Reduction in yield due to incidence of chickpea pod borer	210	Nirsana , Khirsana, Timtala, Januna	OFT & Training
15	Nutrition Management	Effect of feeding creep ration to enhance growth rate of Goat kids.	13	Timtala, Hrinmochan, Adgaon, Yawali shahid Warud	FLD, Training,
16	Production & Management	Supplementation of Sorted Semen,	13	Nirsana,Khirsana, Januna,Nanded khurd, Sarmaspur, Jasapur	FLD, Training,
17	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	1500	Daryapur, Nanadgaon Kh., Bhatkuli	CFLD, Training, OFTs
18	Custard Apple	Due to shelf life and fluctuated market price of Custard Apple.	10	Amravati Block	OFT,Training,Literature
19	Onion	storage problem and fluctuated market price of onion	10	Anjangaon Block	OFT,Training,Literature

20	Millet	Less Use of Millet in diet.	Maximum	Dabha Timtala	OFT , Training
21	Oyster Mushroom	Lack of awareness about different varieties of Oyster mushroom cultivation	Maximum	Anjangao, Timtala, Dabha	OFT, Training Method demonstration
22	Fruits & vegetable	Non availability of fresh fruits & vegetable for household purpose	Maximum	Nirsana , Khirsana, Timtala, Dabha	FLD , Training , Visits,
23	Vegetable	Lack of awareness about use of Bamboo Solar dryer	Maximum	Dabha, Timtala	FLD , Training
24	Soybean harvesting	Lack of awareness about use of soy mittens	Maximum	Nirsana, Khirsana	FLD, Training
25	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 2021, Rabi 2020-21, Summer 2021)

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			02				**03**
Varietal Evaluation			01						02	**03**
Integrated Pest Management			01							**01**
Integrated Crop Management			02							**02**
Integrated Disease Management				01						**01**
Integrated Farming System	01									**01**
Value addition						01				**01**
Mushroom cultivation				01						**01**
Total	**01**		**05**	**02**		**03**			**02**	**13**

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

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
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	Orange	Assessment n Integrated Nutrient Management in Mandarin for improvement of fruit quality and yield	07	07	1.4
	Pigeon Pea	Impact of GA3 application @ 25 ppm (13.9 g per ha) on production of pigeon pea	1	13	5.2
Varietal Evaluation	Turmeric	Assessment of short duration variety of tuemeric IISR-Pragati over PDKV waigaon &selum	07	07	1.4
	Onion	Assessment of Red onion variety Arka Bhim over Bhima Shakti & AFLR	07	07	1.4
	Chick Pea	Performance of Phule Vikram and PDKV Kanchan variety of Chick Pea over JAKI – 9218 for higher production	1	13	5.2
Integrated Pest Management	Chick Pea	Integrated management of chickpea pod borer (Helicoverpaarmigera)	1	13	5.2
	Pigeon Pea	Management of pigeon pea pod borer complex	1	13	5.2
Integrated Crop Management	Cotton	Integrated Management of Pink bollworm (Pectinophoragossypiella) in Bt cotton	1	13	5.2
Integrated Farming System	Sorghum	T2- Normal diet + Sorghum Puff	7	7	7 no..
	Pearl millet	T3- Normal diet + !00gm pearl millet	7	7	7 no.
Mushroom cultivation	Oyster Mushroom	T2Pleurotus Sajor Caju	7	7	200 bags
	Oyster Mushroom	T3- Pleurotus Ostreatus	7	7	200 bags
Total			**54**	**114**	

B.2. Technologies assessed under Livestock and other enterprises

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Evaluation of breeds				
Nutrition management				
Disease management				
Value addition **(Food Tech)**		Processing of Custard Apple (Pulp Preservation & Storage)	05	10
Production and management				
Feed and fodder				
Small scale income generating enterprises				
Total			05	10

C. 1.Results of Technologies Assessed

Results of On Farm Trial

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
Food Tech											
Custard apple	Rainfed	Due to shelf life & fluctuated market price of Custard Apple.	Processing of Custard Apple (Pulp Preservation & Storage)	5	Cleaning of Custard Apple + Removal of skin + extraction of Pulp + Addition of preservatives+ frozen at -20 degree temperature in Cold room / Deep freezer	1. Shelf-life of Custard Apple Pulp & Product Recovery. 2. Sensory evaluation. 3. C: B Ratio		It is very profitable technology and get BC Ratio1:1.48	This Is very good technology for custard apple pulp preservation & shelf life increases.	No	No
Home Science											
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)	30.37	Weight gain by 2.96% in 1st treatment Weight gain by 4.57% in 2nd treatment	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)	31.27				
					T3- Normal diet + 100gm Pearl millet puff	Wight(Kg)	31.76				
Oyster Mushroom	Kharif- Rabbi	Low yield Unaware about deferent varieties Oyster Mushroom for cultivation	To assess deferant varieties of Oyster mushroom cultivation	14	T1 – pleurotus Sajor caju	Yield /Unit/Year	103.65kg	The Yield of Pieurotus Ostreatus 19.38 % more than farmers practice	Farmer like to cultivate Pleurotus Ostreatus as its gives more yield in less efforts	----	-----
						Duration	42 days				
					T2 – pleurotus Sajor caju	Yield /Unit/Year	125.26 kg				
						Duration	42 days				
					T3- Pleurotus Ostitus	Yield /Unit/Year	157.67kg				
						Duration	60 days				
Horticulture											
Orange	Medium to black,irrigated	25-30% low yield than the actual potential due to flower	Assessment on Integrated Nutrient Management in Mandarin for	07	Technology option 1 (Farmer's practice) T1: Farmers Practice	Yield q/ha	237.5		Improve the yield and quality of Orange fruit		
						No. of Fruits/tree	126.02				
						Average wt of fruit	672				

		drop, fruit drop	improvement of fruit quality and yield		:DAP 1000 gm or 10:26:26 1000 gm per plant	C : B Ratio	1:2.84		and also reduce fruit drop		
					Application of 1200:400:400 NPK g/plant in 5 splits doses Stress Release Stage – 360:160:40 NPK g/plant Pea size- 360:160:40 NPK g/plant Marble Size : 240:100:120 NPK g/plant Egg Size 120:00:100 NPK g/plant Pre mature – 120:00:100 NPK g/plant	Yield q/ha	276				
						No. of Fruits/tree	940				
						Average wt of fruit	139				
						C : B Ratio	1:3.31				
Turmeric	Irrigated	Water scarcity during peak period	Assessment of Short duration & yielding variety of turmeric IISR-Pragati	07	T1-Selum	Yield of fresh Rhizomes	231.8 qt	PDKV waigaon gives more fresh rhizomes yield than IISR Pragati and SELUM mature in 221 days while IISR-Pragati mature in 193 days,Selum variety mature in 253 days	under less water consumption Short duration variety IISR Pragati is superior than other		
						Duration	253 days				
					T2- IISR-Pragati	Yield of fresh Rhizomes	239 qt				
						Duration	193 days				
					T3-PDKV Waigaon	Yield of fresh Rhizomes	243.5 qt.				
						Duration	221 days				
Onion	Irrigated	Bolting, Low yield	Assessment of Red onion variety Arka Bhim over Bhima shakti & AFLR	07	T1- AFLR	Yield Qt	278.2	Bhīma shakti performed good in respect of yield (342.5	Bhīma shakti & Arka Bhim both the variety are good in respect of yield		
						Bolting %	10.				
					T2- Arka Bhim	Yield Qt	342.5				
						Bolting %	04				
					T3- Bhima shakti	Yield Qt	364.6				

						Bolting %	3.7	qt.) & less bolting percentage.	and less bolting.		
Plant Protection											
Chickpea	Irrigated	Heavy incidence of Pod borer	Integrated management of chickpea pod borer (Helicoverpaarmigera)	13	T1: 1st Spray of Profenophos 50 EC @ 20 ml/10 lit of water after flowering stage. 2 nd sprays Emamectin Benzoate 5 SG 3gm /10 lit of water if pest crosses ETL 3 rd spray of Clorantraniliprole 18.5SC 3 ml / 10 lit of water.	No. / meter row (Pod borer)	3.42				
						% of pod damage	15.33				
						No. of pod / plant	37.63				
						Average yield q/ha	17.38				
					T2: ETL based spray of Lambda cyhalothrin 5% EC 1.25 ml/lit of water followed by Ethion 50 EC 20 ml/10 lit of water 15 days after first spraying	No. / meter row (Pod borer)	2.03				
						% of pod damage	12.75				
						No. of pod / plant	42.33				
						Average yield q/ha	20.84				
					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	No. / meter row (Pod borer)	1.81				
						% of pod damage	6.66				
						Average yield q/ha					

					pheromone traps 5/ha Spraying NSE 5% at 50% flowering spraying *He ar* NPV 500 LE/ha at the time of pod formation Spray Emamectin benzoate 5SG @ 4g/10 lit water at pod filling stage						
Soybean	Kharif	Heavy incidence of Girdle Beetle	Infestation Of Girdle Beetle (*Oberepesis brivis*) In Soybean	13	T1. 1st Spray of Quinolphos 25 EC @ 3 ml/lit of water after flowering stage. 2nd Spray Prophenophos 50 EC @ 2ml /lit of water. 3rd Spray Flubendiamide 20 WG @ 0.5 gm/lit of water.	% stem fly incidence	10.20				
						Girdle Beetle incidence per MRL	8.75				
						Yield (kg/ha)	15.10				
					T2 : 1st Spray of Ethion 50 % EC @ 15 ml /10 lit water 2nd Spray of Chloraniliprole 18.5 % SC @ 3 ml /10 lit water	% stem fly incidence	6.59				
						Girdle Beetle incidence per MRL	5.66				
						Yield (kg/ha)	17.80				
					T3: 1st Installation of Pheromone traps 2/acre, 2nd Installation of Spodolures 4/acre, 5% NSE, 3rd Spray of Profenophos 50 EC and Clorantraniliprole 18.5 SC	% stem fly incidence	5.66				
						Girdle Beetle incidence per MRL	4.33				
						Yield (kg/ha)	18.25				

Pigeonpea	Kharif20	Heavy incidence of Pod Borer	Management of pigeon pea pod borer complex	13	T1: 1st Spray of Chlorpyiphos 50 EC@ 20 ml/10 lit of water 2nd Spray Flubendamide 20WG 5 gm /10 lit of water. 3rd Spray Chloraniliprole 18.5 % SC @ 5 ml /10 lit water	% of pod damage	13.33				
						No. of damaged pods / Plant	18.77				
						No. of pods / plant	130.4				
						Average yield (q/ha)	11.24				
					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.	% of pod damage	8.50				
						No. of damaged pods / Plant	13.66				
						No. of pods / plant	148.9				
						Average yield (q/ha)	13.47				
					T3: 1st Spray of Azadiractin 300 ppm 50ml /10 lit at 50 % flowering stage. 2nd Spray of Emamectin Benzoate 5 SG 3 gm /10 lit of water 15 days after first spraying. 3rd Spray of Lambda-Cyhalothrin 5%EC@ 10ml/ 10 lit 15 days after second spray	% of pod damage	11.65				
						No. of damaged pods / Plant	6.66				
						No. of pods / plant	165.5				
						Average yield (q/ha)	16.25				
Agronomy											
Pigeon Pea	Rainfed	Moisture Stress	Impact of GA3 application @ 25 ppm (13.9 g per ha) on production of pigeon pea	13	T1:Farmers practice (No Application)	Yield (q/ha)	14.32	13.40 % more yield of pigeon pea observed in the GA3 application over farmers practice	Application of GA3 reduces the moisture stress	NIL	NIL
						No of Pods per Plant	190. 8				
					T2: GA3 application @ 25 ppm (13.9 g per ha)	Yield (q/ha)	16.24				
						No of Pods per Plant	224.3				
					T3: Foliar application of 1 %	Yield (q/ha)	15.3				

					Humic Acid at Flowering and Pod Development stage	No of Pods per Plant	217.6				
Chick Pea	Irrigated	Low productivity, Wilting Problem	Performance of Phule Vikram and PDKV Kanchan variety of Chick Pea over JAKI – 9218 for higher production	13	T1:Farmers practice (JAKI - 9218)	Yield (q/ha)	17.4	28.16 % & 23.56 % more grain yield observed in T2 and T3 over farmers practice	Phule vikram variety helps to reduce the labour cost of harvesting because of its suitability for mechanical harvesting	NIL	NIL
						No of Pods per Plant	40.32				
					T2: Phule Vikram	Yield (q/ha)	22.3				
						No of Pods per Plant	55.36				
					T3: PDKV Kanchan	Yield (q/ha)	21.5				
						No of Pods per Plant	52.4				

Contd..

Technology Assessed	**Source of Technology**	**Production**	**Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)**	**Net Return (Profit) in Rs. / unit**	**B:C Ratio**
13	14	15	16	17	18
Food Tech					
Technology option 1 (Farmer's practice)	Dr. PDKV Akola	100	kg	8200	1:1.48
Technology option 2					
Technology option 3					
Home Science-1					
Technology option 1 (Farmer's practice)		30.37	Kg	-	-
Technology option 2 – (Recommended practice) Normal diet + 100gm sorghum puff		31.27	Kg	1kg	1:2.96
Technology option 3 –9 Recommended practice) Normal diet + 100 gm pear millet puff		31.76	Kg	1.39	1:4.57
Home Science-12					
Technology option 1 (Farmer's practice) T1 – pleurotus Sajor caju	DMR , Solan, HP, ICAR 2011	103.65	Kg/Unit (200bags) / year	9328.75	2.4
Technology option 2(Recommended practice) T2 – pleurotus Sajor caju		125.26		12625.56	2.5
Technology option 3(Recommended practice) T3 - Pleurotus Ostitus		157.67		17065.40	3
Horticulture					
Technology option 1 (Farmer's practice) T1: Farmers Practice :DAP 1000 gm or 10:26:26 1000 gm per plant		237.5	Qt/ha	207522	2.84
Technology option 2 Application of 1200:400:400 NPK g/plant in 5 splits doses 1 Stress Release Stage – 360:160:40 NPK g/plant 2 Pea size-360:160:40 NPK g/plant	Dr. PDKV, Akola 2019	276	Qt /ha	269868	3.31

3 Marble Size : 240:100:120 NPK g/plant 4 Egg Size 120:00:100 NPK g/plant 5 Pre mature – 120:00:100 NPK g/plant					
Technology option 3					
Technology option 1 (Farmer's practice :- T1-Selum		231.8	Qt/ha	244525	2.58
Technology option 2 :- - IISR-Pragati	IISR, Calicut	239	Qt/ha	258837	2.63
Technology option 3 :- T3-PDKV Waigaon	Dr. PDKV, Akola 2019	246.5	Qt/ha	272914	2.74
Technology option 1 (Farmer's practice) T1-AFLR		278.2	Qt/ha	138145	2.59
Technology option T2- Arka Bhim	IIHR, Bangalore	342.5	Qt/ha	202579	3.31
Technology option 3;- T3 :- Bheema Shakti	DOGR,Pune	364.6	Qt/ha	211255	3.45
Plant Protection					
T1: 1st Spray of Profenophos 50 EC @ 20 ml/10 lit of water after flowering stage. 2 nd sprays Emamectin Benzoate 5 SG 3gm /10 lit of water if pest crosses ETL 3 rd spray of Clorantraniliprole 18.5SC 3 ml / 10 lit of water.	NCIPM New Delhi		Qt/ha		1:2.56
T2: ETL based spray of Lambda cyhalothrin 5% EC 1.25 ml/lit of water followed by Ethion 50 EC 20 ml/10 lit of water 15 days after first spraying			Qt/ha		1:2.75
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 *He ar* NPV 500 LE/ha at the time of pod formation Spray Emamectin benzoate 5SG @ 4g/10 lit water at pod filling stage			Qt/ha		1:2.92
T1. 1st Spray of Quinolphos 25 EC @ 3 ml/lit of water after flowering stage. 2nd Spray Prophenophos 50 EC @ 2ml /lit of water. 3rd Spray Flubendiamide 20 WG @ 0.5 gm/lit of water.			Qt/ha		
T2 : 1st Spray of Ethion 50 % EC @ 15 ml /10 lit water 2nd Spray of Chloraniliprole 18.5 % SC @ 3	CIB&RC as on 31.08.2015		Qt/ha		

ml /10 lit water					
T3: 1st Installation of Pheromone traps 2/acre, 2nd Installation of Spodolures 4/acre, 5% NSE, 3rd Spray of Profenophos 50 EC and Clorantraniliprole 18.5 SC			Qt/ha		
T1: 1st Spray of Chlorpyiphos 50 EC@ 20 ml/10 lit of water 2nd Spray Flubendamide 20WG 5 gm /10 lit of water. 3rd Spray Chloraniliprole 18.5 % SC @ 5 ml /10 lit water			Qt/ha		1:2.42
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.	VNMKV Parbhani		Qt/ha		1:2.77
T3: 1st Spray of Azadiractin 300 ppm 50ml /10 lit at 50 % flowering stage. 2nd Spray of Emamectin Benzoate 5 SG 3 gm /10 lit of water 15 days after first spraying. 3rd Spray of Lambda- Cyhalothrin 5%EC@ 10ml/ 10 lit 15 days after second spray			Qt/ha		1:3.31
Agronomy					
T1:Farmers practice (No Application)	-	14.32	q/ha	53360	2.64
T2: Foliar application of 1 % Humic Acid at Flowering and Pod Development stage	PDKV AKOLA 2019	16.24	q/ha	66040	3.10
T3: GA3 application @ 25 ppm (13.9 g per ha)		15.3	q/ha	60550	2.93
T1:Farmers practice (JAKI - 9218)	-	17.4	q/ha	53750	2.61
T2: PDKV Kanchan	PDKV Akola 2017	22.3	q/ha	75813	3.12
T3: Phule Vikram	MPKV Rahuri 2017	21.5	q/ha	72083	3.03

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

Assessment 1

Title of Technology Assessed	Processing of Custard Apple (Pulp Preservation & Storage)
Problem Definition	Due to shelf life & fluctuated market price of Custard Apple**.**
Details of technologies selected for assessment	T1- Use of Custard Apple without processing (Farmers Practice) T2- Cleaning of Custard Apple + Removal of skin + extraction of Pulp + Addition of preservatives+ frozen at -20 degree temperature in Cold room / Deep freezer
Source of technology	Dr. PDKV, Akola (Recommended practice)
Production system and thematic area	Processing & Value Addition

Performance of the Technology with performance indicators	Shelf Life & Good Product recovery
Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	This Is very good technology for custard apple pulp preservation & shelf life increases.
Final recommendation for micro level situation	Use of technology for preservation & increase shelf life of custard apple pulp as compare to manual practice
Constraints identified and feedback for research	It is very good technology for preservation & increase shelf life of custard apple pulp
Process of farmers participation and their reaction	Discussion , Training , OFT etc

Assessment 2

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 , Parbhan
Production system and thematic area	Integrated farming System
Performance of the Technology with performance indicators	Weight gain by 2.96% in 1st treatment & Weight gain by 4.57% in 2nd treatment
Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	
Final recommendation for micro level situation	Both millet useful for health of adolescent girls.
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.

Assessment 3

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 16.32 % in a recommended practice T2 i.e.Pleurotus sajor Caju and 19.38 % 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 19.38 % which is better thanrecommended practice
Final recommendation for micro level situation	Improved practice ie T3 is give more and increase BC ratio 3 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 novative 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.**

Assessment 4

Title of Technology Assessed	**Assessment of Short duration & high yielding variety of turmeric IISR-Pragati**
Problem Definition	Low Productivity, Water scarcity during peak period
Details of technologies selected for assessment	T1-1 (Farmer's practice) Selum variety T2-Technology Assessed IISR-Pragati T3- Technology Assessed PDKV Waigaon
Source of technology	IISR,Calicut , Dr.PDKV. Akola
Production system and thematic area	Varietal Trial
Performance of the Technology with performance indicators	Yield (Qt.), Duration in days
Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	PDKV Waigaon gives more fresh rhizomes yield than mature in IISR- Pragati 221 days while IISR-Pragati mature in 193 days,Selum variety mature in 253 days
Final recommendation for micro level situation	IISR Pragati variety is good for water scarcity area & yield was low as compare to PDKV Waigaon
Constraints identified and feedback for research and developmental departments	IISR Pragati variety is superior for water scarcity during peak period of crops.
Process of farmers participation and their reaction	Discussion, Training, OFT, Field day etc.

Assessment 5

Title of Technology Assessed	**Assessment of Red onion variety Arka Bhim Over Bheema shakti & AFLR**
Problem Definition	Low Productivity, Bolting of onion
Details of technologies selected for assessment	T1-1 (Farmer's practice) AFLR onion variety T2-Technology Assesd Arka Bhim T3- Technology Assessed Bhima Shakti
Source of technology	IIHR, Bangalore , DOGR, Pune
Production system and thematic area	Varietal Trial
Performance of the Technology with performance indicators	Bhima Shakti gives 6.42 % more yield and less bolting (3.7%) as compare to Arka bhim
Feedback, matrix scoring of various technology parameters done	Bhima shakti & Arka Bhim both the variety are good in respect of yield and less bolting.

through farmer's participation / other scoring techniques	
Final recommendation for micro level situation	Bhima Shakti is superior variety for red Rabi onion
Constraints identified and feedback for research and developmental departments	
Process of farmers participation and their reaction	Discussion, Training, OFT, Field day etc.

Assessment 6

Title of Technology Assessed	Assessment on Integrated Nutrient Management in Mandarin for improvement of fruit quality and yield
Problem Definition	25-30% low yield than the actual potential due to flower drop, fruit drop
Details of technologies selected for assessment	T1-1 (Farmer's practice) DAP 1000 gm or 10:26:26 1000 gm per plant T2-Technology Assesd Application of 1200:400:400 NPK g/plant in 5 splits doses 1 Stress Release Stage – 360:160:40 NPK g/plant 2 Pea size-360:160:40 NPK g/plant 3 Marble Size : 240:100:120 NPK g/plant 4 Egg Size 120:00:100 NPK g/plant 5 Pre mature – 120:00:100 NPK g/plant T3- Technology Assessed
Source of technology	Dr, PDKV,Akola
Production system and thematic area	Integrated Nutrient Management
Performance of the Technology with performance indicators	Improv the yield and quality of fruits also reduce fruit drop
Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	Size of fruit increase, fruit drop was reduced
Final recommendation for micro level situation	Five split dose of NPK gives better quality ftuits
Constraints identified and feedback for research and developmental departments	
Process of farmers participation and their reaction	Discussion, Training, OFT, Field day etc.

Assessment 7

Title of Technology Assessed	Integrated management of chickpea pod borer (Helicoverpaarmigera)
Problem Definition	Heavy incidence of Pod Borer
Details of technologies selected for assessment	T1 : Farmers practice T2: ETL based spray of Lambda cyhalothrin 5% EC 1.25 ml/lit of water followed by Ethion 50 EC 2 ml/10 lit of water 15 days after first spraying 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 He ar NPV 500 LE/ha at the time of pod formation, Spray Emamectin benzoate 5SG @ 4g/10 lit water at pod filling stage, 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 He ar NPV 500 LE/ha at the time of pod formation, Spray Emamectin benzoate 5SG @ 4g/10 lit water at pod filling stage
Source of technology	IPM Package for ChickpeaNCIPM Bulletin – 2014
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

Assessment 8

Title of Technology Assessed	Integrated Management Of Girdle Beetle & Stem Fly in Soybean
Problem Definition	Heavy Incidence of Girdle Beetle
Details of technologies selected for assessment	**T_1 : Farmers practice** 1st Spray of Quinolphos 25 EC @ 3 ml/lit of water after flowering stage. 2nd Spray Prophenophos 50 EC @ 2ml /lit of water. 3rd Spray Flubendiamide 20 WG @ 0.5 gm/lit of water. **T_2 : Recommended Practice.** 1st Spray of Ethion 50 % EC @ 15 ml /10 lit water 2nd Spray of Chloraniliprole 18.5 % SC @ 3 ml /10 lit water **T3 : Technology Assessed** 1st Installation of Pheromone traps 2/acre, 2nd Installation of Spodolures 4/acre, 5% NSE, 3rd Spray of Profenophos 50 EC and Clorantraniliprole 18.5 SC
Source of technology	**CIB&RC as on 31.08.2015**
Production system and thematic area	IPM
Performance of the Technology with performance indicators	
Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring	IPM technology proven good control

techniques	
Final recommendation for micro level situation	
Constraints identified and feedback for research and developmental departments	
Process of farmers participation and their reaction	

Assessment 9

Title of Technology Assessed	Management of pigeon pea pod borer complex
Problem Definition	Heavy Incidence of pod borer
Details of technologies selected for assessment	**T1 Farmers Practice** 1st Spray of Chlorpyiphos 50 EC@ 20 ml/10 lit of water 2nd Spray Flubendamide 20WG 5 gm /10 lit of water. 3rd Spray Chloraniliprole 18.5 % SC @ 5 ml /10 lit water **T2 : Recommended Practice** 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. **T3 : Technology Assessed** 1st Spray of Azadiractin 300 ppm 50ml /10 lit at 50 % flowering stage. 2nd Spray of Emamectin Benzoate 5 SG 3 gm /10 lit of water 15 days after first spraying. 3rd Spray of Lambda- Cyhalothrin 5%EC@ 10ml/ 10 lit 15 days after second spray
Source of technology	**VNMKV Parbhani**
Production system and thematic area	IPM
Performance of the Technology with performance indicators	
Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	
Final recommendation for micro level situation	
Constraints identified and feedback for research and developmental departments	
Process of farmers participation and their reaction	

Assessment 10

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: GA3 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
Production system and thematic area	Integrated Nutrient Management
Performance of the Technology with performance indicators	13.40 % 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	
Final recommendation for micro level situation	Application of GA3 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

Assessment 11

Title of Technology Assessed	Performance of Phule Vikram and PDKV Kanchan variety of Chick Pea over JAKI – 9218 for higher production
Problem Definition	Low productivity, Wilting Problem
Details of technologies selected for assessment	T1:Farmers practice (JAKI - 9218) T2: Phule Vikram T3: PDKV Kanchan
Source of technology	MPKV Rahuri 2017 & PDKV Akola 2017
Production system and thematic area	Varietal evaluation
Performance of the Technology with performance indicators	28.16 % & 23.56 % more grain yield observed in T2 and T3 over farmers practice
Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	Phule vikram variety helps to reduce the labour cost of harvesting because of its suitability for mechanical harvesting
Final recommendation for micro level situation	Phule vikram variety is suitable where labour problems are more
Constraints identified and feedback for research and developmental departments	-
Process of farmers participation and their reaction	Identification of farmers, group discussion, training, demonstration

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 2021 and recommended for large scale adoption in the district

S. No	Crop/ Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
1	Orange	Integrated Nutrient Management	Integrated Nutrient Management	Group discussion, Training , Field day.	08	32	43
2	Chrysanthemum (Bijali Super)	Variety Introduction	Promotion of floriculture	Group discussion, Training , Field day.	02	8	9
3	Okra	Variety Introduction	YVMV Resistant variety	Group discussion, Training , Field day.	13	23	39

B. Details of FLDs implemented during 2021**(Kharif 2021, Rabi 2020-21, Summer 2021)** (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	Integrated Nutrient Management	Integrated Nutrient Management	Kharif 2020	02	02	02	08	10	
2	Chrysanthemum (Bijali Super	Variety Introduction	Promotion of floriculture	Rabi 2020	02	02	0	10	10	
3	Okra	Variety Introduction	YVMV Resistant variety	Kharif 2021	02	02	1	9	10	

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Orange	Kharif	Irrigated	Medium to black	L	M	H	Orange	10 Feb	12 Nov		
Chrysanthemum (Bijali Super	Rabi	Irrigated	Medium to light	L	L	H	Soybean	20 Oct	2 March		

Okra	Kharif	Rainfed	medium	L	M	H	Cotton	13 july	19 nov		

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	
2	

Farmers' reactions on specific technologies

S. No	Feed Back
1	
2	

Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	02	12/10/21	82	
2	Farmers Training	03	04/03/21	68	
3	Media coverage				
4	Training for extension functionaries				

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	Integrated Management Of Girdle Beetle & Stem Fly in Soybean	KDS - 726	13	5.2			16.70	14.35	16.38	26900	78490	51590	2.91	26310	67445	41135	2.56
	IPM	IPM in Soybean	JS-335	50	20			16	13.3	20.30	22500	59526	37026	2.64	24450	51560	27110	2.10

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Frontline demonstration on pulse crops

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

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

FLD on Other crops

Category & Crop	Thematic Area	Name of the technology	No. of Farmers	Area (ha)	Yield (q/ha)				% Change in Yield	Other Parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demo			Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Average												
Vegetables																			
Okra																			
Okra	**Varietal**	**YVMV resistant variety**	10	**02**	**164**	**123.5**	**148.5**	**124.6**	**19.18**	**YVMV Incidance 1.33 %**	**YVMV Incidance 3.9 %**	**49465**	**145600**	**96135**	**2.94**	**47630**	**111260**	**63630**	**2.33**
Flower crops																			
Chrysanthemum (Bijali super)	Variety Introduction	Promotion of Floriculture	10	02	104.6	72.4	101.2	86.2	17.4	Flower size cm 5.7	Flower size cm 3.8	37500	101200	63700	1:2.69	36102	74599	38497	1:2.06
Fruit crops																			
Orange	INM	INM	10	02	233.1	211.4	227.9	187.5	21.55	Wt of fruit 137.2 gm	Wt of fruit 124.5gm	85964	266902	180938	3.10	82543	178510	95967	2.16

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Frontline Demonstration on Nutri cereals

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

FLD on Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No.of Units (Animal/ Poultry/ Birds, etc)	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Cattle																	

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

FLD on Fisheries

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

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

FLD on Other enterprises

Category	Name of the technology demonstrated	No. of Farmer	No.of units	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.) or Rs./unit				Economics of check (Rs.) or Rs./unit			
				Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Value Addition																
	Value Addition of Potato Through Chips making	10	10	Value Addition	Direct Sold In the Market	1.Recovery of Product -85-90% 2.Work Efficiency 90-95 kg/hr	-	-	2500	4500	2000	1.80	1300	1800	500	1.38
	Preparation of Orange Syrup	10	10	Value Addition	Direct Sold In the Market	1.Recovery of Product -80-85% 2..Work Efficiency 90-95 kg/hr	-	-	3300	7000	3700	2.12	900	1500	600	1.66

FLD on Women Empowerment

Category	Name of technology	No. of demonstrations	Name of observations	Demonstration	Check
Preschool children	use of soy nuts for 3-6 years malnourished children of anganwadi	14	**Growth quotient**	**83.44**	**82.57**
Farm Women	use of mittens in harvesting of soybean	14	**Time required for 0.4 ha harvesting** **No. of scratches**	**1.55** **--**	**2.08** **16**
Homemaker/ Housewife	use of solar dryer for dehydration of household products	14	**Time required** **color**	**9.5 hrs.** **Highly acceptable**	**12.hrs.** **Acceptable**

FLD on Farm Implements and Machinery

Name of the implement	Crop	Technology demonstrated	No. of Farmer	Area (ha)	Major parameters	Filed observation (output/man hour)		% change in major parameter	Labor reduction (man days)				Cost reduction (Rs./ha or Rs./Unit etc.)			
						Demo	Check		Land preparation	Sowing	Weeding	Total	Land preparation	Labour	Irrigation	Total

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	537	145	2.86	6	5	13590	20210	6620	2.05	2955	5250	2290	1.29

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

FLD on Demonstration details on crop hybrids

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

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										
Integrated nutrient management	2	61	6	67	2	0	2	63	6	69
Total	**2**	**61**	**6**	**67**	**2**	**0**	**2**	**63**	**6**	**69**
II Horticulture										
b) Fruits										
Training and Pruning										
Layout and Management of Orchards	01	54	02	56	11	01	12	65	03	68
Cultivation of Fruit	01	44	01	45	13	02	14	55	03	58
Plant propagation techniques	01	18	01	19	04	02	06	22	03	25
Others (pl specify)Emtreprenrship devolopment	01	18	0	18	2	02	4	20	2	22
Total (b)	**4**	**134**	**4**	**138**	**30**	**7**	**36**	**162**	**11**	**173**
c) Ornamental Plants										
Total (c)										
d) Plantation crops										
Total (d)										
e) Tuber crops										
Production and Management technology	01	34	05	39	6	3	9	40	8	48
Total (e)	**01**	**34**	**05**	**39**	**6**	**3**	**9**	**40**	**8**	**48**
f) Spices										
Production and Management technology	01	23	2	25	02	01	3	25	3	28
Total (f)	**01**	**23**	**2**	**25**	**02**	**01**	**3**	**25**	**3**	**28**
g) Medicinal and Aromatic Plants										
Total (g)										
Grand Total (a to g)										
III Soil Health and Fertility Management										
Nutrient Use Efficiency	2	86	5	91	9	3	12	95	8	103
Balance use of fertilizers										
Soil and Water Testing	3	58	8	66	7	4	11	65	12	77
Others (pl specify)										
Total	**5**	**144**	**13**	**157**	**16**	**7**	**23**	**160**	**20**	**180**
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 Management	02	62	18	80	08	04	12	70	22	92
Feed & fodder technology	01	18	03	21	03	01	04	21	04	25
Total	**7**	**160**	**39**	**199**	**41**	**17**	**58**	**201**	**56**	**257**
V Home Science/Women empowerment										
Design and development of low/minimum cost diet	01	2	15	17	-	-	-	2	15	17
Women and child care	01	3	14	17	-	3	3	3	17	20
Total	**2**	**5**	**29**	**34**	**0**	**3**	**3**	**5**	**32**	**37**
VI Agril. Engineering										
Post Harvest Technology	**07**	**83**	**35**	**118**	**34**	**16**	**50**	**117**	**51**	**168**
Others (pl specify)	**07**	**55**	**20**	**75**	**12**	**09**	**21**	**67**	**29**	**96**
Total										
VII Plant Protection										
Integrated Pest Management	08	27	14	41	8	5	13	35	19	54
Integrated Disease Management	02	37	00	37	12	00	12	49	00	49
Total	**10**	**64**	**14**	**78**	**20**	**5**	**25**	**84**	**19**	**103**
VIII Fisheries										
Total										
IX Production of Inputs at site										
Total										
X CapacityBuilding and Group Dynamics										
Leadership development	02	32	0	32	4	0	4	38	0	38
Total	**02**	**32**	**0**	**32**	**4**	**0**	**4**	**38**	**0**	**38**
XI Agro-forestry										
Total	**41**	**712**	**132**	**844**	**133**	**52**	**184**	**845**	**184**	**1029**

GRAND TOTAL										

Farmers' Training including sponsored training programmes (off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Integrated Crop Management	2	41	12	53	4	0	4	45	12	57
Soil & water conservation										
Integrated nutrient management	6	113	8	141	16	3	19	149	11	160
Others (pl specify)	2	61	6	67	2	0	2	63	6	69
Total	**10**	**215**	**26**	**261**	**22**	**3**	**25**	**257**	**29**	**286**
II Horticulture										
b) Fruits										
Layout and Management of Orchards	02	21	2	23	5	2	7	26	4	30
Cultivation of Fruit	02	20	2	22	5	02	07	25	4	29
Total (b)	**4**	**41**	**4**	**45**	**10**	**4**	**14**	**51**	**8**	**59**
e) Tuber crops										
Production and Management technology	01	21	2	23	8	0	8	29	2	31
Total (e)	**01**	**21**	**2**	**23**	**8**	**0**	**8**	**29**	**2**	**31**
f) Spices										
Production and Management technology	01	9	5	13	2	3	5	11	8	19
Total (f)	**01**	**9**	**5**	**13**	**2**	**3**	**5**	**11**	**8**	**19**
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**	**76**	**267**	**57**	**324**
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	2	-	38	38	-	7	7	-	45	45
Designing and development for high nutrient efficiency diet	02	-	27	27	-	4	4	-	31	31
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs	01	-	19	19	-	3	3	-	22	22
Storage loss minimization techniques	01	-	12	12	-	3	3	-	15	15
Location specific drudgery reduction technologies	01	-	11	11	-	3	3	-	14	14
Total	**7**	**0**	**107**	**107**	**0**	**20**	**20**	**0**	**127**	**127**
VI Agril. Engineering										
Packaging & Branding	**05**	**52**	**26**	**78**	**09**	**06**	**15**	**60**	**33**	**93**
Total										
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	**6**	**150**	**33**	**183**	**29**	**15**	**44**	**179**	**48**	**227**
X Capacity Building and Group Dynamics										
Leadership development	3	33	4	37	3	0	3	36	4	40
Formation and Management of SHGs	02	29	2	31	3	0	3	32	0	32
Total	**5**	**62**	**6**	**68**	**6**	**0**	**6**	**68**	**4**	**72**
GRAND TOTAL	**52**	**762**	**245**	**1026**	**141**	**72**	**213**	**922**	**316**	**1238**

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										
Integrated Crop Management	2	41	12	53	4	0	4	45	12	57
Soil & water conservation										
Integrated nutrient management	8	194	14	208	18	3	21	212	17	229
Production of organic inputs										
Others (pl specify)	2	41	9	50	3	0	3	44	9	53
Total	**12**	**276**	**35**	**311**	**25**	**3**	**28**	**301**	**38**	**339**
II Horticulture										
b) Fruits										
Layout and Management of Orchards	03	75	04	79	16	03	19	91	07	98
Cultivation of Fruit	03	64	03	67	18	04	21	80	07	87
Plant propagation techniques	01	18	01	19	04	02	06	22	03	25
Others (pl specify) Entreprenuership Devlopment	01	18	0	18	2	02	4	20	2	22
Total (b)	**8**	**175**	**8**	**183**	**40**	**11**	**50**	**213**	**19**	**232**
e) Tuber crops										
Production and Management technology	02	55	07	62	14	3	17	69	10	79
Processing and value addition										
Total	**02**	**55**	**07**	**62**	**14**	**3**	**17**	**69**	**10**	**79**
f) Spices										
Production and Management technology	02	32	7	38	04	04	8	36	16	52
Total (f)	**02**	**32**	**7**	**38**	**04**	**04**	**8**	**36**	**16**	**52**
III Soil Health and Fertility Management										
Integrated water management	1	10	0	10	2	0	2	12	0	12
Nutrient Use Efficiency	2	86	5	91	9	3	12	95	8	103
Soil and Water Testing	5	73	10	83	10	5	15	83	15	98
Total	**8**	**169**	**15**	**184**	**21**	**8**	**29**	**190**	**23**	**213**
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
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	02	0	38	38	0	7	7	0	45	45
Design and development of low/minimum cost diet	01	02	15	17	0	0	0	02	15	17
Designing and development for high nutrient efficiency diet	02	0	27	27	0	4	4	0	31	31
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs	01	0	19	19	0	3	3	0	22	22
Storage loss minimization techniques	1	0	12	12	0	3	3	0	15	15
Value addition										
Women empowerment										
Location specific drudgery reduction technologies	1	0	11	11	0	3	3	0	14	14
Rural Crafts										
Women and child care	1	3	14	17	0	3	3	3	17	20
Total	**9**	**5**	**136**	**141**	**0**	**23**	**23**	**5**	**159**	**164**
VI Agril. Engineering										
Small scale processing and value addition	07	83	35	118	34	16	50	117	51	168
Post Harvest Technology	07	55	20	75	12	09	21	67	29	96
Others (pl specify)	05	52	26	78	09	06	15	60	33	93
Total	**19**	**190**	**81**	**271**	**55**	**31**	**86**	**244**	**113**	**357**
VII Plant Protection										
Integrated Pest Management	13	52	16	68	22	7	29	74	23	97
Integrated Disease Management	02	37	00	37	12	00	12	49	00	49
Production of bio control agents and bio pesticides	01	28	02	30	14	02	16	42	4	46
Total	**16**	**117**	**18**	**135**	**48**	**9**	**57**	**165**	**27**	**192**
X CapacityBuilding and Group Dynamics										
Leadership development	02	32	0	32	4	0	4	36	0	36
Group dynamics	03	33	4	37	3	0	3	36	6	40
Formation and Management of SHGs										
Mobilization of social capital	01	29	2	31	3	0	3	32	2	34
Total	**6**	**94**	**6**	**100**	**10**	**0**	**10**	**104**	**8**	**110**

XI Agro-forestry										
Total										
GRAND TOTAL	**102**	**1485**	**388**	**1872**	**313**	**130**	**442**	**1795**	**526**	**2319**

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	01	19	3	22	01	03	04	20	6	26
Commercial fruit production	01	16	2	18	6	0	6	22	02	24
Mushroom Production	02	4	22	26	2	7	9	6	29	35
Value addition	03	10	12	22	12	6	18	22	18	40
Soil and Water Testing	1	16	3	19	4	4	8	20	7	27
Weed Management	1	16	3	19	4	4	8	20	7	27
IPM	2	25	5	30	2	2	4	27	7	34
TOTAL	**11**	**106**	**50**	**156**	**31**	**26**	**57**	**137**	**76**	**213**

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
IPM	2	25	5	30	2	2	4	27	7	34
TOTAL	**2**	**25**	**5**	**30**	**2**	**2**	**4**	**27**	**7**	**34**

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	01	19	3	22	01	03	04	20	6	26
Commercial fruit production	01	16	2	18	6	0	6	22	02	24
Mushroom Production	02	4	22	26	2	7	9	6	29	35
Value addition	01	00	22	22	00	08	08	00	30	30
Soil and Water Testing	1	16	3	19	4	4	8	20	7	27
Weed Management	1	16	3	19	4	4	8	20	7	27
TOTAL	**7**	**71**	**55**	**126**	**17**	**26**	**43**	**88**	**81**	**169**

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Integrated Pest Management	5	365	70	435	51	23	74	416	93	509
Women and Child care	1	0	13	13	0	4	4	0	17	17
Group Dynamics and farmers organization	1	22	01	23	04	00	04	26	01	27
TOTAL	**7**	**387**	**84**	**471**	**55**	**27**	**82**	**442**	**111**	**553**

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Weed Management	1	29	1	30	4	1	5	33	2	35
TOTAL	**1**	**29**	**1**	**30**	**4**	**1**	**5**	**33**	**2**	**35**

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management	5	365	70	435	51	23	74	416	93	509
Women and Child care	1	0	13	13	0	4	4	0	17	17
Group Dynamics and farmers organization	01	22	01	23	04	00	04	26	01	27
Weed Management	1	29	1	30	4	1	5	33	2	35

TOTAL	**8**	**416**	**85**	**501**	**59**	**28**	**87**	**475**	**113**	**588**

Sponsored training programmes

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Post harvest technology and value addition										
Processing and value addition	02	22	23	45	04	08	12	26	31	57
Total	**02**	**22**	**23**	**45**	**04**	**08**	**12**	**26**	**31**	**57**
GRAND TOTAL	**02**	**22**	**23**	**45**	**04**	**08**	**12**	**26**	**31**	**57**

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Post harvest technology and value addition	03	50	19	69	12	10	22	62	29	91
Total	**03**	**50**	**19**	**69**	**12**	**10**	**22**	**62**	**29**	**91**
Income generation activities										
Nursery, grafting etc.	01	18	01	19	04	02	06	22	03	25
Total	**01**	**18**	**01**	**19**	**04**	**02**	**06**	**22**	**03**	**25**
Grand Total	**04**	**68**	**20**	**88**	**16**	**12**	**28**	**82**	**32**	**114**

3.5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services (Other than KMAS)	5760	25920	128	26048
Diagnostic visits	46	258	42	300
Field Day	08	302	13	315
Group discussions	02	50	02	52
Self -help groups	**03**	**61**	**03**	**64**
Kisan Mela	02	160	07	167
Exhibition	08	239	8	247
Scientists' visit to farmers field	30	148	24	173
Farmers' seminar/workshop	**03**	**490**	**30**	**520**
Method Demonstrations	02	27	02	29
Celebration of important days	01	32	01	33
Special day celebration	06	742	12	779
Exposure visits	01	27	02	29
Visit of Agri students to KVK	**05**	**859**	**120**	**895**
Total	**5877**	**29315**	**394**	**29651**

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

Details of other extension programmes:

Particulars		Number
Electronic Media (CD./DVD)		
Extension Literature		04
Newspaper coverage		16
Popular articles		01
Radio Talks		05
Social Media (No. of platforms Used)		08
Others (pl. specify)		
Total		**34**

3.6 Online activities during year 2021

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	Video Conferencing	Climate resillent technology and drought tolarance	02	74
1		Video Conferencing	Marketing Techniques & its importance	01	34
2		Video Conferencing	Agro Based industries & its scope	01	47
3		Video Conference	Organic Farming its standards	01	35
4		Zoom	Fruits & Vegetable Processing	02	45
5		Zoom	Food Processing	01	20
		Zoom	Packaging & Branding	05	95
		Zoom	Health & Nutrition	1	22
		Zoom	Oyster Mushroom Cultivation	1	27
		Zoom/ google meet	Nutrition gardening	3	88
		Zoom	Nutrient management in fruit crops	01	48
		Zoom	Production technology of onion crop	01	37
		Zoom	Fertilizer Awareness Program	01	88
		Google Meet	Integrated Nutrient Management in Soybean	01	26
		Google Meet	Package and practices of rabi crops	01	56
	Total			**23**	**742**
C	Farmers seminars				
1		Google Meet	शेती समृद्धी आणि माती परीक्षण ऑनलाईन सेमिनार	01	29
	Total			**01**	**29**
D	Expert lectures	Video Conference	Drought Tolerance in crops	1	47
1		Video Conference	Organic Farming 7 Certification procedure	1	35
2		ZOOM	Packaging & Branding	5	80
3		Webex	Mushroom Production, Processing & Marketing	2	65
4		Webex/Zoom	Farming System through Nutrition	2	85
	Total			**11**	**312**
E	Extension Functionaries	Webex/Zoom	Farming System through Nutrition	2	85
1	Extension Functionaries	Webex	Mushroom Production, Processing & Marketing	2	65
	Total			**4**	**150**
	Grand Total (A+B+C+D+E)			**39**	**1233**

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		39.36	62976	04
Oilseeds	Soybean	KDS - 726		7.70	50050	08
		MAUS-158		8.01	48000	11
Pulses	Green Gram	BM-2003-02		3.03	21000	7
	Chick Pea	Phule Vikram		22.46	112300	22
		RVG - 202		22.52	112600	10
Commercial crops	Pigeon Pea	BDN-716		8.08	50000	36
Spices						
	Turmeric	Selam		13.25	72875	06
Total				**124.41**	**529801**	**104**

Production of planting materials by the KVK

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Commercial						
Fruits	Kagzi lime	Sai Sharbati		1860	46500	30
	Custard apple	Balanagar		562	16860	30
	Drumstick	PKM-1		24	360	15
Ornamental plants	Palm	Areka,Royal,		36	7200	200
	Foliage plant	Ficus		34	5100	150
Total				**2516**	**76020**	**425**

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg/Lit	Value (Rs.)	No. of Farmers
Bio Fertilisers	Rhizobium	1193	441410	1530
	PSB	1345	497650	1748
	Azotobactor	779	288230	930
	K.S.B	205	75850	316
Bio-pesticide				
	Trichoderma	8919	891900	10355
Total		**12441**	**2195040**	**14879**

Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers
Dairy animals				
Cows	Jercy	140000	02	
Buffaloes	Murha	910000	13	
Total		**1050000**	**15**	

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

A. KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.):
B. Literature developed/published

Item	Title	Authors name	Number
Technical reports			02
Popular articles			05
Extension literature		Dr. Archana Kakade, Dr. H. V.Thakur, Mr. P. S. Jayale Mr. P. H. Mahalle	07
TOTAL			**14**

C. Details of Electronic Media Produced

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

D. Details of Social Media Platforms Created / Used

S. No.	Type of social media platform	Title of social media	Number of Followers/ Subscribers
1	YouTube Channel	**KVK Durgapur**	**198**
2	Facebook page/ Account	**Food Tech/KVK**	**1260**
4	WhatsApp groups	**KVK Durgapur Food Tech**	**1456**
5	Twitter Account	**KVK**	

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).

Effect of DFI intervention **Name of KVK: Amravati II**

Name of farmer: Pramod V Talan
Address: At Po: Vitthalpur Tq: Amravati Dist: Amravati State: Maharashtra
Mobile Number: 9922993273
Age: 56
Education: MSc
Size of land holding (in acre): 10 Acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2018-19)			
Components	**Names**	**Area (Acre)/Number**	**Production (Q)**	**Gross Income (Rs.)**	**Net Income (Rs.)**
Horticulture Crop 1	Orange (Nagpur Mandrin)	10	1210	1936000	1406000
Total				**1936000**	**1406000**

2) Status in 2020

Component Description		Period 2020-21				% increase over base Year	
Components	**Names**	**Area (Acre)/No**	**Production (Q/Liter/No.)**	**Gross Income (Rs.)**	**Net Income (Rs.)**	**production**	**income**
Horticulture Crop 1	Orange (Nagpur Mandrin)	10	1680	3360000	2830000	38.84	101.28
Total				**3360000**	**2830000**	**38.84**	**101.28**

Brief: The farmer used to get annual income of **Rs 1406000/-** from Orange. He faced problems like low yield due to disease and pest incidence etc. With DFI interventions like training and demonstration of IPM and IDM etc., he is getting annual income of **Rs 2830000/-**. In addition, he was got good price in market than the previous year hence getting good income. In addition there is cost saving of **Rs. 100000/- in orange** production.

Bark Eating Caterpillar incidence in control plot

Good Quality Fruits in Demo Plot

Effect of DFI intervention **Name of KVK: Amravati II**

Name of farmer: Pramod V Talan
Address: At Po: Vitthalpur Tq: Amravati Dist: Amravati State: Maharashtra
Mobile Number: 9922993273
Age: 56
Education: MSc
Size of land holding (in acre): 10 Acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2018-19)			
Components	**Names**	**Area (Acre)/Number**	**Production (Q)**	**Gross Income (Rs.)**	**Net Income (Rs.)**
Horticulture Crop 1	Orange (Nagpur Mandrin)	10	1210	1936000	1406000
Total				**1936000**	**1406000**

2) Status in 2020

Component Description		Period 2020-21				% increase over base Year	
Components	**Names**	**Area (Acre)/No**	**Production (Q/Liter/No.)**	**Gross Income (Rs.)**	**Net Income (Rs.)**	**production**	**income**
Horticulture Crop 1	Orange (Nagpur Mandrin)	10	1680	3360000	2830000	38.84	101.28
Total				**3360000**	**2830000**	**38.84**	**101.28**

Brief: The farmer used to get annual income of **Rs 1406000/-** from Orange. He faced problems like low yield due to disease and pest incidence etc. With DFI interventions like training and demonstration of IPM and IDM etc., he is getting annual income of **Rs 2830000/-**. In addition, he was got good price in market than the previous year hence getting good income. In addition there is cost saving of **Rs. 100000/- in orange** production.

Bark Eating Caterpillar incidence in control plot

Good Quality Fruits in Demo Plot

Effect of DFI intervention **Name of KVK: Amravati II**

Name of Farmer: Smt. Shobha A Daware
Address: At Po: A/P Timtala Tql Nandgaon Kh. Dist. Amravati Maharashtra
Mobile Number: 8888196945
Age: 53
Education: H. Sc.
Size of land holding (in acre): 08 Acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2018-19)			
Components	Names	Area (Acre)/Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Organic Product	Neemboli ark & Jivamrut	50 kg	180 lit	13200	10800
Total			**180 lit**	**13200**	**10800**

2) Status in 2020

Component Description		Period 2020-21				% increase over base year	
Components	Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)	production	income
Organic Product	Neemboli ark & Jivamrut	150 kg	400 lit	28300	23500	122.22	117.59
Total			**400 lit**	**28300**	**23500**	**122.22**	**117.59**

Brief: The farmer used to get annual income of **Rs. 10,800/-** from Neemboli ark and Jivamrut . She faced problems like lack of new technology in processing and their marketing . With DFI interventions like training and demonstration , she is getting annual income of **Rs 23,500/-.** She got good price in market than the previous year. In addition there is cost saving of **Rs 2400/-** in production.

Training

Processing activity

Effect of DFI intervention **Name of KVK: Amravati II**

Name of farmer: Sanjay Panjabrao Yawle
Address: At Po: Takali Bk. Tq: Nandgaon Kh Dist: Amravati
State: Maharashtra
Mobile Number: 9422949127
Age: 42
Education: BSc (Math)
Size of land holding (in acre): 5 Acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2018-19)			
Components	**Names**	**Area (Acre)/Number**	**Production (Q/Liter/No.)**	**Gross Income (Rs.)**	**Net Income (Rs.)**
Field Crop 1	Soybean (JS-335)	5	32.1	125190	53690
Field Crop 2	Pigeon Pea (Vipula)	5	13.5	81000	18750
Total			**45.6**	**206190**	**72440**

2) Status in 2020

Component Description		Period 2020-21				% increase over base year	
Components	**Names**	**Area (Acre)**	**Production (Q/Liter/No.)**	**Gross Income (Rs.)**	**Net Income (Rs.)**	**production**	**income**
Field Crop 1	Soybean (JS-93-05)	5	36.5	182500	109250	13.70	103.4
Field Crop 2	Pigeon Pea (P – 12)	5	16.6	104580	38180	22.96	103.6
Total			**53.1**	**280780**	**147430**	**16.44**	**103.52**

Brief: The farmer used to get annual income of **Rs 72440/-** from soybean and pigeon pea etc. He faced problems like low yield of traditional variety, disease and pest incidence etc. With DFI interventions like training and demonstration of newly released varieties and proper nutrient management etc., he is getting annual income of **Rs147430/-** In addition, he was got good price in market than the previous year hence getting good income (5000 rs/qt soybean). In addition there is cost saving of **Rs. 10850/- in Soybean and Rs. 11540/- in Pigeon pea** production.

Soybean Variety JS-93-05

Pigeon Pea Variety Phule Rajeshwari (P-12)

Effect of DFI intervention **Name of KVK: Amravati II**

Name of Farmer: Rahul Devidasrao Nandane
Address: At Po: A/P Udakhed Tq Morshi. Dist. Amravati, Maharashtra
Mobile Number: 9503240022
Age: 26
Education: B.com
Size of land holding (in acre): 04 Acre

1) Before Intervention

Component Description		Benchmark (Baseline period 2018-19)			
Components	**Names**	**Area (Acre)/Number**	**Production (Q/Liter/No.)**	**Gross Income (Rs.)**	**Net Income (Rs.)**
Processing	Turmeric P	18 Qt Dry Finger	15qt powder	280000	190000
Processing	Daniya Powder	10 qt Dry coriander	9 qt powder	240000	159000
Total			**24 qt powder**	**520000**	**349000**

2) Status in 2020

Component Description		Period 2020-21				% increase over base year	
Components	**Names**	**Area (Acre)/No**	**Production (Q/Liter/No.)**	**Gross Income (Rs.)**	**Net Income (Rs.)**	**production**	**income**
Field Crop 1	Turmeric	25 Qt Dry Finger	20 qt powder	440000	308000	33.3	81.6
Field Crop 2	Dhaniya Powder	20 qt Dry coriander	19 qt powder	570000	399000	111.1	111.0
Total			**39 qt powder**	**1010000**	**707000**	**62.5**	**102.57**

Brief: The farmer used to get annual income of Rs. **483000/-** from Turmeric Powder and Dhaniya Powder He faced problems like low production of traditional method i.e Manual Practices of processing. With DFI interventions like training and demonstration of newly released techniques like support of machinery , he is getting annual income of Rs**707000/-**. In addition he saving Rs**. 25500/-** in turmeric powder and coriander powder. Processing with machinery increases the production quantity and reduces the labour cost.

Spices Processing Unit

Processed Product

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

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

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK

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

A. Practicing Farmers

a)
b)
c)

B. Rural Youth

a)
b)
c)
d)

C. In-service personnel

a)
b)
c)

5.2. Indicate the methodology for identifying OFTs/FLDs

For OFT:

i) PRA
ii) Problem identified from Matrix
iii) Field level observations
iv) Farmer group discussions
v) Others if any

For FLD:

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

5.3. Field activities

i. Name of villages identified/adopted with block name (from which year) -
ii. No. of farm families selected per village :
iii. No. of survey/PRA conducted :
iv. No. of technologies taken to the adopted villages
v. Name of the technologies found suitable by the farmers of the adopted villages:
vi. Impact (production, income, employment, area/technological– horizontal/vertical)
vii. Constraints if any in the continued application of these improved technologies

6. LINKAGES

A. Functional linkage with different organizations

Name of 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.
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.
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 Pyrthemium 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 shedi Vikas Mahamandal , Pohara	Technical guidance
National Horticulture Mission	Technical & Financial Assistance
Rashtriya Krishi Vikas Yojna	Financial Assistance
MANAGE, Hyderabad	Technical & Financial assistance
CRIDA, NICRA	Climate Resilient in Agriculture Action Research
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**
MAVIM	**Training**

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

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

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

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 -Nil

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	**Meetings**				
02	**Research projects**				
03	**Training programmes**				
04	**Demonstrations**				
05	**Extension Programmes**				
	KisanMela				
06	**Publications**				
07	**Other Activities** (Pl.specify)				

D. Give details of programmes implemented under National Horticultural Mission-Nil

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

E. Nature of linkage with National Fisheries Development Board -Nil

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

F. Details of linkage with RKVY -Nil

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) -Nil

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
01	Seed Production Technologies in Pulses	Technical	00	00	

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

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 -Nil

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
01	Mushroom Production	Mushroom Production Management	20000	10000	One Day technical Inofrmatin

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 during2021:No

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

Other Details -Nil

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies			
Lectures organized			

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
Maharashtra	Soybean	450.50	205

B. Major area coverage under alternate crops/varieties

Crops	Area (ha)	Number of beneficiaries
Oilseeds-Soybean	380.50	190
Pulses – Pigeonpea	306.00	112
Cereals		
Vegetable crops-Spinach, Brinjal	27.50	24
Tuber crops		
Total		

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

State	Livestock components	Number of interactions	No.of participants
Total			

D. Animal health camps organized **-Nil**

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

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

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
Maharashtra	Soybean, Pigeonpea- Broadbed Furrow	97.60	52
	Chickpea-Broad Bed Furrow	52.40	42
	Cotton-One row Furrow Opening	62.20	49
Total		**212.2**	**143**

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
Mahraahstra	**02**	**106**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total	**02**	**106**	**0**	**0**	**0**				**0**			

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 Micronutrient	100(19)	19.00	20100	27000
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 *Tricoderma* as a seed treatment for the control of Fusarium in chickpea	600 (108)	18.00	Nil	1800
Use of *Beuveria bassina* 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

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

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

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 2021	5	15480	5
Feb 2021	6	14450	3
March 2021	8	21685	4
April 2021	10	20860	6
May 2021	7	20548	5
Jun 2021	11	18435	3
Jul 2021	8	16740	0
Aug 2021	7	17490	2
Sept 2021	9	14860	4
Oct 2021	7	12650	3
Nov.2021	5	21680	4
Dec.2021	5	19865	2

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marke-ting	Aware-ness	Other enterprise	Total
	Text only	41	11	13	7	9	7	88
	Voice only							
	Voice & Text both							
	Total Messages	41	11	13	7	9	7	88
	Total farmers Benefitted	**81678**	**37798**	**49742**	**15538**	**11240**	**18747**	**214743**

15. PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
01	Button Production	2012		Agaricus bisporus	Button mushroom	7295	656550/-	875400/-	
02	Fruits & Vegetable Processing Unit	2011			Amla Candy	300 kg	45000/-	75000/-	
					Amla Murabba	100 kg	6000/-	15000/-	
					Amla juice	100 lit	5400/-	9000/-	
					Amla Powder	45 kg	4725/-	9450/-	
					Amla Pickle	100 kg	7800/-	13000/-	
					Turmeric Powder	670 kg	46900/-	80400/-	

B. Performance of instructional farm (Crops) including seed production

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals									
wheat	1st week of Dec	2nd week of April	1.57	Phule Samadhan	Seed	37.80	18353	78584	
Pulses									

Chick Pea	1st week of Nov	1st week of March	10.50	RVG 202 Phule Vikram JAKI - 9218	Seed	22.52 22.46 10.85	95564	210600	
Oilseeds									
Soybean	2nd Week of June	2nd week of October	11.50	KDS- 726 JS- 9305 JS-335	Seed	23.65 12.35 10.08	105640	230400	
Fibers									
Spices & Plantation crops									
Turmeric	1st week of may								Yield awaited
Floriculture									
Fruits									
Sapota			0.80	Cricket ball		10.05	-	40000	
Vegetables	2nd Week of October	-	0.80					35000	

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	
01	Bio-Fertilizers	Rhizobium	1193	264846	441410	
		PSB	1345	298590	497650	
		Azotobactor	779	172938	288230	
		K.S.B	205	45510	75850	
02	Bio-pesticides	Trichoderma	8919	535140	891900	

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

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

E. Utilization of hostel facilities

Accommodation available (No. of beds):30

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
January **2021**	0	0	Due COVID-19, Amravati
February **2021**	0	0	
March **2021**	0	0	
April **2021**	0	0	
May **2021**	0	0	
June **2021**	0	0	
July **2021**	0	0	
August **2021**	0	0	
September **2021**	0	0	
October **2021**	0	0	
November **2021**	32	03	
December **2021**	53	45	

F. Database management

S. No	Database target	Database created
01	**04**	**02**

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

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

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

Nutritional Garden developed at KVK farm

Area under nutritional garden (ha)	Component of Nutritional Garden	No. of species / plants in nutritional garden	No. of farmers visited
½ Acre	Vegetable crops	22	367
	Fruit crops	5	
	Curry leaves, Drumstick	2	

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

No. of Villages covered	Component of Nutritional Garden	No. of species / plants in nutritional garden	No. of farmers covered
4	Vegetable crops	15	12
	Fruit crops	2	
	Curry leaves , Drumstick	2	

H. Details of Skill Development Trainings organized

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

17. 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 2021-22 (Rs. in lakh)(Till Dec, 2021)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	177.00	147.72	144.06
2	**Traveling allowances**	2.00	1.00	0.35
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)			
B	POL, repair of vehicles, tractor and Equipments	15.00	10.35	8.38

C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)			
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			
G	Training of extension functionaries			
H	Maintenance of buildings			
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
TOTAL (A)		**194.00**	**159.07**	**152.79**
B. Non-Recurring Contingencies				
1	**Works**	00	00	00
2	**Equipments including SWTL & Furniture**	00	00	00
3	**Vehicle** (Four wheeler/Two wheeler, please specify)	00	00	00
4	**Library** (Purchase of assets like books & journals)	00	00	00
TOTAL (B)		**00**	**00**	**00**
C. REVOLVING FUND		**00**	**00**	**00**
GRAND TOTAL (A+B+C)		**194.00**	**159.07**	**152.79**

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

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2018 to March 2019	118.39	243.94	193.70	168.64
April 2019 to March 2020	168.64	194.34	227.80	135.18
April 2020 to March2021	135.18	117.57	176.54	76.21
April 2021 to December, 2021	76.21	81.98	117.64	40.55

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

Name of the staff	Designation	Title of the training programme	Institute where attended	Mode (Online/Offline)	Dates
Dr Archana N Kakade	SMS(Home science)	Mushroom production Technology	IIHR, Bengaluru	Online	9/8/21 to 11/8/21
Dr Archana N Kakade	SMS (Home Science)	Button Mushroom Production	SKNAU Jobner	Online	18/6/21
P.H.Mahalle	SMS (Hort)	Advances in Agripreneurship and skill development for reshaping the future of indian agriculture	AEEFWS, Punjab	Online	01 to15th August 2021
P.H.Mahalle	SMS (Hort)	Horticulture Technologies for Startups	BEST-HORT, ICAR-IIHR, Bangalore	Online	07 August2021
P.H.Mahalle	SMS (Hort)	Soilless Terrace Gardening	BEST-HORT, ICAR-IIHR, Bangalore	Online	10th August2021

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)
Takli	402	Varietal Intervention, Irrigation Schedule, Water saving methods	50	69000 per ha	125000 per ha
Ajani	200	Varietal Intervention, INM, IPM	50	70000 per ha	122000 per ha

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- SwachhtaPakhwada, Cleaning, Awareness Workshop, Microbial based Agricultural Waste Management by Vermicomposting etc.*	No. of Programmes conducted	No. of Participants
01	Swachhta Pakhwada, Cleaning, Awareness Workshop, Microbial based Agricultural Waste Management by Vermicomposting etc	07	124

21. 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	102	**1795**	**526**	**2319**
Rural youths	13	164	83	247
Extension functionaries	08	475	113	588
Sponsored Training	02	26	31	57
Vocational Training	04	82	32	114
Total	**129**	**2542**	**785**	**3325**

2. Frontline demonstrations

Crops/Enterprise	No. of Farmers	Area(ha)	Units/Animals
Oilseeds	63	25.0	
Pulses	0	0	
Cereals			
Vegetables	10	02	
Other crops	20	04	
Hybrid crops			
Total	**93**	**31.2**	**00**
Livestock & Fisheries			
Other enterprises	20		20
Women Empowerment	42		42
Kitchen Gardening	100		100
Total	**162**	**31.2**	**162**
Grand Total	**348**	**31.2**	**162**

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	08	86	
Livestock	00	00	
Various enterprises	03	33	
Total	**11**	**119**	
Technology Refined			
Crops	0	0	
Livestock	0	0	
Various enterprises	0	0	
Total	0	0	
Grand Total	**11**	**119**	

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	5877	29651
Other extension activities	0	0
Online Programmes	39	1233
Total	**5916**	**30884**

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marke-ting	Awar e-ness	Other enterprise	Total
	Text only	41	11	13	7	9	7	88
	Voice only							
	Voice & Text both							
	Total Messages	41	11	13	7	9	7	88
	Total farmers Benefitted	**81678**	**37798**	**49742**	**15538**	**11240**	**18747**	**214743**

6. Seed & Planting Material Production

	Quintal/Number	Value (Rs.)
Seed (q)	124.41	529801
Planting material (No.)	2516	76020
Bio-Products (kg)	12441	2195040
Livestock Production (No.)	0	0
Fishery production (No.)	0	0

7. Soil, water & plant Analysis

Samples		No. of Beneficiaries	Value (Rs.)
Soil	359	359	75390
Water	234	234	46800
Plant	32	32	48000
Total	**625**	**625**	**170190**

8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	00
2	Conferences	00
3	Meetings	12
4	Trainings for KVK officials	05
5	Visits of KVK officials	03
6	Book published	0
7	Training Manual	0
8	Book chapters	0
9	Research papers	0
10	Lead papers	0
11	Seminar papers	0
12	Extension folder	04
13	Proceedings	02
14	Award & recognition	0
15	On-going research projects	01