# ANNUAL PROGRESS REPORT - 2021

### (January - December)





Submitted by Sr. Scientist & Head KRISHI VIGYAN KENDRA, Nanded-1 Jawaharlal Nehru Institute of Education and Science and Technological Research, Pokharni, Nanded.

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### 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)
Krishi Vigyan Kendra, Pokharni,	Office	FAX		www.kyknonded.com
Purna Road, Nanded (MS) Pin code-431 735	8975899504		kvk_nanded@yahoo.co.in	Hits: 36429

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

Address	Telephone		E mail	Website address
	Office	FAX		
Jawaharlal Nehru Institute of				
Education, Science and Technological	02462 -		lade nondod@wahoo oo in	www.lwlmondod.com
Research Trust, Nanded 1, HIG,	253643		KVK_IIanueu@yanoo.co.iii	www.kvknanueu.com
Colony, Near ITI, Nanded (MS)				

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

Name	Telephone / Contact			
Dr. Davikant Amrutrao Dashmukh	Office	Mobile	Email	
DI. Devikant Annutrao Desinnukn	8975899504	9423140598	drdad1976@gmail.com	

### 1.4. Date and Year of sanction: 1993

SI.		Name of the	<mark>Mobile No.</mark>	<b>N:</b> :	If Perman indi	ent, Please cate	Date of	If Temporary, pl. indicate the
No.	Sanctioned post	incumbent		Discipline	Current Pay Band	Current Crada Pay	joining	consolidated amount
1	Senior Scientist and Head	Vacant			I ay Dallu	Graueray		paiu (KS./montin)
1.			0.4001.40.500	TT / 1/	15(00.20100	5400	20/01/2000	
2.	Subject Matter Specialist	Dr. Deshmukh D. A.	9423140598	Horticulture	15600-39100	5400	20/01/2009	Permanent
3.	Subject Matter Specialist	Mrs Nadre S. R.	9423113580	Home Science	15600-39100	5400	03/08/2010	Permanent
4.	Subject Matter Specialist	Mr. Kalyankar M. G.	9421569640	Plant Protection	15600-39100	5400	04/07/2011	Permanent
5.	Subject Matter Specialist	Mr. Jaybhaye S. H.	8669125394	Agronomy	15600-39100	5400	01/07/2013	Permanent
6.	Subject Matter Specialist	Dr. Ambore M. N.	9423140163	Veterinary science	15600-39100	5400	01/07/2013	Permanent
7.	Subject Matter Specialist	Dr. Deshmukh G. P.	9890909666	Agricultural Extension	15600-39100	5400	15/12/2014	Permanent
8.	Jr. Clerk	Ms. Hadoltikar P S	9860738151	Clerk	5200-20200	2000	02/06/2003	Permanent
9.	Computer Programmer	Mr. Wadile R. T.	9960438725	Computer	9300-34800	4200	06/07/2011	Permanent
10.	Farm Manager	Mr. Ingole R. R.	8668672867	Farm manager	9300-34800	4200	01/07/2013	Permanent
11.	Accountant/Superintendent	Mr. Bhalerao A. G.	7558647090	Accountant	9300-34800	4200	01/07/1995	Permanent
12.	Stenographer	Mr. Jadhav S. S.	8087901897	Stenographer	5200-20200	2400	01/08/2007	Permanent
13.	Driver 1	Mr. Wathore M. S.	9890601279	Driver	5200-20200	2000	06/05/1997	Permanent
14.	Supporting staff 1	Mr. Gaikwad S. S.	7875002314	Peon	5200-20200	1800	01/07/1995	Permanent
15.	Supporting staff 2	Mr. Konapure S. R.	9860065596	Watchman	5200-20200	1800	01/07/1995	Permanent
16.	Supporting staff 3	Mr. Kadam D. R.	9028910656	Messenger	5200-20200	1800	02/04/2009	Permanent

### 1.5. Staff Position (as on December, 2021)

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

S. No.	Item	Area (ha)
1	Under Buildings	01
2.	Under Demonstration Units	1.4
3.	Under Crops	11.7
4.	Horticulture	5.9
5.	Pond	0.20
6.	Area under crop, Fodder Museum	01
	Total	21.2

## 1.7. Infrastructural Development: A) Buildings

		Source			Stage			
S	Name of building	of		Incomplete				
S. No.		funding	Completion Year	Plinth area (Sq.m)	Expenditure (Rs.)	Starting year	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	31.03.1999	2272.73	3614539/-	1998		Complete
2.	Farmers Hostel	ICAR	31.03.2005	308.02	2423000/-	2003		Complete
3.	Staff Quarters (6)	ICAR	-	380.14	3034000/-	2006		Complete
4.	Demonstration Units (2)	ICAR	31.03.1997	3060.45 Sq.ft	1242661/-	1996		Complete
5	Fencing							
6	Rain Water harvesting system							
7	Threshing floor							
8	Farm godown							
9	ICT lab							

### B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Running	Present status
Tractor	2003	4,50,000/-	8596 hrs	Good
Motorcycle	1996	43,804/-		Scraped
Bolero Jeep (New)	Dec 2019	7,13,368/-		Good
Bolero jeep (old) Condemned	Sold date: 24/02/2020	Sold cost: 91,000/-		Sold

### Equipments& AV aids C)

Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
Zenith Camera	1995	4,950/-	Good
Kodak Camera	1997	800/-	Good
Television	1996	14,240/-	Good
Slide and Overhead Projector	1996	31,925/-	Good
Furniture	1995	64,195/-	Good
Bench	2005	1,00,000/-	Good
Typewriters	1995	22,560/-	Good
Computer With printer etc	2000	54,850/-	Good
Chairs	2000	22500/-	Good
Fans	2000	2,440/-	Good
Soil and Water Testing Lab	2004	8,60,000/-	Good
Fax Machine	2006	15,000/-	Good
Mridaparikshak Mini Lab	2015	75,000/-	Good
GPS machine	2017	15000/-	Good
Video Conference System (LCD Screen,	2020	55000/-	Good
Computer with LCD screen, Web			
Camera, UPS Battery, Audio mice			

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

Date	Name and Designation of Participants	Salient Recommendations	Action taken
-	-	-	-

### 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 + Horticulture.			
2	Agriculture + Siliviculture.			
3	Agriculture + Dairy.			
4	Agriculture + Vegetables.			
5	Horticulture. + Animal Husbandry. + Agriculture.			
6	Agriculture + Animal Husbandry.			

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

a) 501	i type	
S. No	Agro-climatic Zone	Characteristics
110.		
1	Central Vidarbha	Rainfall of 1,200 mm/year well distributed within the S-W monsoon months.
	moderate	Maximum temperatures of 35-40 degrees Celsius in the summer. Humidity
	Rainfall	of about 75% in the rainy season. Soils are black derived from basalt rock,
		medium to heavy texture, and generally Fertile. Cropping patterns involve
		cotton, sorghum, pulses, wheat and oilseeds.
2	Moderate to	Large plateau covering the central part of the state. Well distributed rainfall
	Moderately High	of 700 to 900 mm/year dictated by the S-W monsoon. Summer temperature
	Rainfall Zone (Central	will reach about 40 degrees Celsius. Soils are vertisoils and entisoils varying
	Maharashtra Plateau	from medium black to reddish brown. Sorghum is the most important crop,
	Zone)	but cotton, oilseeds, millet, groundnut, pulses and sugarcane occupy
		significant areas.

### b)Topography

Nanded District mainly consists of plain areas with small hills and granite boulders. The land is mainly utilized for agricultural purpose. The Agricultural area is 1033114 hectars and the forest area is 91748 hectares. There are ten small rivers with Godavari, Manjra, Manyad, Penganga being the main rivers. The overall climate is dry and temperature in summer goes up to 40 degree and above. The average rainfall is around 450 mm.

### 2.3 Soil Types

S. No	Soil type	Characteristics	Area in ha
1	Shallow black Soil	Depth 15-20 cm	576.26
2	Medium deep black Soil	More calcium & carbonate percentage	101.12
3	Deep black	High soil moisture, holding capacity	394.65

The black cotton soil in the district is rich in calcium, magnesium and carbonates, but poor in Nitrogen, Potassium and Phosphorous. It has a high moisture and humidity retention capacity. The river basin of Godavari, Mangurd, Mongia and Penganga has deep and good quality soil along the banks. The soil near hilly areas is lanterate and mixed with stone.

(2021)	2021)							
S. No	Crop	Area (ha)	Production (Q)	Productivity (kg./ha)				
1	Kharif Sorghum	22951	81017	353				
2	Maize	914	3838.8	420				
3	Red gram	71731	616169	859				
4	Green gram	23845	114933	482				
5	Black gram	25428	104763	412				
6	Soybean	434251	3426240	789				
7	Cotton	175445	1142147	651				
8	Rabi sorghum	27247						
9	Wheat	31451						
10	Rabi maize	5469						
11	Chick pea	268433	2995712	1116				
12	Safflower	3319	34285.3	1033				
13	Sesame	455	1251.25	275				
14	Summer groundnut	16965	203580	1200				

2.4. Area, Production and Productivity of major crops cultivated in the area of jurisdiction of KVK (2021)

Source: District agriculture department.

### 2.5. Weather data (2021)

Marth	Dainfall (mm)	Tempera	ature ( <sup>0</sup> C)	<b>Relative Humidity (%)</b>	
IVIOIIUI	Kaiman (iiiii)	Maximum	Minimum	Maximum	Minimum
January	24.0	28.9	16.9	61.4	58.3
February	0	31.4	16.3	58.9	50.2
March	12.2	37.6	20.3	50.8	32.6
April	0	39.4	23.1	49.1	28.8
May	16	39.7	24.5	63.2	39.1
June	129.4	34.3	19.8	73.9	57.8
July	411.6	37.7	18.2	78.7	67.6
August	75.2	31.8	18.4	83.3	71.2
September	408.4	29.7	18.4	88.4	79.2
October	61.2	31.6	19.1	77.4	68.4
November	4.4	30.8	17.3	72.7	63.5
December	0	29.0	15.2	68.2	55.9
Total	1142.4				

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

Population (No.)	Production (Per unit)	Productivity (Per unit)
65030	15.41 (MT)	7.992 kg/animal
585273	98.50 (MT)	2.477 kg/animal
211721	124.02 (MT)	4.563 kg/animal
41173	17.09 (MT)	-
253302	7.38 (MT)	0.254 kg/animal
13004	_	-
553	-	-
184594	335.93 lakh eggs	182 eggs/year/bird
276891	186.92 lakh eggs	84 eggs/year/bird
	Population (No.)           65030           585273           211721           41173           253302           13004           553	Population (No.)         Production (Per unit)           65030         15.41 (MT)           585273         98.50 (MT)           211721         124.02 (MT)           41173         17.09 (MT)           253302         7.38 (MT)           13004         -           553         -           184594         335.93 lakh eggs           276891         186.92 lakh eggs

Taluka / Block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
Bhokar	Hadoli	Soybean, cotton, turmeric, Bengal gram, Agriculture, Horticulture, Animal Husbandry	• Lack of knowledge, adoption of improved variety	• Horticulture, Agriculture
Mudkhed	Pimpalgaon magre	Turmeric & Banana	<ul> <li>Sowing of Cotton in light soil &amp;rainfed situation.</li> <li>Management practices (wider spacing, Seed treatment, No proper gap filling, Protective irrigation at critical stages).</li> <li>Imbalance nutrient management (Soil test Based Fertilizer application Inadequate &amp; low Quality organic matter used).</li> <li>Improper Pest, diseases management.</li> </ul>	<ul> <li>Method, quantity &amp; time of fertilizer application.</li> <li>Integrated Nutrient Management.</li> <li>Integrated pest &amp; diseases management.</li> </ul>
Ardhapur	Bhogan	Soybean	<ul> <li>Unawareness about New variety.</li> <li>No use of good utility Seed.</li> <li>Imbalance nutrient management (No use of 2%foliar spray of Urea)</li> <li>Improper Pest, diseases management.</li> </ul>	<ul> <li>Integrated Nutrient Management.</li> <li>Proper Pest &amp; Diseases management.</li> </ul>
Bhokar	Bember	Red gram/green gram/black gram	<ul> <li>Imbalance nutrient Management</li> <li>Excess Urea Application Improper pest &amp; disease management</li> </ul>	<ul> <li>Integrated Nutrient Management.</li> <li>Foliar Application of 2% Urea</li> <li>Integrated Pest &amp; Diseases management.</li> </ul>
Hadgaon	Pathrad	Wheat	<ul> <li>Low yield due to use of traditional crop varieties.</li> <li>Improper Sowing time Imbalance nutrient Management.</li> </ul>	<ul> <li>Importance of new high yielding varieties.</li> <li>Nutrient management.</li> </ul>
Nanded	Dhanora	Groundnut	<ul> <li>Unawareness about New Technology Secondary and micronutrient deficiencies.</li> </ul>	<ul> <li>BBF or Polyethelin Mulching</li> <li>Nutrient Management.</li> <li>Proper Pest &amp; Diseases management.</li> </ul>
Ardhapur	Lone, Lahan	Sugarcane, Banana, Soybean, cotton, turmeric, Agriculture, Horticulture, Animal Husbandry	• Chlorosis content water, Adoption of micro irrigation	Animal Husbandry, Agriculture
Kinwat	Islapur	Red gram, Green gram, Black gram, Soybean, Bengal gram	Lack of Knowledge on improved variety, Less awareness about seed treatment	Agriculture

### 2.7. Details of Operational area / Villages

### 2.8. Priority thrust areas:

Sr. No.	Discipline	Thrust area
1	Agronomy	Integrated Crop management, Integrated Nutrient Management, Resource conservation technology, Weed management, Crop diversification, Integrated farming and Seed production.
2	Horticulture	Nursery management, Off season vegetable, Protective cultivation, Training and Pruning, Cultivation of Fruit, Management of young plants/orchards, Propagation techniques of Ornamental Plants, Processing and value addition, Planting material production.
3	Plant protection	Integrated Pest Management, Integrated Disease Management, Bio-control of pests and diseases, Production of bio control agents and bio pesticides, Bio-pesticides production, Bio-fertilizer production, Sericulture.
4	Home Science	Household food security by kitchen gardening and nutrition gardening, Design and development of low/minimum cost diet, Designing and development for high nutrient efficiency diet, Minimization of nutrient loss in processing, Gender mainstreaming through SHGs, Storage loss minimization techniques, Value addition. Income generation activities for empowerment of rural Women, Location specific drudgery reduction technologies, Women and child care.
5	Veterinary science	Dairy Management, Poultry Management, Gotary management, Disease Management, Feed management, Production of quality animal products, Production of livestock feed and fodder.
6	Agricultural extension	Group dynamics, Leadership development, Formation and Management of SHGs, Mobilization of social capital, Entrepreneurial development of farmers/youths, WTO and IPR issues, Small scale processing, Information networking among farmers, Capacity building for ICT application.

### **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
19	14	265	91	21	15	319	330

Training				Extension Programmes			
3				4			
Number of Courses		Number of Participants		Number of		Number of participants	
		-		Programmes			
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
123	97	3521	3117	377	661	1947	28004

Seed Prod	uction (Qtl.)	Planting materials (Nos.)		
	5		6	
Target	Achievement	Target	Achievement	
140	117	184000	49850	

Livestock, poultry strai	ns and fingerlings (No.)	Bio-products (Kg)		
	7		8	
Target	Achievement	Target	Achievement	
225	17	4700	15551	

<b>J.I. D.</b> Operational areas details during 202	3.1. B	<b>Operational</b>	l areas	details	during 2021
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S. No.	Major crops & enterprises being practiced in	Prioritized problems in these crops/ enterprise	Extent of area (ha/ No.) affected by the problem in	Names of Cluster Villages identified for	Intervention (OFT, FLD, Training, extension activity etc.)*
	cluster villages		the district	intervention	• •
1	Red gram	No use of improved variety, It's due to low productivity, Low productivity under rainfed, No use of seed treatment, Wilting problem.	7000 ha	Rahati, Tq.Nanded	OFT, Training
2	Soybean	Due to uncertainty of rainfall, Less branching, Stunted crop growth, Less flowering, Pods besides low gains weight, Low	2000 ha	Pandharwadi, Tq.Mudkhed	OFT, Training
	Soybean	yield, Uncertainty rainfall situation, Nutrient uptake is very less in dry spell situation.	1000 ha	Samundarwadi Tq. Bhokar	FLD, Training
3	Dairy	Low milk yield, Longer inter calving period, Fodder scarcity, Mastitis, Heat detection.	862024 number	Rui, Thakarwadi, Hadgaon	OFT, Training
4	Sheep and Goat	Poor growth rate, Mineral deficiency, High mortality	294475 number	Halda, Bhokar	FLD, Training, Vaccination camp, Extension activity
5	Backyard poultry	Less income from backyard poultry farming	461485 number		OFT, Training
6	Fodder	Low yield of green fodder			OFT, Training
7	Red gram	Heavy incidence of <i>Helicoverpa</i> , Improper <i>Helicoverpa</i> management besides Increases cost on plant protection	4200 ha	Rahati,	FLD, Training
8	Sovbean	Observed heavy incidence of defoliator pest and girdle beetle	950 ha		FLD Training
9	Cotton	Heavy incidence of Whitefly and Pink bollworm			OFT. Training
10	Turmeric	Heavy losses due to White grub			FLD, Training
11	Sericulture	Silkworm maturation lasts for 2-3 days, In winter season it may extend further, Incurring extra expenditure.			OFT, Training
12	Maize	Heavy incidence of Fall army worm			OFT, Training
13	Chick pea	Incidence of wilt, Incidence of Rust, Heavy incidence of Helicoverpa, Improper Helicoverpa management besides Increases cost on plant protection			FLD, Training
14	Turmeric	Small Size of Rhizome, Long Duration of Variety, Less curcumin %, Less Dry recovery, Less Average yield (kg/ha).	7200 ha	Bhosi, Pokharni	OFT, Training
15	Vegetable	High incidence of pest & disease at early stage	360 ha	Bhogaon, Bhokar	FLD, Training
16	Tomato	Leaf curl virus, Leaf Blight, Tuta absulata	200 ha	Kamtha, Vasantwadi	FLD, Training

### 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	-	-	-	-	-	-	-	01
Varietal Evaluation	-	-	01	02	-	-	-	-	-	03
Integrated Pest Management	01	-	-	01	-	-	-	-	-	02
Integrated Crop Management	-	-	-	-	01	-	-	-	I	01
Integrated Disease Management	-	-	-	-	-	01	-	-	-	01
Small Scale Income Generation Enterprises	-	-	-	-	-	-	-	-	-	-
Weed Management	-	-	-	-	-	-	-	-	-	-
Resource Conservation Technology	-	-	-	-	-	-	-	-	-	-
Farm Machineries	-	-	-	-	-	-	-	-	-	-
Integrated Farming System	-	-	-	-	-	-	-	-	-	-
Seed / Plant production	-	-	-	-	-	-	-	-	-	-
Value addition	-	-	-	-	01	-	-	-	I	01
Drudgery Reduction	-	-	-	-	01	-	01	01	-	03
Storage Technique	-	-	-	-	-	-	-	-	-	-
Mushroom cultivation	-	-	-	-	-	-	-	-	-	-
Total	01	01	01	03	03	01	01	01	-	12

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

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Evaluation of Breeds	-	01	-	-	-	01
Nutrition Management	-	-	-	-	-	-
Disease of Management	01	-	-	-	-	01
Value Addition	-	-	-	-	-	-
Production and Management	-	-	-	-	-	-
Feed and Fodder	-	-	-	-	-	-
Small Scale income generating enterprises	-	-	-	-	-	-
TOTAL	01	01	0	0	0	02

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

Thematic areas	Сгор	Name of the technology assessed	No. of trials	No. of farmer s	Area in ha (Per trial covering all the Technological Options)
Integrated Nutrient Management	Soybean	To assess the management of moisture stress in soybean during dry spell	05	05	0.40
Varietal Evaluation	Red gram	Assessment of improved variety of Red Gram as compared to local under protective irrigation for increase productivity	05	05	0.40
	Turmeric	Assessment of new variety of Turmeric (IISR – Pragati) Vs Salem	10	10	02
	Ajwain	Introduction of new seed spice crop Ajwain.(Climate resilient crop.)	06	06	02
Integrated Pest Management	Cotton	Assessment of Mass trapping by Pheromone trap for management of Pink bollworm in Cotton	05	05	02
	Maize	Assessment of Integrated management of Fall Army worm ( <i>Spodoptera frugiperda</i> ) in Maize	05	05	02
Integrated Crop Management	Watermelon	Use of crop covers (Protection Film-Non wooven polypropylene material) in watermelon	10	10	02
Integrated Disease Management	Banana	Assessment of Integrated management of Infectious Chlorosis in Banana	05	05	02
Value addition	Solar dryer	To assess the suitability of Solar dryer for drying vegetable.	05	05	0.10
Drudgery Reduction	Flower	To assess the suitability of flower harvesting bags.	05	05	0.10
	Trans-planter	To Assess the suitability Trans-planter for planting the seeding.	05	05	0.10
	Drumstick harvester	To Assess the suitability of Drumstick harvester.	05	05	0.10
Total			71	71	13.2

### 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	Poultry	Assessment of Kaveri breed for backyard poultry	10	10
Disease management	Cattle/Buffalo	Assessment of different preventive measures for	10	10
		subclinical mastitis in dairy animal		
Total			20	20

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 refineme nt needed	Justificatio n for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Red gram	irrigated	1) No use of	Assessment	05	T1 :	Plant height (cm)	187	The result	It is long	-	-
		improved	of		Farmers	No. of pods /	340.2	showed that the	duration		
		variety. It's	improved		practice	Plant		cultivation of	variety		
		due to low	variety of		Variety-	No of grain/pod	3.5	varieties BDN-	upto175 day.		
		productivity.	Red Gram		BSMR 736	Yield qt/ha	14.72	716 gave higher	It is high		
		2) Low	as		T2:	Plant height (cm)	170.2	number of	yielding		
		productivity	compared		Technolog	No. of pods /	420.1	pods/plant 520.2,	variety 40%		
		under rainfed.	to local		y Assessed:	Plant		Grain yield 18.	more yield		
		3) No use of	under		Variety of	No of grain/pod	3.7	95qt/ha with BC	than BDN-		
		seed	protective		BDN-711	Yield qt/ha	16.80	ratio of 6.57 as	711.		
		treatment.	irrigation		T3:Technol	Plant height (cm)	177.2	against farmers	Red colour		
		4) Wilting problem.	for increase productivit y		ogy Assessed: Variety of BDN-716	No. of pods/ Plant No of grain/pod	510.2 3.9	variety of BDN 711 with number of pods/plant – 410 and Grain	seed. It is high no. of branches and no. of pod		

C. 1.Results of Technologies Assessed -Discipline - Agronomy Results of On Farm Trial - 1

		Yield qt/ha	18.95	yield of 16.80	It is resistant to
		_		qt/ha with BC	wilt disease
				ratio of 5.83.and	Escape
				BSMR-736 with	terminal
				number of	drought.
				pods/plant – 340	It's given in
				and Grain yield	one time of
				of 14.70 qt/ha	maturity.
				with BC ratio of	The variety of
				5.31.	BDN 711 is
					susceptible to
					wilt in this
					year but less
					than BSMR
					736

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	B:C Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice) Variety- BSMR 736	VNMKV Parbhani	14.72	Kg/ha	65720	5.31
Technology option 2- Variety of BDN-711	VNMKV Parbhani	16.80	Kg/ha	76555	5.83
Technology option 3- Variety of BDN-716	VNMKV Parbhani	18.95	Kg/ha	88380	6.57

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

- **1 Title of Technology Assessed:** Assessment of improved variety of Red Gram as compared to local under protective irrigation for increase productivity
- Problem Definition: 1) No use of improved variety. It's due to low productivity. 2) Low productivity under rainfed.3) No use of seed treatment.
   4) Wilting problem.
- **3 Details of technologies selected for assessment:** T1: Farmers practice: Variety- BSMR 736

T2: Technology Assessed: Variety of BDN-716.

T3:Technology Assessed: Variety of BDN-711.

4 **Source of technology:** VNMKV Parbhani

- **5 Production system and thematic area:** Soybean + Red gram/Sorghum- Bengal gram Varietal evaluation.
- 6 **Performance of the Technology with performance indicators:** The result showed that the cultivation of varieties BDN-716 gave higher number of pods/plant 520.2, Grain yield 18.95qt/ha with BC ratio of 6.57 as against farmers variety of BDN 711 with number of pods/plant 410 and Grain yield of 16.80 qt/ha with BC ratio of 5.83.and BSMR-736 with number of pods/plant 340 and Grain yield of 14.70 qt/ha with BC ratio of 5.31.
- 7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques: 1)It is long duration variety upto175 day. 2) It is high yielding variety 40% more yield than BDN-711. 3) Red colour seed. 4) It is high no. of branches and no. of pod. 5) It is resistant to wilt disease escape terminal drought.6) It's given in one time of maturity. The variety of BDN 711 is susceptible to wilt in.
- 8 Final recommendation for micro level situation: its suitable variety in rainfed as well as irrigated. Red color seed variety most of farmers are prefer for cultivation its suitable for that region. It can be recommended for farmer cultivation in major area. No wilting problem.
- 9 Constraints identified and feedback for research and developmental departments: It's observed higher no of branches and no of pod per plant but it is less plant height as compared to BSMR-736. It's required one irrigation during flowering and pod development in dry spell situation. In BDN 711 variety of red gram is observed wilting problem in this year but less percent as compared to local checked.
- 10 Process of farmer's participation and their reaction: Assessment has been taken as per problem diagnosed, after that village-wise meeting was conducted for selection of farmers. After selecting farmers, training has been given and made aware about complete procedure for assessment. Regular visit of farmers were arranged and necessary suggestions were given to farmers.

Crop/ enterpris e	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refineme nt needed	Justificatio n for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Soybean	Rainfed	1) Due to	То	05	T1:	Plant height	79.04	The result	1.It is very	-	-
		uncertainty	assess		Farmers	cm		showed that the	important for		
		of rainfall.	the		practice:	No. of	10.93	application of	increasing		
		2) Less	manage		application	Branches/plant		KNO3 @1% at	plant height		
		branching.	ment of		of RDF	No. Pods/	90.8	35 DAS and	and No of		
		3) Stunted	moisture		(30:75:30	plant.		2% at 55 DAS	branches		
		crop	stress in		kg NPK	100 grain	11.90	with RDF was	during dry		
		growth.	soybean		/ha)	weight (gm)		recorded	spell situation		
		4) Less	during			Yield (qt/ha)	18.75	highest test	2.It is		

### C. 1.Results of Technologies Assessed Results of On Farm Trial - 2

flowering	dry spell	T2:	Plant height	84.85	weight 13.85,	increasing test		
5) Pods		assessed-	cm		seed yield	eight and seed		
besides low		spraying of	No. of	13.35	22.25, No of	yield by the		
gains		(19:19:19)	Branches/plant		pods/plant	application of		
weight.		1% at 35	No. Pods/	114.1	115.3 and B:C	KNO3 at dry		
6) Low		DAS and	plant.		4.01 as	spell situation		
yield.		2% at 55	100 grain	12.9	compared to	3. The plant do		
		DAS with	weight (gm)		farmer practice	not uptake		
		RDF.	Yield (qt/ha)	21.75	and as at par	nutrient from		
		T3:	Plant height	84.12	with	soil at the time		
		spraying of	cm		application of	of dry		
		Potassium	No. of	13.25	19.19.19NPK	situation this		
		nitrate	Branches/plant		@1% at 35	its supplement		
		(13:00:45)	No. Pods/	115.3	DAS and 2% at	dose for plant		
		1% at 35	plant.		55 DAS with	growth		
		DAS and	100 grain	13.85	RDF and the			
		2% at 55	weight (gm)		application of			
		DAS with	Yield (qt/ha)	22.25	19.19.19NPK			
		RDF.			@1% at 35			
					DAS and 2% at			
					55 DAS with			
					RDF recorded			
					highest plant			
					height84.85			
					and No of			
					branches			
					compared to			
					local			

Contd..

**Technology Assessed** 

Production

Source of

uction Pl

Please give the unit (kg/ha, t/ha, Net Return (Profit)

Profit) B:C

	Technology		lit/animal, nuts/palm, nuts/palm/year)	in Rs. / unit	Ratio
13	14	15	16	17	18
Technology option 1					
Farmers practice: application of	VNMKV Parbhani	18.75	Kg/ha	80250	3.48
RDF (30:75:30 kg NPK /ha)					
Technology option 2					
spraying of (19:19:19) 1% at 35	VNMKV Parbhani	21.75	Kg/ha	97380	3.94
DAS and 2% at 55 DAS with RDF.					
Technology option 3					
Spraying of Potassium nitrate	VNIMK V Dorbhoni	22.25	V a/ha	100260	4.01
(13:00:45) 1% at 35 DAS and 2% at	VINIVIK V Falulialii	22.23	Kg/IIa	100200	4.01
55 DAS with RDF.					

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

- **1 Title of Technology Assessed:** To assess the management of moisture stress in soybean during dry spell.
- 2 **Problem Definition:** 1) Due to uncertainty of rainfall. 2) Less branching. 3) Stunted crop growth.4) Less flowering. 5) Pods besides low gains weight. 6) Low yield.
- **3 Details of technologies selected for assessment:** T1: Farmers practice: application of RDF (30:75:30 kg NPK /ha).

T2: Assessed: Spraying of (19:19:19) 1% at 35 DAS and 2% at 55 DAS with RDF. T3: Assessed: Spraying of Potassium nitrate (13:00:45)1% at 35 DAS and 2% at 55

DAS with RDF.

- 4 **Source of technology:** VNMKV Parbhani
- 5 **Production system and thematic area:** foliar application of fertilizer during dry spell situation, integrated nutrient management.
- 6 Performance of the Technology with performance indicators: The result showed that the application of KNO3 @1% at 35 DAS and 2% at 55 DAS with RDF was recorded highest test weight 13.85, seed yield 22.25 No of pods/plant 115.3 and B:C 4.01 as compared to farmer practice and

as at par with application of 19.19.19NPK @1% at 35 DAS and 2% at 55 DAS with RDF and the application of 19.19.19NPK @1% at 35 DAS and 2% at 55 DAS with RDF recorded highest plant height 84.85 and No of branches13.25 compared to local checked and at par with application of KNO3@1% at 35 DAS and 2% at 55 DAS with RDF.

- Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques:
  1) It is very important for increasing plant height and No of branches during dry spell situation. 2) It is increasing test eight and seed yield by the application of KNO3 at dry spell situation. 3) The plant do not uptake nutrient from soil at the time of dry situation this its supplement dose for plant growth.
- **8** Final recommendation for micro level situation: The result showed that the application of 19.19.19NPK @1% at 35 DAS and 2% at 55 DAS with RDF recorded highest plant height and branches compared to local this might be due to 6 percent more N in 19.19.19 NPK fertilizer compared to KNO3, which might have enhance plant height .because of its role in cell division and cell elongation at higher level of nitrogen. application of KNO3 @1% at 35 DAS and 2% at 55 DAS with RDF was recorded highest test weight and seed yield as compared to farmer practice and as at par with application of 19.19.19NPK @1% at 35 DAS and 2% at 55 DAS and 2% at 55 DAS with RDF.
- 9 Constraints identified and feedback for research and developmental departments: it is suitable for in light soil as well as uncertainty rainfall situation and late on set of monsoon it is also suitable in heavy rainfall area because plant don't uptake nutrient at the time lodge condition during this time we can applied foliar application of the nutrient as per requirement.
- 10 Process of farmer's participation and their reaction: Assessment has been taken as per problem diagnosed, after that village-wise meeting was conducted for selection of farmers. After selecting farmers, training has been given and made aware about complete procedure for assessment. Regular visit of farmers were arranged and necessary suggestions were given to farmers.

### Discipline: Veterinary Science C. 1.Results of Technologies Assessed Results of On Farm Trial -1

Crop/ enterpris e	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refineme nt needed	Justificatio n for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Cattle/	-	1)	Assessment	10	T1- Farmer	Milk	6 lit/ day/	Animal in	Mastiguard	-	-
Buffalo		Incidences	of different		practice- No	production.	animal	which	spray of		

of subclinical mastitis.	preventive measures for	use of medicine	Incidences of subclinical mastitis.	40 %	Mastiguard teat spray is used having	TANUVAS was very excellent and	
2) Low milk yield	subclinical mastitis in dairy animals	T2- Mastiguard teat spray	Milk production. Incidences of subclinical mastitis.	10.50 lit/day/ animal 0%	no cracks or any mammary gland related problem.	no problems of cut, cracks and sluffing of teat skin were not at all. The	
		T3- Mastilep herbal spray	Milk production. Incidences of subclinical mastitis.	8.5 lit/day/ animal 10%	Ayurvet is also having good result but it required more quantity.	appearance of teat is shiny and feels soft as compare to mastilep and local practice.	

### Contd..

Technology Assessed	Source of Technology	Produc tion	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	B:C Ratio
13	14	15	16	17	18
Technology option 1- (Farmer's practice)		06	lit/ day/ animal	5400	2.05
Technology option 2 - Mastiguard teat spray	TANUVAS Chennai and GADVASU Ludhiana	10.50	lit/ day/ animal	10500	3.0
Technology option 3 - Mastilep herbal spray	Ayurvet Pvt Ltd	8.5	lit/ day/ animal	7430	2.39

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

- 1. Title of Technology Assessed: Assessment of different preventive measures for subclinical mastitis in dairy animals.
- 2. **Problem Definition:** 1) Incidences of subclinical mastitis. 2) Low milk yield.
- **3. Details of technologies selected for assessment:** T1- Farmer practice- No use of medicine.

T2- Mastiguard teat spray.

### T3- Mastilep herbal spray.

- 4. Source of technology: TANUVAS Chennai and GADVASU Ludhiana, Ayurvet Pvt Ltd
- 5. **Production system and thematic area :** Disease management.
- 6. Performance of the Technology with performance indicators: The present technology the milk yield of T2 is highest and the incidences of occurrence of subclinical mastitis are nil as compare to 10% and 40% in T3 and T1. The detection of milk using TANU CHECK kit gives the result of presence of subclinical mastitis is key performance indicator.
- 7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques: Mastiguard spray of TANUVAS was very excellent and no problems of cut, cracks and sluffing of teat skin were not at all. The appearance of teat is shiny and feels soft as compare to mastilep and local practice.
- 8. Final recommendation for micro level situation: Mastiguard of TANUVAS should be gives in large scale as results are very good.
- 9. Constraints identified and feedback for research: Production availability and response of TRVPV, TANIVAS Chennai was poor also the price was more as compare to market product.
- **10. Process of farmers participation and their reaction:** Farmers are happily involve record the observation and igneous to purchase at own cost. The fee for treatment and time in mastitis affected animal reduced.

### C. 1.Results of Technologies Assessed Results of On Farm Trial - 2

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12

Poultry	-	1) Low	Assessment	10	T1-Farmer	rs Egg		60 eggs	The egg	Kaveri	-	-	
		egg	of Kaveri		practice-	producti	on per		production	birds are			
		production.	breed for		Desi birds	bird.			of kaveri	very			
		2) High	backyard			Mortalit	у	8 %	birds is	excellent			
		mortality	poultry			rate%			average	for egg			
						B:C ratio	Э	1.73	152 eggs	purpose			
					T2- Kaver	i Egg		152 eggs	and that of	the age of	f		
					birds	producti	on per		Desi are	first			
						bird.			only 60	laying is			
						Mortalit	у	30%	eggs.	less than			
						rate%			Mortality	local desi			
						B:C ratio	C	2.37	% 1S 8%	breed. Th	ie		
									that to 30%	egg			
									in desi	productio	n		
									birds.	1s more			
										than			
										Dogi hird	_		
Contd										Desi bilu	•		
Conta							р	Plansa giva th	o unit (lza/ho	t/ha	Not Roturn (P	rafit)	B·C
Tec	hnology As	sessed	Source	of Tech	nology	Production	lit/or	nimal nuts/r	e unit (kg/na,	1/11a, [m/yoor]	in Re / uni	it it	D.C Ratio
	13		Source	14	nonogy	15	111/A	11111ai, 11uto/	16	iiii/ycarj	17	ii ii	18
Technology	$\frac{15}{100}$	Farmer's		17		13		eggs	hirds/ vear		17		10
practice)- [	)esi hirds	diffici 5				60		Cgg3/	ondo, year		5100		1.73

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

1. Title of Technology Assessed: Assessment of Kaveri breed for backyard poultry.

CPDO Bengalore

**2. Problem Definition:** 1) Low egg production. 2) High mortality.

Technology option 2- Kaveri birds

152

eggs/birds/ year

13200

2.37

3. Details of technologies selected for assessment: T1-Farmers practice- Deshi birds.

T2- Technology assessed - Kaveri birds.

- 4. Source of technology: CPDO Bengalore.
- 5. **Production system and thematic area:** Breed evaluation.
- 6. Performance of the Technology with performance indicators: The present technology of breed for egg production T1 is almost double i.e. 152 eggs/ bird and less mortality in Kaveri birds is 8% as that in deshi birds in 30%.
- 7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques: The Kaveri birds are very excellent. The age of first laying is less than local deshi breed. The egg production is more i.e. 152/birds/year which more than double of local deshi breeds i.e. 60/birds/year.
- 8. Final recommendation for micro level situation: It is very good breed for egg purpose and the eggs laying is early so it should be given to farmers on medium large scale for egg purpose.
- 9. Constraints identified and feedback for research: The availability of birds in district is too difficult.
- **10. Process of farmer's participation and their reaction:** Farmers are happily involved in recording the observation.

Discipline – Horticulture C. 1.Results of Technologies Assessed Results of On Farm Trial - 1

Crop/ enterpr ise	Farming situation	Problem definition	Title of OFT	No. of trials	Technolog y Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refine ment needed	Justifica tion for refinem ent
1	2	3	4	5	6	7	8	9	10	11	12
Turmeri c	Irrigated	1) Small Size of Rhizome.	Assess ment of	10	T1- Farmer practice-	Duration of crop	270 days	When a traditional	Farmer were grown salem	-	-
		2) Long	New		Using	Dry recovery	33.4 Q/ha	variety of	variety since		
		Duration of	Variety		salem	Wet recovery	165.26 Q/ha	turmeric	many years		
		Variety. 3)	of		variety-	Pest & Disease	More	salem	observed that		
		Less	Turmer		270 days	Yield Q/ha	165.26	selected for	although it is 9		
		curcumin	ic IISR		T2- New	Duration of	180 days	assessment	months old but		
		percentage	Pragati		variety of	crop	5	with IISR-	the rhizome		
		4)Less Dry recovery	Vs Salem		turmeric	Dry recovery	26.17 Q/ha	Pragati results indicate that	quality, weight and color is very		
		5)Less	~ ******		Pragati	Wet recovery	186.93 Q/ha	salem local is	attractive beside		
		Average			(ACS-48)	Pest & Disease	Less	9 111011111	uns dry recovery		

yield (I	kg/ha).	180 days	Yield Q/ha	186.93	duration	from this is very	
		duration			variety with	high i.e 20%	
					4.75	which fetch	
					curcumine	higher price in	
					and highly	the market as	
					suitable for	compare to IISR-	
					irrigated areas	Pragati with	
					beside this	recovery	
					colour of	percentage is	
					rhizome is	14%.	
					attractive and		
					it fetches		
					better price in		
					the market as		
					compare to		
					IISR-Pragati.		
					IISR-Pragati		
					is short		
					duration (180		
					days) and		
					highly		
					suitable for		
					the areas		
					where		
					irrigation		
					problem is		
					serious.		

### Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	B:C Ratio
13	14	15	16	17	18
Technology option 1 - Using salem variety- 270 days	TNAU-Coimbtour (Local selection)	165.26	Q/ha	250520	4.13

Technology option 2-IISR Pragati	USP Calicat Karla	186.03	Q/ha	242805	7 47
(ACS-48)	HSIX Cancal Kella	180.95		242093	/.4/

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

- 1. Title of Technology Assessed: Assessment of new variety of Turmeric (IISR Pragati) Vs Salem
- 2. **Problem Definition:** 1) Small Size of Rhizome. 2) Long Duration of Variety. 3) Less curcumin percentage 4)Less Dry recovery.

5)Less Average yield (kg/ha).

3. Details of technologies selected for assessment: T1- Farmer practice- Using salem variety- 270 days

T2- New variety of turmeric i.e.1)IISR Pragati (ACS-48) 180 days duration.

- 4. Source of technology: IISR Calicat Kerla.
- 5. **Production system and thematic area:** Varietal assessment.
- 6. Performance of the Technology with performance indicators: When a traditional variety of turmeric salem selected for assessment with IISR-Pragati results indicate that salem local is 9 month duration variety with 4.75 curcumine and highly suitable for irrigated areas beside this colour of rhizome is attractive and it fetches better price in the market as compare to IISR-Pragati. IISR-Pragati is short duration (180 days) and highly suitable for the areas where irrigation problem is serious.
- 7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques: Farmer were grown salem variety since many years observed that although it is 9 months old but the rhizome quality, weight and color is very attractive beside this dry recovery from this is very high i.e 20% which fetch higher price in the market as compare to IISR-Pragati with recovery percentage is 14%.
- 8. Final recommendation for micro level situation: Need for multi location trial and assessment under different agro climatic condition in district.
- 9. Constraints identified and feedback for research: Non availability of pure planting material of turmeric with no protected irrigation. i.e. drip and sprinkler and traditional method of planting. In order to save planting material innovative propagation method such as preparation of turmeric seedling by using bud in pro tray should be encouraged.
- 10. Process of farmer's participation and their reaction: Farmers were highly satisfied with the assessment and excite to conduct this trial under KVK technical guidance.

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technolo gy Assessed	Parameters of assessment	Data on the parame ter	Results of assessment	Feedback from the farmer	Any refine ment needed	Justificat ion for refineme nt
1	2	3	4	5	6	7	8	9	10	11	12
Watermelon	Irrigated	High	Use of crop	10	T1-	Yield (t/ha)	41.2	Result show	As watermelon and	-	-
		incidence	covers		Farmer	Pest & disease	More	that by using	muskmelon area in		
		of pest &	(Protection		practice-	attack		5.25 feet/400	Nanded district		
		disease at	Film-Non		No use of	No. of spray	11	meter with 30	increasing at rapid		
		early	wooven		crop	required		microns, 1	rate but in the initial		
		stage	polypropyl		cover	-		bundle of	stage seedlings of		
			ene		Т2-	Yield (t/ha)	58	crop cover	this vegetables were		
			material) in		Technolo	Pest & disease	Less	1) Prevents	greatly affected by		
			watermelo		gy	attack		the entry of	sucking pest mostly		

### C. 1.Results of Technologies Assessed Results of On Farm Trial - 2

	n	assessme	No. of spray	03	pests. 2)	leaf minor, white
		nt- Use	required		Creates a	fly, aphid and thrips
		of crop	*		Greenhouse	which reduce
		cover			effect.	immunity of
					3) Earlier	seedling thus farmer
					flowering and	were very happy by
					higher yields.	this cover crop in
					4) Prevents	early stages which
					frost damage.	not only produce
					5) Prevents	disease free
					sun damage	seedlings but also
					and	quality of fruit is
					discoloring.	also attractive and
					6) Better	fetch better price in
					color and	market. Beside this
					outputs of the	fruits are disease
					watermelon	and pest free and
					fruits.	free from frost
						injury.

### Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	B:C Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)-Use of no crop cover		41.2	t/ha	227700	12.67
Technology option 2- Use of crop cover	National Committee on Plasticulture application in Horticulture (NCPAH, New Delhi)	58	t/ha	551500	20.35

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

- 1 Title of Technology Assessed: Use of crop covers (Protection Film-Non wooven polypropylene material) in watermelon
- 2 **Problem Definition:** High incidence of pest & disease at early stage.
- **3** Details of technologies selected for assessment: T1-Farmer practice- No use of crop cover

T2- Technology assessment- Use of crop cover

- **4 Source of technology:** National Committee on Plasticulture application in Horticulture (NCPAH, New Delhi).
- 5 **Production system and thematic area:** Integrated Crop Management.
- 6 Performance of the Technology with performance indicators: Result show that by using 5.25 feet/400 meter with 30 microns, 1 bundle of crop covers 1) Prevents the entry of pests. 2) Creates a greenhouse effect. 3) Earlier flowering and higher yields. 4) Prevents frost damage.
   5) Prevents sun damage and discoloring. 6) Better color and outputs of the watermelon fruits.
- 7 Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques As watermelon and muskmelon area in Nanded district increasing at rapid rate but in the initial stage seedlings of this vegetables were greatly affected by sucking pest mostly leaf minor, white fly, aphid and thrips which reduce immunity of seedling thus farmer were very happy by this cover crop in early stages which not only produce disease free seedlings but also quality of fruit is also attractive and fetch better price in market. Beside this fruits are disease and pest free and free from frost injury.
- 8 Final recommendation for micro level situation: This trial if it is conducted on BBF with drip and mulching using crop cover gives very nice and attractive result in terms of quality and quantity of fruits and also reduce cost of production of watermelon per acre and increase more return per acre.
- 9 Constraints identified and feedback for research and developmental departments: Crop covers due to COVID pandemic were sometimes not available at right stage of plant growth if they are easily available in the market at reasonable price it will helpful to the farmers and they should be durable and of fine quality.
- 10 Process of farmer's participation and their reaction: Farmers were highly satisfied with the assessment and excite to conduct this trial under KVK technical guidance by using cover crops in watermelon and muskmelon especially because they are become promising vegetable in the area particularly during summer season with short duration and more income.

### C. 1. Results of Technologies Assessed

### **Results of On Farm Trial - 3**

Crop/ enterpri se	Farming situation	Problem definition	Title of OFT	No. of trials	Technolog y Assessed	Parameter s of assessment	Data on the paramete r	Results of assessment	Feedback from the farmer	Any refineme nt needed	Justificat ion for refineme nt
1	2	3	4	5	6	7	8	9	10	11	12
Ajwain	Dryland	1) Unawarenes s about this seed spice	Introducti on of new seed spice crop	06	T1- Farmer practice- Traditional crop cotton	Yield (Q/ha)	9.29	The introduction of new crop Ajwain is found to be promising	Farmers were very happy with the introduction	-	-

crop. 2	Less Ajwain.	Т2-	Yield	11.3	as compare to	this new	
income	from (Climate	Technolog	g (Q/ha)		cotton with B: C	seeds spice	
traditio	nal resilient	y assessed			ratio 3.87 under	which is of	
crop sy	stem. crop.)	– Ajwain			rainfed condition	short	
3)		Variety			with good price	duration and	
Fluctua	tion	AA-01-19			in the market,	free from	
in clim	ate.				short duration	pest and	
					and free from	disease	
					pest and disease	required less	
					as compare to	water with	
					cotton.	less cost of	
						cultivation.	

Contu					
Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	B:C Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice) Traditional crop cotton		9.29	Q/ha	47320	2.75
Technology option 2- Ajwain Variety AA-01-19.	AISSRI, Tabiji, Ajmer (Rajasthan)	11.3	Q/ha	69360	6.78

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

- 1. Title of Technology Assessed: Introduction of new seed spice crop Ajwain.(Climate resilient crop.)
- 2. **Problem Definition:** 1) Unawareness about this seed spice crop. 2) Less income from traditional crop system. 3) Fluctuation in climate.
- **3. Details of technologies selected for assessment:** T1- Farmer practice- Traditional crop cotton.

T2- Technology assessed – Ajwain Variety AA-01-19.

- 4. Source of technology: AISSRI, Tabiji, Ajmer (Rajasthan).
- 5. **Production system and thematic area:** Varietal introduction.

- 6. Performance of the Technology with performance indicators: The introduction of new crop Ajwain is found to be promising as compare to cotton with B: C ratio 3.87 under rainfed condition with good price in the market, short duration and free from pest and disease as compare to cotton.
- 7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques: Farmers were very happy with the introduction this new seeds spice which is of short duration and free from pest and disease required less water with less cost of cultivation.
- 8. Final recommendation for micro level situation: Multi location trials were proposed under different soil type in Nanded district.
- 9. Constraints identified and feedback for research: As a seed size is very small and delicate required more number of days for germination.
- 10. Process of farmers participation and their reaction: Scientist farmer interaction group discussion Kisan Goshti, Field visit.

C. 1.Results of Technologies Assessed- Discipline: Plant Protection Results of On Farm Trial - 1

Crop/ enterp rise	Farmin g situatio n	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parame ter	Results of assessment	Feedback from the farmer	Any refine ment needed	Justificat ion for refineme nt
1	2	3	4	5	6	7	8	9	10	11	12

Cotton	Rainfed	30-90 %	Assessm	05	T1 – Farmers	Average no. of Moths	-	The percent	Installation of	-	-
		loss in	ent of		practice: Using	Catches per trap.		number of	Pheromone		
		yield due	Mass		various insecticides	Percent no. of infested	6.5	infected bolls	traps is a easy		
		to Pink	trapping			bolls.		were found	and eco-		
		bollworm	by			Yield Q/ha	12.5	maximum in	friendly		
			Pheromo		T2 - Mass trapping	Average no. of Moths	7.52	T1 (6.5), and	technology for		
			ne trap		of male adults of	Catches per trap.		less in T2	management		
			for		Pink bollworms by	Percent no. of infested	3.25	(3.25), and	of pink		
			managem		installing	bolls.		very less in T3	bollworm in		
			ent of		Pheromone traps@ 8	Yield Q/ha	14.38	(1.78). The	cotton. Due to		
			Pink		per acre + IPM			yield was	heavy and		
			bollworm		T3 - Technology	Average no. of Moths	6.35	maximum in	continuous		
			in Cotton		assessed- Mass	Catches per trap.		T3 (16.80) as	rainfall some		
					trapping of male			compare to T1	management		
					adults of Pink	Percent no. of infested	1.78	(12.5) Which	practice were		
					bollworms by	bolls.		is 32.00 %	skipped out.		
					installing	V: 110/1	16.50	more and it is			
					Pheromone traps@	r iela Q/na	16.50	14.74 % more			
					16 per acre + $IPM$			than T2			

### Contd..

Technology Assessed	Source of Technology	Product ion	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)		12.5	Qt/ha	44250	1.79
Technology option 2	Regional Agril. Research Station, Junagadh	14.38	Qt/ha	62290	2.18
Technology option 3	VNMVK Parbhani.	16.50	Qt/ha	77250	2.41

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

- 1. Title of Technology Assessed: Assessment of Mass trapping by Pheromone trap for management of Pink bollworm in Cotton.
- 2. **Problem Definition:** The Pink bollworm *Pectinophora gossypiella* is most destructive pest in all cotton growing area. In Nanded district the pest was very serious in 2018-19, which damages up to 70 to 90% yield losses in cotton. Management of pink bollworm is very difficult with insecticides alone

since it is an internal feeder. So potential solution is adoption of mass trapping of male adults of the pest to stop or minimize its population dynamics, ultimately management of the pest.

**3. Details of technologies selected for assessment:** T1 – Farmers practice: Using various insecticides.

T2 – Technology assessed- Mass trapping of male adults of Pink bollworms by installing Pheromone traps@ 8 per acre + IPM.

T3 - Technology assessed- Mass trapping of male adults of Pink bollworms by installing Pheromone traps@ 16 per acre + IPM.

- 4. Source of technology: Regional Agril. Research Station, Junagadh / VNMVK Parbhani.
- 5. **Production system and thematic area:** Integrated Pest Management.
- 6. Performance of the Technology with performance indicators: Pheromone traps play a major role in the mass trapping and mating disruption of pink bollworm adult at field level there by reducing the infestation level to minimum level or by integration with low plant protection measures and also eco-friendly in nature, beneficial to the farmers by reducing their investment in the more number of sprayers, with no adverse effect on the beneficial insects. The results of this On farm testing showed that the percent number of infected bolls were found maximum in T1 (6.5), and less in T2 (3.25), and very less in T3 (1.78). The yield was maximum in T3 (13.80) as compare to T1 (8.5) which is 62.35% more and it was 10.40 % more than T2.
- 7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques: Installation of Pheromone traps is an easy and eco-friendly technology for management of pink bollworm in cotton. Use of 5% NSKE is very effective and cost effective.
- 8. Final recommendation for micro level situation: Installation of more number of pheromone traps lead to better management of the pest and also reduces the sprays of insecticides. Overall the mass trapping of pink bollworm should better on large area as compared to small area.
- 9. Constraints identified and feedback for research: Heavy and continuous rainfall have skipped some steps of IPM.
- 10. Process of farmers participation and their reaction: The KVK Scientist took initiative to organize farmers seminar on pink bollworm. All the practicing farmers were trained on various aspects of cotton production and provided with all the critical inputs viz. Pheromone traps, pectin lures. The proper method and time of traps installation in the field and change of lures in the traps was demonstrated to the farmers at their fields and right time of application of plant protection chemical based on ETL level of pest. The KVK had adopted different extension methods viz. Training, Group meetings, Diagnostic visit, field day, mass awareness campaigns, posturing etc. to overcome the above situation. Most of the farmers have changed their attitude and followed management practices on pink bollworm by including IPM components i.e. mass trapping, neem oil, ETL based pesticide usage etc.

### C. 1.Results of Technologies Assessed Results of On Farm Trial - 2

Crop/	Farmin	Problem	Title of	No.	Technology Assessed	<b>Parameters</b> of	Data on	Results	Feedbac	Any	Justificatio

enterpri	g	definition	OFT	of		assessment	the	of	k from	refineme	n for
se	situatio			trial			parame	assessme	the	nt needed	refinement
	n			S			ter	nt	farmer		
1	2	3	4	5	6	7	8	9	10	11	12
1 Maize	2 Irrigate d	3 Recently the occurrence of new invasive exotic pest Spodoptera frugiperda has been found on Maize and Jowar crop in Nanded	4 Assessm ent of Integrate d manage ment of Fall Army worm ( <i>Spodop</i> <i>tera</i> <i>frugiper</i> <i>da</i> ) in	5 05	<ul> <li>T1 : Unaware or use chemical pesticides.</li> <li>T2.</li> <li>1.Installation of Pheromone traps</li> <li>2. Seed treatment with Cyantraniliprole 19.8%</li> <li>+ Thiamethoxam</li> </ul>	7 Percent no. of infected plant/5 meter row. Percent no. of Larva/sq. meter. Yield Q/ha Percent no. of infected plant/5 meter row. Percent no. of Larva/sq. meter.	8 29.5 14.5 39.50 15.8 8.9	9 The percent infestation was found 86.7 % more in T1 than T2. The yield was 10.50 % more in T2 than T1.	10 Manageme nt of Fall Army worm form beginning of crop stage was effective than spraying of insecticide	-	-
		district. It is a polyphagus pest, so efforts are needed to manage the pest.	Maize		<ul> <li>19.8% FS (<i>a</i>) 6 mi/kg of seed.</li> <li>3. Spraying of pre mixed Thiamethoxam</li> <li>12.6%+ Lambda cyhalothrin 9.5%</li> </ul>	Yield Q/ha	43.65		s after heavy infestation , was very difficult and costly.		

### Contd..

Technology Assessed	hnology Assessed Source of Technology		Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)		39.50	Qt/ha	24600	1.52
Technology option 2	DPPQ&S, Faridabad	43.65	Qt/ha	35570	1.82

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

- 1 Title of Technology Assessed: Assessment of Integrated management of Fall Army worm (*Spodoptera frugiperda*) in Maize.
- 2 **Problem Definition:** Recently the occurrence of new invasive exotic pest *Spodoptera frugiperda* has been found on Maize and Jowar crop in Nanded district. It is a polyphagus pest, so efforts are needed to manage the pest.
- **3 Details of technologies selected for assessment:** T1: Farmers practice: Unaware or use chemical pesticides.
  - T2: (1) Installation of Pheromone traps.
    - (2) Seed treatment with Cyantraniliprole 19.8%+Thiamethoxam 19.8% FS@ 6 ml/kg of seed.
    - (3) Spraying of pre mixed Thiamethoxam 12.6%+ Lambda cyhalothrin 9.5%.
- 4 **Source of technology:** DPPQ&S, Faridabad.
- 5 **Production system and thematic area:** Integrated Pest Management.
- 6 Performance of the Technology with performance indicators: The percent infestation was found 86.7 % more in T1 than T2. The yield was 10.50 % more in T2 than T1.
- 7 Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques: Management of Fall Army worm form beginning of crop stage was effective than spraying of insecticides after heavy infestation, was very difficult and costly.
- 8 Final recommendation for micro level situation: The installation of Pheromone traps 15 days after sowing and spraying of 5% NSKE at 15 days after sowing was effective for management of the pest.
- 9 Constraints identified and feedback for research and developmental departments: it is difficult to manage the pest 45 to 60 days after sowing because the larva shelter inside the whorl.
- 10 Process of farmer's participation and their reaction: KVK first indentified problems, its intensity and affected area, organized the group meeting, identified gaps, problems. Based on these plant protection problems, explain the technology to be demonstrated. Selection of farmers where are interested in conducting demonstration, involve and interested in technology adoption. Transfer of technology through training, method demonstration, field days, literature etc.

### C. 1.Results of Technologies Assessed Results of On Farm Trial - 3

	Itesuites 0.										
Crop/ enterpr ise	Farmin g situatio n	Problem definition	Title of OFT	No. of trial s	Technology Assessed	Parameters of assessment	Data on the parame ter	Results of assessme nt	Feedback from the farmer	Any refine ment neede d	Justific ation for refinem ent
1	2	3	4	5	6	7	8	9	10	11	12
Banana	Irrigated	Recently the occurrence of infectious chlorosis virus disease has been found on Banana crop in Nanded district. Near about 5 to 25 % yield losses observed, so efforts are needed to manage the pest.	Assessme nt of Integrated managem ent of Infectious Chlorosis in Banana	05	<ul> <li>T1 : Unaware or use chemical pesticides.</li> <li>T2- 1) Destroy infected plants.</li> <li>2) Raising barrier crop like Sunhemp in three to four rows on field boundaries.</li> <li>3) Dry heat treatment of suckers at 40° C for 1 day.</li> <li>4) Avoid growing cucurbits as intercrop.</li> <li>5) Control aphid vector by Spraying Dimethoate 30% EC</li> <li>@ 594-792 ml in 600- 800 1 of water/acre or Oxydemeton – methyl 25% EC @ 1200-1600 ml in 600-800 1 of water/acre.</li> </ul>	Percent no. of infected plants/ ha. Yield Q/ha Percent no. of infected plants/ ha. Yield Q/ha	5.38 669 1.15 715	The percent infestatio n was found 467.82 % more in T1 than T2. The yield was 6.87 % more in T2 than T1.	Management of CMV form beginning of crop stage was effective than spraying of insecticides after heavy infestation, was very difficult and costly. After heavy infestation rouging of infected plant is the only option. costly. After heavy infestation rouging of infected plant is the only option.		-
#### Contd..

Technology Assessed         Source of Technology		Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)		669	Qt/ha	411900	2.27
Technology option 2	NRC Banana , Trichy / NIPHM	715	Qt/ha	471500	2.49

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

1 Title of Technology Assessed: Assessment of Integrated management of Infectious Chlorosis in Banana.

2 **Problem Definition:** Recently the occurrence of infectious chlorosis virus disease has been found on Banana crop in Nanded district. Near about 5 to 25 % yield losses observed, so efforts are needed to manage the pest.

**3 Details of technologies selected for assessment:** T1: Farmers practice: T1: Unaware or use chemical pesticides.

T2-1) Destroy infected plants.

2) Raising barrier crop like Sunhemp in three to four rows on field boundaries.

3) Dry heat treatment of suckers at 40° C for 1 day.

4) Avoid growing cucurbits as intercrop.

5) Control aphid vector by Spraying Dimethoate 30% EC @ 594-792 ml in 600-800 l of

water/acre or Oxydemeton - methyl 25% EC @ 1200-1600 ml in 600-800 l of water/acre.

- 4 Source of technology: NRC Banana, Trichy / NIPHM Hyderabad.
- 5 **Production system and thematic area:** Integrated Disease Management.
- 6 Performance of the Technology with performance indicators: The percent infestation was found 467.82 % more in T1 than T2. The yield was 6.87 % more in T2 than T1.
- 7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques: Management of CMV form beginning of crop stage was effective than spraying of insecticides after heavy infestation, was very difficult and costly. After heavy infestation rouging of infected plant is the only option.
- 8 Final recommendation for micro level situation Destroy infected plants and raising barrier crop like Sunhemp in three to four rows on field boundaries. Control aphid vector by Spraying Dimethoate 30% EC @ 594-792 ml in 600-800 l of water/acre or Oxydemeton methyl 25% EC @ 1200-1600 ml in 600-800 l of water/acre. Selection of Virus indexing tissue cultured plants for plantation.
- 9 Constraints identified and feedback for research and developmental departments:
- **10 Process of farmers participation and their reaction:**

KVK first indentified problems, its intensity and affected area, organized the group meeting, identified gaps, problems. Based on these plant protection problems, explain the technology to be demonstrated. Selection of farmers where are interested in conducting demonstration, involve and interested in technology adoption. Transfer of technology through training, method demonstration, field days, literature etc.

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
Drudgery Reduction	Irrigated	<ol> <li>Pain in hand fingers shoulder knees. 2) Low work efficiency.</li> <li>More time and energy.</li> <li>Fatigues, Posture discomfort</li> </ol>	To Assess the suitability of flower harvesting bags	05	T1- Farmer practice- T2- Use of flower harvesting bags.	Average working HR(beat/min) Energy (kj/min) Flower discarded RPE Health Problem Average working HR(beat/min) Energy (kj/min) Flower discarded RPE Health Problem	99.6         6.81         1kg         3.6         80%         91.1         5.76         0.5         2.2         20%		Farm women felt that flower cutting bag is very easy to operate ,less stress and area covered more than traditional method		-

C. 1.Results of Technologies Assessed- Discipline – Home Science Results of On Farm Trial - 1

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1	Traditional	11	kg/day	550/-	

(Farmer's practice)	Local method				
Technology -2	VNMKV Parbhani (College of	22	kg/day	1100/	1.2
Flower harvesting bag	Community Science)			1100/-	1.2

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

- **1 Title of Technology Assessed:** To assess the suitability of flower harvesting bags.
- 2 **Problem Definition:** Pain in hand fingers shoulder knees, Low work efficiency, more time and energy. Fatigues, Posture discomfort.
- **3** Details of technologies selected for assessment: T1 Farmers practice: Local method

T2 - Use of flower harvesting bags.

- 4 Source of technology: VNMKV Parbhani (College of Community Science).
- 5 **Production system and thematic area:** Drudgery Reduction.
- 6 Performance of the Technology with performance indicators:
- 7 Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques
- 8 Final recommendation for micro level situation: It is very useful for flower harvesting in rural area.
- 9 Constraints identified and feedback for research and developmental departments: It is very useful to rural women for drudgery reduction in collection of flowers.
- **10 Process of farmer's participation and their reaction:** One of the most exciting things is that men also prefer to use it as a tool for easy collection of flowers.

No. of	<b>Performance Parameters/Indicator</b>	Data of paramete	r in relation of	Change in parameter
Beneficiaries		technology der	monstrated	
5	Average working HR(beat/min)	99.6	91.1	8.63%
	Energy(kj/min)	6.81	5.76	15.41%
	Flower discarded	1kg	0.5	50%
	RPE	3.6	2.2	38.88%
	Health Problem	80%	20%	75%

# **Results of On Farm Trial - 2**

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the	Any refinement	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Drudgery Reduction	Irrigated	1) Posture discomfort. 2) Heart stress. 3) Repetitive Strain. 4)Time load.	Assessment of Trans – planter	05	T1- Farmer practice-	AverageworkingHR(beat/min)Energy(kj/min)Area coveredRPEHealthProblemAverageworkingHR(beat/min)Energy(kj/min)Area coveredRPEHealthProblem	3         99.7         6.75         998sq.m         3.5         60%         88.1         5.10         2300 sq.m         2.5         20%	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Farm women felt that trans planter is very easy to operate ,less stress and area covered more than traditional method	-	-

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal,	Net Return (Profit)	BC
Technology Assessed		riouuction	nuts/palm, nuts/palm/year)	in Rs. / unit	Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)		1000	Sq.meter	300/day	
Technology -2 Tans-planter	VNMKV Parbhani (College of Community Science)	2000	Sq.meter	600/ day	1:2

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

- **1 Title of Technology Assessed:** To Assess the suitability Trans-planter for planting the seeding.
- 2 **Problem Definition:** Pain in hand fingers shoulder knees, Low work efficiency, more time and energy. Fatigues, Posture discomfort.
- **3 Details of technologies selected for assessment:** T1 Farmers practice: Local method

#### T2 - Use of trans-planter.

- 4 Source of technology: VNMKV Parbhani (College of Community Science).
- 5 **Production system and thematic area:** Drudgery Reduction.
- 6 **Performance of the Technology with performance indicators:**
- 7 Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques
- 8 Final recommendation for micro level situation: It is very useful for trans-planting the seedlings.
- 9 Constraints identified and feedback for research and developmental departments: It is very useful to rural women for drudgery reduction into transplanting the seedlings.

# **10 Process of farmer's participation and their reaction:** One of the most exciting things is that men also prefer to use it as a tool for easy

seedling transplanted.	
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No. of	Performance Parameters/Indicator	Data of paran	eter in relation of	Change in parameter
Beneficiaries		technology	demonstrated	
5	Average working HR(beat/min)	99.7	88.1	10.79%
	Energy (kj/min)	7.13	5.19	27.20%
	Area covered	999sq m	2300 sq m	130%
	RPE	3.5	2.5	28.57%
	Health Problem	60	20	66.66%

#### **Results of On Farm Trial - 3**

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Value	-	Vegetable	To Assess the	05	T1- Farmer	Temperature	36 °C		It is very	-	-
addition		losses	suitability of		Practice	Time	12 hrs		easy to		
			Solar dryer			RPE	3.6		operate,		
			for drying		T2- Solar	Temperature	4 °C		Time and		
			vegetable.		dryer	Time	5hrs		energy		
1						RPE	2.0		saving		
									device.		

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)		10	kg/per day	500	

Technology -2	KKV Dapoli	25	kg/per day	1000	1.2
Tans-planter		23	kg per day	1000	1.2

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

- **1 Title of Technology Assessed:** To assess the suitability of Solar dryer for drying vegetable.
- **2 Problem Definition:** Vegetable losses, more time and energy require.
- **3 Details of technologies selected for assessment:** T1 Farmers practice:

T2 - Use Solar dryer for drying vegetable.

- 4 **Source of technology:** KKV Dapoli.
- 5 **Production system and thematic area:** Value addition.
- 6 Performance of the Technology with performance indicators:
- 7 Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques
- 8 Final recommendation for micro level situation: It is very useful for drying the vegetable.

- 9 Constraints identified and feedback for research and developmental departments: It is very useful to Value addition of vegetable and fruits in rural areafor drying to reduce the losses of vegetable.
- **10 Process of farmer's participation and their reaction:** Reduces the processing time and energy. Maintain color and nutrient.

No. of	Performance	Data of parameter	in relation of	Change in parameter
Beneficiaries	<b>Parameters/Indicator</b>	technology demon	strated	
5	Vegetable losses	70%	20%	71.42%
	Energy (kj/min)	7.95	6.60	16.98%
	Time	12 Hour	5 Hour	7 Hour(58.33%)
	Temperature	36c	40c	4c
	RPE	3.0	2.0	33.33%

**Results of On Farm Trial - 4** 

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technolog y Assessed	Parameters of assessment	Data on the parameter	Results of assessme nt	Feedback from the farmer	Any refineme nt needed	Justificatio n for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Drudgery Reduction	-	<ol> <li>Very difficult to harvest and to collect pod.</li> <li>Damage the branches</li> </ol>	Assessment of efficiency of drumstick harvester.	05	T1-Farmers practice T2- Technology	Pod collection kg/hr Pod damage% per kg. RPE Flower drop Pod collection kg/hr	7.5 35 04 (Heavy) More 28.50		It is very useful for drumstick harvesting.	-	-

Drumstick per kg. harvester. RPE 2.5 (Moderately	
harvester. RPE 2.5 (Moderately	
heavy)	
Flower drop Less	

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	B:C Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)		7.5	Kg/hrs	500	
Technology -2 Drumstick harvester.	KKV Dapoli	28.50	Kg/hrs	1000	1:2

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

- **1 Title of Technology Assessed:** To Assess the suitability of Drumstick harvester.
- **2 Problem Definition:** 1) Very difficult to harvest and to collect pod. 2) Damage the branches and flowers
- **3 Details of technologies selected for assessment:** T1 Farmers practice:

T2 – Technology assessed – Use of Drumstick harvester.

- 4 **Source of technology:** KKV Dapoli.
- 5 **Production system and thematic area:** Drudgery Reduction.

- 6 Performance of the Technology with performance indicators:
- Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques
   It is very useful for drumstick harvesting.
- 8 Final recommendation for micro level situation: It is very useful for drumsticks harvesting.
- 9 Constraints identified and feedback for research and developmental departments: It is very useful to harvesting the drumsticks in rural area and reduction damage percent.
- **10 Process of farmer's participation and their reaction:** Difficult to handle with basket and without basket is very easy to harvest the pods. Time

saving. No stress on shoulder and neck

No.of	Performance	Data of parame	eter in relation of technology	Change in
Beneficiaries	Parameters/Indicator	demonstrated		parameter %
5	Pod collection kg/hr	7.5	28.50	73.68
	Pod damage% per kg	35	07	92
	RPE	04 (Heavy)	2.5 (Moderately heavy)	37.5
	Flower drop	More	Less	Less flower
				drop

# **3.3. FRONTLINE DEMONSTRATION**

#### **Discipline: Plant Protection:**

# 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	Crop/	Thomatic		Details of nonularization methods suggested to		Horizontal spread of technology			
S. No	Enterprise	I nematic	Technology demonstrated	echnology demonstrated betails of popularization methods suggested to		No. of	Area in		
INO		Area		the Extension system	villages	farmers	ha		
1	Pigeon pea	IPM	Integrated Pest and Disease	1) Organized demonstration on 10 farmer's field.	20	1200	1500		
			management	2) Conducted trainings FFS in FLD plot.					
				3) Organized frequent field visit to FLD plot.					
2	Chick pea	IPM	Integrated Pest and Disease	1) Organized demonstration on 10 farmer's field.	15	1000	1000		

			management	<ul> <li>2) Conducted trainings FFS in FLD plot.</li> <li>3) Organized frequent field visit to FLD plot.</li> </ul>			
2	G 1			1) Organized frequent field visit to 1 ED plot.	20	1.500	1000
3	Soybean	IPM	Integrated Pest and Disease	1) Organized demonstration on 10 farmer's field.	20	1500	1800
			management	2) Conducted trainings FFS in FLD plot.			l
				3) Organized frequent field visit to FLD plot.			
4	Turmeric	IPM	Integrated Pest and Disease	1) Organized demonstration on 10 farmer's field.	10	1200	100
			management	2) Conducted trainings FFS in FLD plot.			
				3) Organized frequent field visit to FLD plot.			

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.)

SI. No	Crop	Thematic	Technology Demonstrated	Season and	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in
1100		urcu	Demonstrated	yeur	Proposed	Actual	SC/ST	Others	Total	achievement
1	Pigeon pea	IPM	Integrated Pest and	Kharif 2021	08	08	06	14	20	
			Disease management							
2	Chick pea	IPM	Integrated Pest and	Rabi 2021	08	08	08	12	20	
			Disease management							
3	Soybean	IPM	Integrated Pest and	Kharif 2021	08	08	08	12	20	
	-		Disease management							
4	Turmeric	IPM	Integrated Pest and	Kharif 2021	08	08	04	16	20	
			Disease management							

#### Details of farming situation

Crop	ason	ning ttion rigated	type	Statu	is of s	oil	vious op	ıg date	rvest ate	sonal nfall um)	f rainy ays
crop	Se	Farr situa RF/Irr	Soil	Ν	Р	K	Pre	Sowin	Hand	Sea: rai (n	No. 0 di
Pigeon pea	Kharif 2021	Rainfed	Medium to heavy	Medium	Low	High	Bengal gram, Rabi Jowar	15-17 June 2021	Last week of Dec 2021 to 2 <sup>nd</sup> week Jan 2022	1090.2	54
Chick pea	Rabi 2021	Irrigated/Rainfed	Medium to heavy	Medium	Low	High	Soybean	25 Oct-10 Nov 21	Till un harvested	1090.2	54
Soybean	Kharif 2021	Rainfed	Medium to heavy	Medium	Low	High	Chick pea/ Jowar	15 -18 Jun 2021	17 – 23 Oct 2021	1090.2	54

	Turmeric	Kharif 2021 Irrigated	Medium to heavy	Medium I	Low High	Cotton/ Chick pea	10-20 Jun 2021	Till un harvested	1090.2	54
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#### Technical Feedback on the demonstrated technologies

S. No	Feed Back
1) IPM technology	IPM technology is very useful in every crop for reducing cost of plant protection up to 40 to 60 %. It was very effective in Soybean,
	Turmeric, Chick pea and Pigeon pea for management of pest and diseases.
2)Pheromone traps	Installation of Pheromone traps for monitoring and trapping of the pest is very cost effective method for reducing the pest population.
	Most of the farmers have installed the pheromone traps in Soybean, Chick pea and Pigeon pea for management of pest and diseases.
3)Trichoderma	Rhizome seed treatment and drenching with Trichoderma in Turmeric crop for effective management of Rhizome rot.
4) Field days	Field days celebration helps to aware the farmers about IPM technology.

#### Farmers' reactions on specific technologies

S. No	Feed Back
1. Training	The training on IPM Technology is very effective for us to identify the different insect pest and Beneficial insects.
2.Use of Botanical pesticides	Use of Neem ark or NSKE 5% is very effective for manage the pest in early stages of crops. The number of Natural enemies have observed this year due to the use of NSKE. It is very easy to prepare at home.
3. Use of <i>Metarhizium</i> for white Grub	Application of <i>Metarhizium anisopli</i> is very effective for controlling the white Grub in Turmeric.
management	

#### **Extension and Training activities under FLD**

Sl. No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	04	15/08/2021, 28/08/2021 14/11/2021, 22/01/2022	135	
2	Farmers Training	08	10/06/2021, 15/06/2021, 05/07/2021,17/07/2021, 06/09/2021 04/09/2021,12/12/2021, 12/01/2022	205	
3	Media coverage	02	-	-	
4	Training for extension functionaries	01	02/07/2020	27	

# **Discipline:** Agronomy

**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	Thomatia		Datails of nonularization methods suggested to	Horizontal spread of technology				
		Area*	Technology demonstrated	the Extension system	No. of	No. of	Area in		
INU				the Extension system	villages	farmers	ha		
1	Soybean	INM	Nutrient management in	Field day, Training programme, Demonstrations	05	45	20		

			Soybean				
2	Chick pea	INM	Nutrient management in Chick pea	Field day, Training programme, Demonstrations	25	140	50

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.)

SI.	Crop	Thematic	Technology Demonstrated	Season and	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in
INO.	•	area		year	Proposed	Actual	tual SC/ST Other		Total	achievement
1	Soybean	IWM	Weed management in soybean with pre	Kharif 2021	10	10	4	6	10	
			emergence and post emergence							
			herbicides for getting higher yield.							
2	Sorghum	Varietal	To Demonstrate Introduction of new	Rabi 2021	10	10	4	6	10	
		evaluation	variety of sorghum Phule Revati and							
			Parbhani super moti under life saving							
			irrigation as compare to local check.							

#### **Details of farming situation**

Сгор	eason	arming tuation Irrigated)	oil type	Status of soil			ious crop	ving date	vest date	easonal fall (mm)	. of rainy days
	۵ <u>م</u>	F2 sit (RF/	Š	Ν	Р	K	Prev	Sow	Har	Se rain	N0.
Soybean	kharif	rainfed	Medium black	Low	Low	High	Chickpea	15 June 2021	25 October 2021	1090.2	54
Rabi sorghum	Rabi	irrigated	Medium black	Low	Low	High	Soybean	28 October 2021		1090.2	54

#### Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	It observed that the pre emerge herbicide got very good result as compared to post emergence.
2	The farmers face the problem of application of post emergence herbicide due to heavy rainfall so these application not given in time.
3	The B:C ratio of pre emergence herbicides is her than post emergence as well as farmer practice.

4 The higher yield obtained from farmers practice as compare to post emergence herbicide but less than pre emergence herbicide.

#### Farmers' reactions on specific technologies

S. No	Feed Back
1	This post and pre emergence herbicide is very best for control weed in soybean
2	It is due to increasing soybean yield by the application of pre emergence herbicide. The post emergence herbicide of imzathyper + imzomox is not
	control all weeds. This herbicide application is given in time for better result.
3	No availability of labor for weeding in given time and its high cost for weeding as compared to pre and post herbicides.

#### Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	01	20 August 2021	21	
2	Farmers Training	02	10 June 2021 18 January 2022	45	
3	Media coverage				
4	Training for extension functionaries				

**Discipline:** Horticulture

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

No	Enterprise	Area*	demonstrated	system	No. of	No. of	Area
					villages	farmers	in ha
1	Banana	Integrated Crop Management	Demonstration on use of banana special and skirting bag in banana	With the use of this banana special micronutrient formulation prepared by IIHR Bengaluru is specially during the formation and growth of bunch followed by use of skirting bag after the emergence of bunch till the harvest found to be promising technology. Farmers were very happy with quality of bunch as well as hands and fingers in the bunch which are totally free from pest and disease and fetch better price in the market as compare to control.	10	20	02
2	Chilli	Varietal introduction and crop improvement	Demonstration on growing of chili on plastic mulch	Farmers of adopted village were using plastic mulch film of 25 micron which is <b>4 feet in to 400 meter</b> and cost Rs.2200/- per bundle with popular chili F1, <b>Ankur 930</b> found that this combination is very effective due to following observations: 1) This practice reduce weed growth and thus save weeding expenditure. 2) Pest and disease attack is also less. 3) Fruit quality is attractive and fresh. 4) % of dropping flowers and fruits is very less.	05	10	01

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	Banana	Integrated Crop Management	Demonstration on use of banana special and skirting bag in banana	Kharif-2021	02	02	08	12	20	
2	Chilli	Varietal introduction and crop improvement	Demonstration on growing of chili on plastic mulch	Rabi-2021	01	01	04	06	10	

Details of farming situation

Cross	uos	ning ttion rrigat 1)	type	Status of soil			ious op	/ing lte	vest ite	onal Ifall m)	rainy Iys
Сгор	Sea	Farr situa (RF/I) ec	Soil	Ν	Р	K	Prev cr	Sow	Har da	Seas rain (m	No. of da
Banana	Kharif-2021	Irrigated	Medium black soil	Low	Medium	High	Summer groundnut & Green gram	June 2021	February 2022	1090.2	54
Chilli	Rabi-2021	Irrigated & Rainfed	Medium black soil	Low	Medium	High	Summer groundnut & Sesamum	September 2021	January 2022	1090.2	54

# Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	Instead of blue color skirting bag if white color skirting bags available which helps in clear visibility of bunch development.

# Farmers' reactions on specific technologies

S. No	Feed Back
1. Banana	With the availability of banana special produce by IIHR Bengaluru and skirtingbags blue colour from Reliance polymers Chennai
	at right time during the emergence of bunch and the development farmers were very happy with the attractive fruit color good
	bunch weight and size of fingers which was totally free from pest and disease and fetch good market price during the pandemic.
	Farmers were greatly influence by the use of banana special as a micronutrient formulation in collaboration with skirting bag.
2. Chili	Ankur 930 is a popular and promising F1 of chili amongst district farmers, but when this F1 grown by raising seedlings and
	transplanting them in main field on mulching paper height of the plant recorded more with more number of flowers and fruits,
	less flower and fruit drop and fruit free from pest and disease. Percentage of weed is also less which saves extra expenditure on
	intercultivation. This practice is now a days is very popular in chili growing areas of nanded district.

#### Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field visit	02		35	
2	Diagnostic visit	01		28	
3	Group discussion	01		30	
4	Distribution of extension literature	01		40	

#### **Discipline: Home Science:**

# 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

	Crop/				Horizoi	ntal spread	of		
S.	Enterprise	Thomatic Aroa*	Technology	Details of popularization methods suggested to	technology				
No		Thematic Area	demonstrated	the Extension system	No. of	No. of	Area		
					villages	farmers	in ha		
1	Nutritional Garden	Nutritional	Demonstration	This FLD has been conducted at Pokharni, Sayal	04	65	0.03		
		Management	preparation	Pawadewadi, Limbgaon to improve family					
		rural family.	Nutritional Garden	health.					
2	Demonstration on Zero	Post-harvest	Zero energy	This FLD has been conducted at Sayal Tq.	01	05	-		
	energy chambers for	technology	chambers for	Nanded					
	vegetables storage		vegetables storage.						
3	To access the efficiency	Post-harvest	Grain storage bag	This FLD has been conducted at Pawdewadi,	02	10	-		
	Grain storage bag	technology		Pokharni Tq. Nanded					

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.)

SI. No.	Crop	Thematic	Technology Demonstrated	Season and	Area	(ha)	]	Reasons for shortfall in		
1,00		ureu	Demonstrated	ycui	Proposed	Actual	SC/ST	Others	Total	achievement
1	Vegetable	Nutritional Management rural family	Demonstration preparation Nutritional Garden	June &sep 2021	75 Unit	75 Unit	25	50	75	-
2	Vegetable	Post-harvest Technology	Zero energy chambers	Nov 2021	05	05	03	07	10	-
3	Jowar &Wheat	Post-harvest Technology	Grain storage bag	April 2021	10	10	2	10	10	-

# Details of farming situation

Cron	ISON	ming ttion rigated	type		Status of	f soil	do.	ıg date	rvest ate	sonal nfall 1m)	f rainy ays
Crop	Se	Farr situs	Soil	Ν	Р	К	Pre	Sowin	Haud	Sea: rai (n	No. o di
Vegetable	Kharif	irrigated	Medium Black	-	-	-	-	-	-	1090.2	54
Vegetable	Kharif	Irrigated	Medium Black	-	-	-	-	-	-	1090.2	54
Jowar & Wheat	Kharif	Irrigated	Medium Black	-	-	-	-	-	-	1090.2	54

#### Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	Farm women were highly satisfied with this introducing nutritional garden because it increases consumption of vegetables in their diet. Some of
	farm women selling the vegetable and generating income. Improvement in hb level
2	Farm women were highly satisfied because these zero energy chamber reduces the vegetable spoilage losses 64% and 85% losses in other vegetable
	than tradition method of vegetable storage. It is popularizing day by day in our region.
3	Grain bags are very useful in storage grain particular in wheat and jowar. Its reduces the grain damage 65%.

# Farmers' reactions on specific technologies

S. No	Feed Back
1	Reduction of monthly expenditure on purchasing the vegetables, Increase the hemoglobin level.
2	Increase the aria coverage and reduction in drudgery while weeding.
3	Grain bags arevery useful during grain storage avoid grain damage by insect.

# Extension and Training activities under FLD

Sl. No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	06			ICDS worker & MahilaBachat Gat & Extension functionaries
				160	appreciated the programme.
2	Farmers Training	07		65	
3	Media coverage	05		-	Improved knowledge in nutrition

4	Training for extension	2	45	It is very informative training for anganwadi worker.
	functionaries			

#### C. Performance of Frontline demonstrations Frontline demonstrations on oilseed crops

				No.			Yield	ield (q/ha) %			Economics of				Economics of check			
Сгор	atic Area	technology demonstrated	Variety	of Farm ers	Are a (ha)	Hig h	Demo Low	o Avera ge	Chec k	Increas e in yield	dem Gros s Cost	Gross Retur n	ion (Rs. Net Retur n	/ha) BCR (R/C )	Gros s Cost	(Rs. Gross Retur n	na) Net Retur n	BCR (R/C )
Soybean	IPM	Integrated Pest and disease Management	MAUS- 71/ KDS_726	20	08	26.50	17.8	22.15	18.75	18.13	42500	121825	79325	2.86	45800	103125	57325	2.25
Soybean	ICM	To Demonstrate Yield potential Use of improved variety MAUS- 162 under whole component as compare to local check variety	MAUS- 162	25	10	26.25	13.75	20.16	17.25	16.87	35270	100800	65530	2.85	35150	86250	51100	2.45

Sesame (Summer 2021)	ICM	To Demonstrate Yield potential Use of improved variety PKV- NT-11 under whole component as compare to local check variety	PKV-NT- 11	50	20	10.5	3.5	7.8	5.8	34.48	11350	62400	51050	5.49	11205	49600	38395	4.42
Soybean	IWM	*	MAUS-	10	02	25.2	13.5	21.89	21.15	3.50	31270	131340	100070	4.20	33500	126900	93400	3.78
		**************************************	71		02	24.5	13.1	20.9	21.15	-1.18	30340	125400	95060	4.13				

\*Technology Demonstrated: Weed management in soybean with pre emergence and post emergence herbicides for getting higher yieldT1-Farmers practice: hand weeding and hoeing.T2-Improved technology application of pre emergence herbicides Diclosulam 84 WDG 12..4 g per acre T3 : application of post emergence herbicides Imazethapyr Imazamox 70 WG 1 lit per acr at 21 DAS

#### Frontline demonstration on pulse crops

Crop	<b>T</b> 1		<b>N</b> 7	No. of			Yield	(q/ha)		%	dem	Econor onstrati	nics of on (Rs./	'ha)	Ec	onomics (Rs./	of cheo ha)	ek
Сгор	c Area	demonstrated	y y	Farme rs	Area (ha)	High	Demo Low	Aver age	Chec k	e in yield	Gross Cost	Gross Retur n	Net Retur n	BCR (R/C )	Gross Cost	Gross Retur n	Net Retur n	BCR (R/C )
Pigeon pea	IPM	Integrated Pest and disease Management	BDN- 711	20	08	20.5	13.75	17.12	13.25	29.21	28400	94150	65760	3.31	30500	72875	42375	2.38
Pigeon pea		To demonstrate potential yield of Pigeon pea variety of BDN- 716 as compare to Khadki	BDN- 716	25	10	23.75	14.2	17.8	15.4	15.58	13520	89000	75480	6.58	13410	77000	63590	5.74

Chick	ICM	To demonstrate	Phule	50	20	28	14.25	21.9	16.5	32.73	27100	87600	60500	3.23	26250	66000	39750	2.51
pea		potential yield	Vikra															
(Rabi		of Chick pea	m															
2020-		variety of																
21)		Phule Vikram																
		as compare to																
		Jaki-9218																
Chick	IPM	Integrated Pest	Iolzi															
pea		and disease	Jaki- 0219	20	08	Result	ts await	ed										
		Management	9210															

# FLD on Other crops

Catego	Themest	Nome of the	No.	Are	Ŋ	Yield (	(q/ha)		% Chan	Oth Paran	ner neters	dem	Econo onstrat	mics of ion (Rs.	/ha)	Eco	nomics (Rs./	of che ha)	eck
ry &	c Area	technology	oi Far	a	]	Demo		Che	ge in	Dem	Chec	Gros	Gross	Net	BCR	Gros	Gross	Net	BCR
Crop			mers	(ha)	Hig h	Lo w	Ave rage	ck	Yield	0	k	s Cost	Retur n	Retur n	(R/C )	s Cost	Retur n	Retu rn	(R/C )
Millets			4												//				,
Jowar	Varietal	To Demonstrate	10	04					•		Re	esult Av	waited						
	evaluatio	Introduction of																	
	n	new variety of																	
		sorghum phule																	
		Revati and																	
		parbhani super																	

		moti under life saving irrigation as compare to local check																	
Vegetab	oles																		
Chilli	Variety introduc tion	Demonstration on growing of chilli on plastic mulch	10	01	130	90	110	85	29.41	150 Plant heigh t	90 Plant heigh t	470 00	4400 00	3930 00	9.3 6	470 00	2550 00	2080 00	5.4 2
Fruit cr	ops																		
Banan a	Integrate d crop Manage ment	Use of banana special and skirting bag in banana	10	02	553.5	410	555.5	477	16.46	-	-	622 50	8225 0	2000 0	1.3 2	504 50	5875 0	8300	1.1 6
Spices &	& condime	nts																	
Turm eric	IPM	Integrated Pest and disease Management	20	08						3.5 1.8	39.5 6.3		Result	awaited					

# Frontline Demonstration on Nutri cereals

Crea	Thomas	Technology	Variat	No. of	Are		Yie	eld (q/ha)		%	den	Econo nonstrat	mics of ion (Rs./	/ha)	Ec	onomics (Rs.	s of cheo /ha)	:k
Cro _p_	c Area	demonstrate d	y y	Farmer s	a (ha)	Demo Hig Lo Averag			Chec k	e in yield	Gros s	Gross Retur	Net Retur	BCR (R/C	Gros s	Gross Retur	Net Retur	BCR (R/C
-	-	-	-	-	-	- 11	-	-	-	_	-	-	-	-	-	-	-	-

# FLD on Livestock

Categor	Thematic	Name of the	No. of	No.of	Major parameters	%	Other parameter	Economics of	Economics of check
у	area	technology	Farme	Units		change		demonstration (Rs.)	(Rs.)

		demonstrate	r	(Anima	Demo	Check	in major	Demo	Check	Gros	Gross	Net	BCR	Gros	Gross	Net	BCR
		d		l/			paramete			S	Retur	Retur	( <b>R</b> / <b>C</b>	S	Retur	Retur	(R/C
				Poultry			r			Cost	n	n	)	Cost	n	n	)
				/ Birds,													
				etc)													
Cattle	Disease	Integrated	10	10	4.5 liter/	3.5 liter/	28.57	10%	20%	1750	4890	3140	2.79	1840	3000	1160	1.6
	manageme	control of			day/anim	day/anim		disease	disease								
	nt	ticks and fly			al	al		occurrenc	occurrenc								
		in cattle shed						e	e								
Dairy	Feed &	Silage	10	10	255 lit	195 lit	30.77	-	-	2500	7200	4700	2.88	3000	5850	2850	1.95
	Fodder	making in			/animal/	/animal/											
	manageme	polypropylen			month	month											
	nt	e bag															
Sheep	Nutrient	Use of	10	10	3 kg birth	2.5 kg	20	01	03	1890	5500	3610	2.91	1800	4000	2200	2.22
& Goat	manageme	mineral			weight	birth		mortality	mortality								
	nt	bricks for				weight											
		goat				_											

# **FLD on Fisheries**

Catago	Thomati	Name of the	No. of	No.o	Major paramet	ers	% change	Oth paran	er neter	Econo	omics of o (R	lemonst s.)	ration	E	conomi (]	cs of ch Rs.)	eck
ry	c area	demonstrat ed	Farm er	unit s	Demons ration	Che ck	in major parameter	Demon s ration	Chec k	Gross Cost	Gross Return	Net Retur n	BCR (R/C)	Gros s Cost	Gross Retur n	Net Retur n	BCR (R/C)
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	_	-	-	-	-	-	-	-	-	-	-	-	-

# FLD on Women Empowerment

Category	Name of technology	No. of demonstrations	Name of observations	Demonstration	Check
Post harvest	Zero energy chamber	05	Temperature	26 °C	36 °C
technology			Humidity (%)	78	26
			Keeping quality (%)	85	28
Post harvest	Grain storage bag	10	Quality of grain	95 % in good condition	30 % in good condition
technology					

FLD on Farm Implements and Machinery

Name of	Cro	Technology	No. of	Are	Major	Fi	led	%	Labor re	eduction	(man da	ys)	(	Cost redu	iction	
the	р	demonstrate	Farme	a	paramete	obser	vation	change					(Rs./h	a or Rs.	/Unit etc.)	
impleme		d	r	(ha)	rs	(output/ma in major n hour) paramete										
nt						n h	our)	paramete		2				-		
						Dem	Chec	r	Land	Sowin	Weedin	Tota	Land	Labou	Irrigatio	Tota
						0	k		preparatio	g	g	l	preparatio	r	n	l
									n				n	<b>.</b>		
-	-	-	-	-	-	-	-	-	-	-	-	-		- 1	-	-

# FLD on Other Enterprise: Kitchen Gardening

Nutrition garden componen	Thematic area	Area (sq mt)	No. of Farme r	No. of Unit	Yield supp vegeta	(Kg)- ly of ables,	% chang e in	Hous si (nun	ehold ze 1ber)	Ec	onomics of dem (Rs./ha)	onstrati	on	E	conomics (Rs./	of chec ha)	ж
ts				S	fruits, e KG in t	tc from he vear	yield	(	-~)								
					Demon s ration	Check *		Dem o	Chec k	Gros s Cost	Gross Return/Saving s*	Net Retur n	BCR (R/C )	Gros s Cost	Gross Return/ Savings *	Net Retur n	BCR (R/C )
Vegetable & Fruit	Nutritional Manageme nt	Nutrition al Garden	65	65	5.30	1.30	2.45	11.5 g/dl	9.5 g/dl	7000 0	210000	14000 0	3.3	5000 0	120000	70000	1.89

Thematic area	No. of				Pa	rticip	oants			
	cours	(	Othe	rs		SC/S	ST	Gr	and '	Fotal
	es	Μ	F	Total	Μ	F	Total	Μ	F	Total
I Crop Production										
II Horticulture										
a) Vegetable Crops										
b) Fruits										
c) Ornamental Plants										
Nursery Management	01	35	0	35	20	01	21	55	01	56
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Total ( c)	01	35	0	35	20	01	21	55	01	56
d) Plantation crops										
e) Tuber crops										
f) Spices										
g) Medicinal and Aromatic Plants										
Grand Total (a to g)	01	35	0	35	20	01	21	55	01	56
III Soil Health and Fertility Management										
IV Livestock Production and Management										
V Home Science/Women empowerment										
Household food security by kitchen										
gardening and nutrition gardening	01	0	15	15	0	02	02	0	17	17
Design and development of low/minimum										
cost diet	01	0	44	44	0	0	0	0	44	44
Designing and development for high nutrient										
efficiency diet	01	0	12	12	0	10	10	0	22	22
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques	01	0	12	12	0	02	02	0	14	14
Value addition										
Women empowerment										
Location specific drudgery reduction										
technologies										
Rural Crafts										
Women and child care										
Total	04	0	83	83	0	14	14	0	97	97
VI Agril. Engineering										
VII Plant Protection					-					
Integrated Pest Management	02	29	0	29	41	0	41	70	0	70
Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio										
pesticides	01	0	0	0	45	0	45	45	0	45
Total	03	29	0	29	86	0	86	115	0	115
VIII Fisheries										
IX Production of Inputs at site										
X CapacityBuilding and Group Dynamics										
XI Agro-forestry										

# **3.4. Training Programmes(Online programmes if any should be included under On Campus category)** Farmers' Training including sponsored training programmes (on campus)

GRAND TOTAL	08	64	83	147	106	15	121	170	<b>98</b>	268
										-

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

Thematic area	No. of Participants									
	course		Othe	ers		SC/S	Т	G	rand ]	Fotal
	S	Μ	F	Total	Μ	F	Total	Μ	F	Total
I Crop Production										
Weed Management	01	10	15	25	12	20	32	22	35	57
Resource Conservation Technologies	01	20	0	20	17	0	17	37	0	37
Cropping Systems	01	12	0	12	02	02	02	14	2	16
Crop Diversification	02	72	0	72	33	0	33	105	0	105
Integrated Farming	01	40	02	42	20	03	23	60	5	65
Micro Irrigation/irrigation	01	10	02	12	10	0	10	20	2	22
Seed production	01	30	25	55	20	25	45	50	50	100
Nursery management										
Integrated Crop Management	01	20	0	20	04	0	04	24	0	24
Soil & water conservation	01	25	03	28	15	02	17	40	5	45
Integrated nutrient management	01	30	02	32	12	03	15	42	5	47
Production of organic inputs	01	30	0	30	20	0	20	50	0	50
Total	12	299	49	348	165	55	218	464	104	568
II Horticulture										
a) Vegetable Crops										
Production of low value and high value	01	20	0	20	12	0	12	40	0	40
crops	01	20	0	20	12	0	12	40	0	40
Off-season vegetables	01	35	0	35	15	0	15	50	0	50
Nursery raising	01	15	0	15	32	0	32	47	0	47
Exotic vegetables	01	12	0	12	08	0	08	20	0	20
Export potential vegetables										
Protective cultivation										
Total (a)	04	90	0	90	67	0	67	157	0	157
b) Fruits										
Training and Pruning										
Cultivation of Fruit										
Management of young plants/orchards	01	28	0	28	06	0	06	34	0	34
Rejuvenation of old orchards										
Export potential fruits	01	52	05	57	02	01	03	54	06	60
Micro irrigation systems of orchards										
Plant propagation techniques										
Total (b)	02	80	05	85	08	01	09	88	06	94
c) Ornamental Plants										
d) Plantation crops										
e) Tuber crops										
Production and Management technology	01	06	0	06	24	0	24	30	0	30
Processing and value addition										
Total (e)	01	06	0	06	24	0	24	30	0	30
f) Spices										
Production and Management technology	01	42	0	42	10	0	10	52	0	52
Processing and value addition										
Total (f)	01	42	0	42	10	0	10	52	0	52
g) Medicinal and Aromatic Plants										
Grand Total (a to g)	08	218	05	223	109	01	110	327	06	333

III Soil Health and Fertility										
Management										
Soil fertility management	01	30	0	30	12	0	12	42	0	42
Integrated water management										
Integrated Nutrient Management	01	05	20	25	02	08	10	07	28	35
Production and use of organic inputs	01	15	10	25	12	09	21	27	19	46
Management of Problematic soils	01	15	0	15	17	05	22	32	05	37
Micro nutrient deficiency in crops										
Nutrient Use Efficiency	01	12	03	15	07	0	07	19	03	21
Soil and Water Testing										
Total	05	77	33	110	50	22	72	127	55	181
IV Livestock Production and										
Management										
Dairy Management	02	32	0	32	22	0	22	54	0	54
Poultry Management	03	71	16	87	35	08	43	106	24	130
Animal Nutrition Management							_			
Disease Management	01	10	0	10	02	0	02	12	0	12
Feed & fodder technology	02	17	07	24	10	04	14	27	11	38
Production of quality animal products	01	15	0	15	10	0	10	2.5	0	25
Total	09	145	23	168	79	12	91	224	35	259
V Home Science/Women	07	1.0		100	.,		71			-07
empowerment										
Household food security by kitchen										
gardening and nutrition gardening	03	0	20	20	0	25	25	0	45	45
Design and development of			• •							
low/minimum cost diet	02	0	30	30	0	07	07	0	37	37
Designing and development for high	0.1	0	10	1.0	0	0.5	0.5	0	1.5	1.5
nutrient efficiency diet	01	0	10	10	0	05	05	0	15	15
Minimization of nutrient loss in	0.1	0	1.5	1.7	0	0.5	0.5	0	20	20
processing	01	0	15	15	0	05	05	0	20	20
Processing and cooking	01	0	10	10	0	05	05	0	15	15
Gender mainstreaming through SHGs	01	0	12	12	0	10	10	0	22	22
Storage loss minimization techniques	01	0	10	10	0	05	05	0	15	15
Value addition	01	03	12	15	02	02	04	05	14	19
Women empowerment										
Total	11	03	119	122	02	64	66	05	183	188
VI Agril. Engineering										
VII Plant Protection										
Integrated Pest Management	04	87	0	87	35	0	35	122	0	122
Integrated Disease Management	06	127	0	127	38	0	38	165	0	165
Bio-control of pests and diseases	01	24	0	24	04	0	04	28	0	28
Production of bio control agents and bio	0.1	1.5	0	1.5	0	_	0	1.5	0	1.5
pesticides	01	15	0	15	0	0	0	15	0	15
Total	12	253	0	253	77	0	77	330	0	330
VIII Fisheries										
IX Production of Inputs at site										
X Capacity Building and Group										
Dynamics										
Leadership development	01	10	2	12	0	0	0	10	2	12
Group dynamics	01	15	0	15	0	0	0	15	0	15
Formation and Management of SHGs	01	18	4	22	2	2	4	20	6	26
Mobilization of social capital	01	9	2	11	3	2	5	12	4	16
L										

Entrepreneurial development of farmers/youths	01	12	0	12	5	0	5	17	0	17
WTO and IPR issues	01	13	2	15	10	0	10	23	2	25
Total	06	77	10	87	20	04	24	97	14	111
XI Agro-forestry										
GRAND TOTAL	63	1072	239	1311	502	158	658	1574	397	1970

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

Thematic area	No.	No. Participants								
	of		Others			SC/ST		Gi	and To	tal
	cour	Ma	Fem	Tot	Ma	Fem	Tot	Ma	Fem	Tot
	ses	le	ale	al	le	ale	al	le	ale	al
I Crop Production										
Weed Management	01	10	15	25	12	20	32	22	35	57
Resource Conservation Technologies	01	20	0	20	17	0	17	37	0	37
Cropping Systems	01	12	0	12	02	02	02	14	2	16
Crop Diversification	02	72	0	72	33	0	33	105	0	105
Integrated Farming	01	40	02	42	20	03	23	60	5	65
Micro Irrigation/irrigation	01	10	02	12	10	0	10	20	2	22
Seed production	01	30	25	55	20	25	45	50	50	100
Nursery management										
Integrated Crop Management	01	20	0	20	04	0	04	24	0	24
Soil & water conservation	01	25	03	28	15	02	17	40	5	45
Integrated nutrient management	01	30	02	32	12	03	15	42	5	47
Production of organic inputs	01	30	0	30	20	0	20	50	0	50
Others (pl specify)										
Total	12	299	49	348	165	55	218	464	104	568
II Horticulture										
a) Vegetable Crops										
Production of low value and high										
value crops	01	28	0	28	12	0	12	40	0	40
Off-season vegetables	01	35	0	35	15	0	15	50	0	50
Nursery raising	01	05	0	15	32	0	32	37	0	37
Exotic vegetables	01	12	0	12	08	0	08	20	0	20
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl specify)										
Total (a)	04	80	0	90	67	0	67	147	0	147
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young										
plants/orchards	01	28	0	28	06	0	06	34	0	34
Rejuvenation of old orchards										
Export potential fruits	01	52	05	57	02	01	03	54	6	60
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl specify)										

Total (b)	02	80	05	85	08	01	09	88	06	94
c) Ornamental Plants										
Nursery Management	01	35	0	35	20	01	21	55	01	56
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of										
Ornamental Plants										
Others (pl specify)										
Total ( c)	01	35	0	35	20	01	21	55	01	56
d) Plantation crops										
Production and Management										
technology										
Processing and value addition										
Others (pl specify)										
Total (d)										
e) Tuber crops										
Production and Management										
technology	01	06	0	06	24	0	24	30	0	30
Processing and value addition			-			-			-	
Others (pl specify)										
Total (e)	01	06	0	06	24	0	24	30	0	30
f) Spices		00	Ū			•		•••	Ŭ	•••
Production and Management										
technology	01	42	0	42	10	0	10	52	0	52
Processing and value addition	-		-			-	-	_	-	
Others (pl specify)										
Total (f)	01	42	0	42	10	0	10	52	0	52
g) Medicinal and Aromatic Plants	01		Ŭ		10	•			Ŭ	
Grand Total (a to g)	09	243	05	258	129	02	131	372	07	379
III Soil Health and Fertility										
Management										
Soil fertility management	01	30	0	30	12	0	12	42	0	42
Integrated water management										
Integrated Nutrient Management	01	05	20	25	02	08	10	7	28	35
Production and use of organic inputs	01	15	10	25	12	09	21	27	19	46
Management of Problematic soils	01	15	0	15	17	05	22	32	5	37
Micro nutrient deficiency in crops	-	_	-	_				_	-	
Nutrient Use Efficiency	01	12	03	15	07	0	07	19	3	22
Balance use of fertilizers	-			_		-			-	
Soil and Water Testing										
Others (pl specify)										
Total	05	77	33	110	50	22	72	127	55	182
IV Livestock Production and										
Management										
Dairy Management	02	32	0	32	22	0	22	54	0	54
Poultry Management	03	71	16	87	35	08	43	106	24	130
Piggery Management			-						-	
Rabbit Management	1									
Animal Nutrition Management	1									
Disease Management	01	10	0	10	02	Ο	02	12	0	12
	01	10	0	10	02	0	02	14	U	14

Production of quality animal products	01	01	15	0	15	10	10	16	25	41
Others (pl specify)										
Total	09	131	38	153	84	22	91	215	60	275
V Home Science/Women										
empowerment										
Household food security by kitchen										
gardening and nutrition gardening	04	0	35	35	0	27	27	0	62	62
Design and development of										
low/minimum cost diet	03	0	47	47	0	01	07	0	48	48
Designing and development for high										
nutrient efficiency diet	02	0	22	22	0	15	15	0	37	37
Minimization of nutrient loss in										
processing	01	0	15	15	0	05	05	0	20	20
Processing and cooking	01	0	10	10	0	05	05	0	15	15
Gender mainstreaming through SHGs	01	0	12	12	0	10	10	0	22	22
Storage loss minimization techniques	02	0	22	22	0	07	07	0	29	29
Value addition	01	03	12	15	02	02	04	5	14	19
Women empowerment										
Location specific drudgery reduction										
technologies										
Rural Crafts										
Women and child care										
Others (pl specify)										
Total	15	3	175	178	2	72	80	5	247	252
VI Agril. Engineering										
VII Plant Protection										
Integrated Pest Management	06	116	0	116	76	0	76	192	0	192
Integrated Disease Management	06	127	0	127	38	0	38	165	0	165
Bio-control of pests and diseases	01	24	0	24	04	0	04	28	0	28
Production of bio control agents and	-				-	-	-			_
bio pesticides	02	15	0	15	45	0	45	60	0	60
Others (pl specify)										
Total	15	282	0	282	163	0	163	445	0	445
VIII Fisheries	-		-			-			-	_
IX Production of Inputs at site										
X CapacityBuilding and Group										
Dynamics										
Leadership development	01	10	2	12	0	0	0	10	2	12
Group dynamics	01	15	0	15	0	0	0	15	0	15
Formation and Management of SHGs	01	18	4	22	2	2	4	20	6	26
Mobilization of social capital	01	9	2	11	3	2	5	12	4	16
Entrepreneurial development of		-	_				-			-
farmers/vouths	01	12	0	12	5	0	5	17	0	17
WTO and IPR issues	01	13	2	15	10	0	10	23	2	25
Others (pl specify)	~ -		-			~				
Total	06	77	10	87	20	04	24	97	14	111
XI Agro-forestry	~ •			- J,		~ •	+			
GRAND TOTAL	71	1112	310	1416	613	177	779	1725	<b>48</b> 7	2212

	No of			]	No. of	f Par	ticipants	5		
Area of training	NO. 01 Cours	Gen	eral/ (	Others		SC/S	ST	Gr	and To	otal
Area of training	es	Μ	F	Total	М	F	Total	Μ	F	Tot al
Nursery Management of Horticulture										
crops										
Training and pruning of orchards										
Protected cultivation of vegetable	01	04	10	22	08	0	08	12	10	21
crops	01	04	19	23	08	0	08	12	19	51
Commercial fruit production										
Integrated farming										
Seed production	01	08	0	08	05	0	05	13	0	13
Production of organic inputs	01	14	0	14	08	0	08	22	0	22
Planting material production	01	20	20	40	10	10	20	30	30	60
Vermi-culture										
Mushroom Production										
Bee-keeping	01	56	0	56	0	0	0	56	0	56
Sericulture	01	48	42	90	12	20	32	60	62	122
Dairying	01	32	02	34	07	01	08	39	03	42
Sheep and goat rearing	01	28	02	30	06	01	07	34	03	37
Quail farming										
TOTAL	08	210	85	295	56	32	88	266	117	383

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

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

Area of training	No.			]	No. of	' Partic	ipants	5		
	of	Gen	eral/ O	thers		SC/ST		Gr	and To	otal
	Cour	Ma	Fem	Tot	Ma	Fem	Tot	Ma	Fem	Tot
	ses	le	ale	al	le	ale	al	le	ale	al
Nursery Management of Horticulture	01	18	0	18	12	16	28	30	16	16
crops	01	10	0	10	14	10	20	50	10	40
Training and pruning of orchards										
Protected cultivation of vegetable crops	01	24	0	24	03	0	03	27	0	27
Commercial fruit production										
Integrated farming	01	13	03	16	05	0	05	18	3	21
Seed production										
Production of organic inputs										
Planting material production										

Vermi-culture										
Mushroom Production	01	13	0	13	0	0	0	13	0	13
Bee-keeping										
Sericulture										
Repair and maintenance of farm										
machinery and implements										
Value addition										
Small scale processing	01	0	21	21	0	03	03	0	24	24
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
TOTAL	05	68	24	92	20	19	39	88	43	131

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

	No. of				No. of	' Parti	cipants			
Area of training	Cours	Gen	eral/ O	Others		SC/S	Г	G	rand T	otal
	es	Μ	F	Total	Μ	F	Total	Μ	F	Total
Nursery Management of	01	18	Ο	18	12	16	28	30	16	46
Horticulture crops	01	10	0	10	12	10	20	50	10	40
Training and pruning of orchards										
Protected cultivation of	02	28	19	47	11	0	11	30	19	58
vegetable crops	02	20	17	7	11	U	11	57	17	50
Commercial fruit production										
Integrated farming	01	13	03	16	05	0	05	18	3	21
Seed production	01	08	0	08	05	0	05	13	0	13
Production of organic inputs	01	14	0	14	08	0	08	22	0	22
Planting material production	01	20	20	40	10	10	20	30	30	60
Vermi-culture								0	0	0
Mushroom Production	01	13	0	13	0	0	0	13	0	13
Bee-keeping	01	56	0	56	0	0	0	56	0	56
Sericulture	01	48	42	90	12	20	32	60	62	122
Repair and maintenance of farm										
machinery and implements										
Value addition										
Small scale processing	01	0	21	21	0	03	03	0	24	24
Production of quality animal										
products										
Dairying	01	32	02	34	07	01	08	39	03	42
Sheep and goat rearing	01	28	02	30	06	01	07	34	03	37
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										

Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing										
technology										
Fry and fingerling rearing										
Any other (pl.specify)										
Total	13	278	109	387	76	51	127	354	160	514

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

	No of	No. of Participants								
Area of training		Ger	neral/ (	Others		SC/S	ST	Gr	and ]	Fotal
	Courses	Μ	F	Total	Μ	F	Total	Μ	F	Total
Productivity enhancement in field										
crops										
Integrated Pest Management										
Integrated Nutrient management	01	15	0	15	10	0	10	25	0	25
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic										
inputs										
Care and maintenance of farm										
machinery and implements										
Gender mainstreaming through	01	29	0	29	0	0	0	29	0	29
SHGs	01	2)	U	2)	U	U	U	2)	U	2)
Formation and Management of	01	12	2	14	0	0	0	12	2	14
SHGs	01	12	2	17	0	0	U	12	2	14
Women and Child care										
Low cost and nutrient efficient										
diet designing										
Group Dynamics and farmers	01	17	3	20	0	0	0	17	3	20
organization	01	17	5	20	Ŭ	Ŭ	0	17	5	20
Information networking among	01	25	0	25	0	0	0	25	0	25
farmers	01	23	Ŭ	20	Ŭ	Ŭ	Ŭ	20	Ŭ	20
Capacity building for ICT	01	14	0	14	13	0	13	27	0	27
application	01		Ű		10	Ű		- '	Ŭ	
Management in farm animals										
Livestock feed and fodder										
production				• •				-		
Household food security	01	0	20	20	0	10	10	0	30	30
Any other (pl.specify)										
TOTAL	07	112	25	137	23	10	33	135	35	170

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

	No. of	No. of Participants								
Area of training	Course	Gen	eral/ (	Others	SC/ST			Grand Total		
	S	Μ	F	Total	Μ	F	Total	Μ	F	Total
Productivity enhancement in field										
crops										
Integrated Pest Management	01	24	0	24	04	0	04	28	0	28
Integrated Nutrient management	01	13	01	14	04	0	04	17	01	18
Rejuvenation of old orchards										
Protected cultivation technology	01	39	0	39	08	0	08	47	0	47
Production and use of organic inputs	01	15	02	17	10	0	10	25	02	27
Information networking among										
farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production	01	32	10	42	13	04	17	45	14	59
Household food security										
Any other (pl.specify)										
TOTAL	05	123	13	136	39	04	43	162	17	179

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

	No.	No. of Participants								
Area of training	of	Gen	eral/ O	thers		SC/ST		Gr	and To	otal
Area or training	Cour	Ma	Fem	Tot	Ma	Fem	Tot	Ma	Fem	Tot
	ses	le	ale	al	le	ale	al	le	ale	al
Productivity enhancement in field crops										
Integrated Pest Management	01	24	0	24	04	0	04	28	0	28
Integrated Nutrient management	02	28	01	29	14	0	14	42	01	43
Rejuvenation of old orchards								0	0	0
Protected cultivation technology	01	39	0	39	08	0	08	47	0	47
Production and use of organic inputs	01	15	02	17	10	0	10	25	02	27
Care and maintenance of farm										
machinery and implements										
Gender mainstreaming through SHGs	01	29	0	29	0	0	0	29	0	29
Formation and Management of SHGs	01	12	02	14	0	0	0	12	02	14
Women and Child care										
Low cost and nutrient efficient diet										
designing										
Group Dynamics and farmers	01	17	03	20	0	0	0	17	03	20
organization	01	17	05	20	0	0	0	1/	05	20
Information networking among farmers	01	25	0	25	0	0	0	25	0	25
Capacity building for ICT application	01	14	0	14	13	0	13	27	0	27
Management in farm animals										
Livestock feed and fodder production	01	32	10	42	13	04	17	45	14	59
Household food security	01	0	20	20	0	10	10	0	30	30
Any other (pl.specify)										
TOTAL	12	235	38	273	62	14	76	297	52	349

# Sponsored training programmes

Area of training No of No of Participants
---

	Course	Gene	General/ Others SC/ST				Grand Total			
	S	Μ	F	Total	Μ	F	Total	Μ	F	Total
Crop production and management										
Commercial production of vegetables	01	12	0	12	03	0	03	15	0	15
Production and value addition										
Fruit Plants										
Ornamental plants										
Spices crops										
Soil health and fertility management										
Production of Inputs at site										
Methods of protective cultivation										
Total	01	12	0	12	03	0	03	15	0	15
Post harvest technology and value										
addition										
Farm machinery										
Livestock and fisheries										
Home Science										
Agricultural Extension										
GRAND TOTAL	01	12	0	12	03	0	03	15	0	15

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

	No. of	No. of Participants								
Area of training		Gen	eral/ (	Others		SC/	'ST	Gr	and	Total
Area of training	s	Μ	F	Tota l	Μ	F	Tota l	Μ	F	Tota l
Crop production and management	-	-	-	-	-	-	-	-	-	-
Commercial floriculture	-	-	-	-	-	-	-	-	-	-
Commercial fruit production	-	-	-	-	-	-	-	-	-	-
Commercial vegetable production	-	-	-	-	-	-	-	-	-	-
Integrated crop management	-	-	-	-	-	-	-	-	-	-
Organic farming	-	-	-	-	-	-	-	-	-	-
Others (pl. specify)	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Post harvest technology and value addition	-	-	-	-	-	-	-	-	-	-
Value addition	-	-	-	-	-	-	-	-	-	-
Others (pl. specify)	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Livestock and fisheries	-	-	-	-	-	-	-	-	-	-
Dairy farming	-	-	-	-	-	-	-	-	-	-
Composite fish culture	-	-	-	-	-	-	-	-	-	-
Sheep and goat rearing	-	-	-	-	-	-	-	-	-	-
Piggery	-	-	-	-	-	-	-	-	-	-
Poultry farming	-	-	-	-	-	-	-	-	-	-
Others (pl. specify)	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Income generation activities	-	-	-	-	-	-	-	-	-	-
Vermicomposting	-	-	-	-	-	-	-	-	-	-
Production of bio-agents, bio-pesticides,	-	-	-	-	-	-	-	-	-	-
bio-fertilizers etc.	-	-	-	-	-	-	-	-	-	-

Repair and maintenance of farm machinery	-	-	-	-	-	-	-	-	-	-
and implements	-	-	-	-	I	-	-	-	-	-
Rural Crafts	-	-	-	-	I	-	-	-	-	-
Seed production	-	-	-	-	I	-	-	-	-	-
Sericulture	-	-	-	-	-	-	-	-	-	-
Mushroom cultivation	-	-	-	-	-	-	-	-	-	-
Nursery, grafting etc.	-	-	-	-	-	-	-	-	-	-
Tailoring, stitching, embroidery, dying etc.	-	-	-	-	-	-	-	-	-	-
Agril. para-workers, para-vet training	-	-	-	-	-	1	-	-	-	-
Others (pl. specify)	-	-	-	-	I	-	-	-	-	-
Total	-	-	-	-	I	-	-	-	-	-
Agricultural Extension	-	-	-	-	I	-	-	-	-	-
Capacity building and group dynamics	-	-	-	-	-	-	-	-	-	-
Others (pl. specify)	-	-	-	-	I	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Grand Total	-	-	-	-	-	-	_	-	-	-

# **3.5. Extension Programmes**

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services (Other than KMAS)	48	4565	364	4929
Diagnostic visits	66	5412	451	5863
Field Day	14	148	84	232
Group discussions	94	2314	546	2860
KisanGhosthi	19	1452	241	1693
Film Show	03	124	14	138
Self -help groups	04	451	19	470
KisanMela	02	475	45	520
Exhibition	00	00	0	0
Scientists' visit to farmers field	325	1245	321	1566
Plant/animal health camps	02	129	17	146
Farm Science Club	14	1247	189	1436
Ex-trainees Sammelan	01	254	11	265
Farmers' seminar/workshop	01	214	19	233
Method Demonstrations	08	2598	145	2743
Celebration of important days	19	1247	154	1401
Special day celebration	22	3214	145	3359
Exposure visits	19	231	19	250
Total	661	25320	2784	28104

# **Details of other extension programmes:**

Particulars	Number
Electronic Media (CD./DVD)	03
Extension Literature	18
---	-----
Newspaper coverage	47
Popular articles	05
Radio Talks	07
TV Talks	02
Animal health camps (Number of animals treated)	53
Social Media (No. of platforms Used)	04
Total	139

# **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 Progra mmes	No. of Participan ts/ Views
А	Farmers	training			
1		Video conferencing	Enrichment of FYM in with bio incolunce for pest & disease Management	01	33
2		Video conferencing	Layout & management of orchard	01	43
3		Video conferencing	Dairy business Management	01	54
4		Google meet	Integrated Management of white grub in Kharif crop	01	13
5		Google meet	Bee keeping technology	01	17
6		Google meet	Soil Test base fertilizer Management	01	18
7		Zoom	Integrated Pest management	01	27
8		Zoom	Integrated crop management	01	25
9		Zoom	Soil test base fertilizer Management in Kharif & Rabi season for using fertilizer use efficiency	01	18
10		Zoom	Integrated Pest management	01	27
11		Google meet	Training on Integrated crop management in Kharif crop	01	25
12		Zoom	Weed Management in Soybean	01	28

13		Zoom	Nutrient and IPM management in Soybean, cotton & turmeric	01	25	
14		Google meet	Management of young Mango orchards	01	53	
15		Google meet	Production & Management of Chilly	01	39	
16		Google meet	Methods of fodder preservations and production	01	26	
17		Zoom	IPM in Cotton Management	01	28	
18		Zoom	Integrated Management in Cotton & Turmeric	01	32	
19		Zoom	Integrated Management in Cotton & Farming	01	27	
20		Zoom	Integrated Nutrient & IPM management in kharif crop	01	32	
21		Zoom	Integrated Bengal gram Crop Management under CFLD pulses	01	45	
22		Zoom	Soybean Seed production in summer	01	30	
	Total			22	665	
В	Farmers	scientist's interaction programme				
C	Farmers	seminars				
D	Expert le	ctures				
Е	Any other (Pl. specify)					
	Grand T	otal (A+B+C+D+E)		22	665	

Сгор	Name of the crop	Name of the variety	Name of the hybrid	Quantity of seed(q)	Value (Rs)	Number of farmers
Cereals			, i i i i i i i i i i i i i i i i i i i			
Oilseeds	Soybean	MAUS-162		10 Qt	60000	10
		DS-228		5 Qt	42000	12
Pulses	Red gram	BDN-711		2 Qt	10000	15
Commercial crops	Sugarcane	VSI-8005		10 tons	30000	03
Vegetables	Tomato	US-440		5000	5000	15
	Brinjal	Mauli		5000	5000	50
	Chilly	Ankur-930		5000	5000	45
Flower crops	Marigold	Mixed		5000	2500	30
	Gylardiya	Mixed		5000	2500	42
Spices	Turmeric	Selam ACC-48				
	Ambehalad	Rajendra Sonia				
Fodder crop seeds						
Others	Onion	N-Red, Bhima Super, Pune fursungi, Phule Samarth				
	Garlic	Local, Bhima Purple				
Total						

### Production of seeds by the KVKs

# Production of planting materials by the KVK

Сгор	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Commercial						
Vegetable seedlings						
Fruits	Mango	Keshar		2000	180000	
	Guava	L-49		2850	171000	
Ornamental plants						
Medicinal and Aromatic						
Plantation						
Spices						
Tuber						
Fodder crop saplings	Napier	DHN-6		20000	20000	05
Forest Species						
Others						

Total			

#### **Production of Bio-Products**

Die Dreducte	Name of the big product	Quantity	Value (Da)	No. of Formous	
BIO Products	Name of the bio-product	Kg/Lit	value (Ks.)	No. of Farmers	
Bio Fertilisers					
	Vermi compost culture	10 kg	4000	04	
	Bio boost	4183 liter	418300	684	
Bio-pesticide	Neem ark	400 liter	20000	60	
	Metarhizium	4124 kg	618650	1040	
Bio-fungicide	Trichoderma	6634 kg	663400	1206	
Bio Agents	Waste decomposer	50 liter	2500	08	
Others	Panchamrut	150 liter	9000	55	
Total			1735850	3057	

### Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers
Dairy animals				
Cows				
Buffaloes				
Calves				
Goats	Osmanabadi	17	105100	12
Milk sale	Buffalo		48050	
Poultry				
Broilers				
Layers				
Total			153150	12

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

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

Item	Title	Authors name	Number
Research papers			
Technical reports			
News letters			
Technical bulletins			
Popular articles	Onion cultivation methods	Dr. Devikant Deshmukh	80
	Turmeric cultivation	Dr. Devikant Deshmukh	150
	Turmeric disease management	Dr. Devikant Deshmukh	160
	Grampriya - Egg producing	Dr. Mahesh Ambore	40
	poultry bird		
	Management of fodder in	Dr. Mahesh Ambore	100
	drought condition		
	Marathwada region - Quality	Dr. Mahesh Ambore	80
	livestock producing mine		
	Dog production business		50
Extension literature	Goat farming	Dr.Ambore M.N	200
	Groundnut cultivation	Mr. Sandip Jaybhaye	200
	IPM in Groundnut	Mr. Kalyankar M. G	200
	Ginger cultivation &	Dr. Devikant Deshmukh	200
	Processing		
	IPM in Chick pea	Mr. Kalyankar M.G.	200
	BT- cotton cultivation	Mr. Sandip Jaybhaye	200
	Soybean cultivation	Mr. Sandip Jaybhaye	200
	Green gram & Black gram cultivation	Mr. Sandip Jaybhaye	200
	Kitchen gardening	Dr. Devikant Deshmukh	200
	Custard apple cultivation	Dr. Devikant Deshmukh	200

	Soil testing	Mrs. Nadre S.R. Dr.	200
		Devikant Deshmukh, Mr.	
		Ingole R R	
	Red gram cultivation	Mr. Sandip Jaybhaye	500
	Turmeric cultivation	Dr. Devikant Deshmukh	500
	Fodder cultivation of Phule	Dr. Mahesh Ambore	500
	Jaywant variety		
	Azolla Production for animals	Dr. Mahesh Ambore	500
	Pest management in cotton	Mr. Kalyankar M.G.	500
	Vermi compost management	Mrs. Nadre S. R.	500
	Rabi Sorghum Cultivation	Mr. Sandip Jaybhaye	500
	Wheat cultivation	Mr. Sandip Jaybhaye	500
	KVK at Glance	Mrs. Nadre S. R.,	500
	Drumstick cultivation	Dr. Devikant Deshmukh	500
	Watermelon cultivation, Pest	Dr. Devikant Deshmukh,	500
	& disease management	Mr. Manik Kalynkar	
TOTAL			8360

#### C. Details of Electronic Media Produced

S. No.	Type of media (CD / VCD / DVD/ Audio-Cassette)	Title of the programme	Number
1	CD	Implementations of agriculture machineries at TSP	01
2	CD	Demonstration of Drone at KVK farm	01
3	CD	Kitchen gardening	01

#### 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 Pokharni Nanded-I	210
2	Facebook page/ Account	Krishi Vigyan Kendra Nanded	2422
3	Mobile Apps		
4	WhatsApp groups	345 groups	10658
5	Twitter Account	@kvknanded	68

**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).

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 whic
can be considered for technology development (in detail with suitable photographs)

S.	Crop /	ITK Practiced	Purpose of ITK
No.	Enterprise		_
1	Banana	Most of the Banana farmers they are using dry grass and paddy straw to cover and protect the bunch from the sun burn and hot wind injuries.	To protect the bunch from the hot winds and direct exposure of sunlight on the banana stalk

			to avoid breakage of bunch.
2	Turmeric and Banana	Both Turmeric and Banana Grower they are using old Sarris as a fence around the orchards.	To protect the banana and turmeric crop from the attack and injuries of wild pigs and other animals.
3	Fruit crops	Mostly fruit grower's sweet orange, mandarin growers in order to provide water to fruit crops under water deficit condition using plastic bottles few distance away from the main stream by burying down the cutted bottle in the ground so as to supply moisture to the roots to save orchards.	To save the orchards during hot summer under drought condition.
4	Sugarcane	Farmers they are using old saris all around the sugarcane crop field to protect from wild animals such as wild pigs and bears.	To protect the sugarcane attack from wild animals.
5	Sorghum	Tying plastic carry bags to sticks of 2' height and stacked in the boundary with escapement of 2 meter this technique is carried out scare away the squirrel from damaging the sorghum seed sown.	The sound of the whirling wind and bags caused will scare away squirrel & birds.
6	Groundnut	Use of polyethylene covers sticks in field scare off birds in groundnut.	To protect the groundnut from birds and wild animals.
7	Cotton & soybean	Rising of sorghum as mixed crop as cotton & soybean as bird perches.	The farmers raise sorghum as a mix crop scattered in cotton field. The grain of sorghum attacks the birds and served as a perches for the birds to reach the insect of cotton plants.
8	Cotton	Use of Okra crop for pest control for cotton. Farmers grow 2-3 lines of Okra plants surrounding the cotton field. Cotton is more susceptible to insect pest like bollworm, worm and jassid etc. farmers believe that pest prefer okra plant as compare to cotton plant and attack first.	Pest is control by simply destroying okra plants attack by insect pest
9	Sugarcane	Mulching the field with trash.	To control the shoot borer in sugarcane leaf minor in groundnut.
10	Cattle	In case of Alopecia topical application of groundnut oil and turmeric paste is apply.	For hilling of the patches and to grow the hairs.
11	Cattle & Buffalo	In case of Alopecia farmers make juice of early stage wheat leaf and apply on the patches of hair loss.	It is used for growing of hairs.
12	Cotton	Fertilizer application directly to putting the fertilizer in between row & after that hoeing this carried on this row.	It saves labor & easy for application. 1-2 labors are sufficient for this.
13	Rabi season	Use of preventive measure waste tapes is binding to Jawar head at the milk stage of jawar.	To protection from birds.

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

# A. Practicing Farmers

a) PRA Survey. b) Farmers and scientist interaction. c) Field day d) Training program

# **B. Rural Youth**

a) Group discussion. b) Skill development counseling. c) Exposure visit d) Training program.

#### C. In-service personnel

a) Field visit. b) Diagnostic visit. c) Field level observations. d) Training program

# **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) Rui, Tq.Hadgaon
- ii. No. of farm families selected per village : 50
- iii. No. of survey/PRA conducted : 01
- iv. No. of technologies taken to the adopted villages: 01
- v. Name of the technologies found suitable by the farmers of the adopted villages: Selection of improved variety
- vi. Impact (production, income, employment, area/technological-horizontal/vertical): 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		
National Institute of Plant Health	Transfer of technology for On Farm Production of Bio		
Management, Hyderabad.	Pesticides, Bio Fertilizers and Bio Agent.		
Vacantras Nail Marsthuada Agricultural	Collaborative Symposium on different crop.		
Vasanuao Naik Malaulwada Agricultural	Continuously provide all possible technical guidance to KVK		
Oniversity, Paronani.	scientist.		
	i) Participate in Kisan Mela, Farmers rally & and visits of		
D.5.A.O.	various research trails.		
	Participation in Seminars, Cattle Show, Cattle Camp, and		
A LL Dementer and	Organized by KVK supply inputs like layers, goats, vaccines		
A.n. Department	etc. to ex-trainees gives training on Poultry management, Goat		
	Management.		
	Supplied Horticulture and Forest Plants.		
Dept. of Horticulture	Giving Technical advices to selected farmers by KVK. Jointly		
	working on demonstration of fruit crops cultivation.		
Dont of Sociaultura	Gives training to KVK farmers, supply mulberry stumps, eggs		
Dept. of Seneulture	and other material require for rearing to trainees.		
Cotton Dessent Station Nonded	Arranging monthly workshop in order to discuss new research		
Conon Research Station, Nanded	and technical achievements in a crop cultivation mainly Cotton.		
Krishi vigyan Mandal	Arrange Shetkari Melava on organic farming and shown Video		

	Film in the district.		
A I.P. Nanded & Parbhani	Co-operating in arranging Radio Talks of KVK selected		
A.I.K. Nanded & Faibliani	farmers.		
District industrial centre	Gives training to the unemployed rural youth		
Zilla Parishad (ICDP)	Arranged Training for Anganvadi Sevika, Supervisor in		
	supplemental foods. Diet of permanence Lactating mother.		
Maharashtra Council of Agricultural	Consultancy and Self-Employment courses for Rural		
Education and Research (MCAER) Pune.	unemployed youth.		
PDBC Bangalore	IPM and Biological methods for controlling plant diseases and		
FDBC, Ballgalole.	pests, which is researched by PDBC.		
NIAM, Faridabad	Training on Rural Godown		
NABARD	Set up of SHG in rural areas. Formation of TTC in the villages.		
Dist. Fisheries Dept, Nanded	For conducting training programme.		
Govt. Aurvedic College Nanded	Co-ordination and affiliation.		
Dent of health DOU Nandad	Joins working on nutrition training programme for the people		
Dept. of health, DOH, Nanded	of SC/ST and below poverty line.		
ATMA Nanded	Training Programme. Field Visit and other extension activities.		
SRTMU, Nanded	Training, Extension & Research.		
NES science college Nanded	Training & Research.		
MANAGE Hydorobod	Certificate course for input dealers (Fertilizer, Insecticide,		
MANAGE Hyderabad	Pesticide)		
VANAMATI Nagaur	Certificate course for input dealers(Fertilizer, Insecticide,		
	Pesticide)		

#### 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.)
Diploma in Agriculture Extension Services for Input dealers (DAESI) (52 week)	21.03.2021	MANAGE Hyderabad	3,60,000
Skill Training for Rural Youth (STRY)- Nursery management (7 days)	23.12.2021	ATMA Nanded	2,50,000
Certificate Course on Insecticides Management for insecticides dealers/ distributors (CCIM) (12 week)	04.03.2021	NIPHM Hyderabad	2,50,000
Certificate Course for Integrated Nutrient Management for fertilizer dealer (CCINM) (15 days)	21.12.2021	MANAGE Hyderabad	3,60,000
Certificate Course on Insecticide Management for Insecticide dealers/distributers (CCIM) (12 days)	January 2022	NIPHM Hyderabad	1,80,000
			14,00,000

C. Details of linkage with ATMA a) Is ATMA implemented in your district Yes If yes, role of KVK in preparation of SREP of the district?

Coordination activities between KVK and ATMA

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks
01	Meetings	Meetings	8	8	
02	<b>Research projects</b>				
03	Training programmes	Training	18	18	
04	Demonstrations	Demonstration	02	02	
	Extension				
05	Programmes				
	KisanMela				
	Technology Week				
	Exposure visit	Visit	26	26	
	Exhibition				
	Soil health camps				
	Animal Health				
	Campaigns				
06	Publications				
	Video Films				
	Books				
	Extension				
	Literature				
	Pamphlets				
07	Other Activities (Pl.specify)				
	Watershed approach				

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

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

# E. Nature of linkage with National Fisheries Development Board

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

# F. Details of linkage with RKVY

F. Det	F. Details of linkage with RKVY							
S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks			
-	-	-	-	-	-			

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

Or Details of mixage with Tixy I (Further ague Erisin vixas Fojana)						
S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks	
-	-	-	-	-	-	

#### H. Details of linkage with NFSM

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

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

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

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

#### 8. Innovative Farmers Meet

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

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

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

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

#### **Technology Assessed:**

- It is long duration variety upto175 day. It is high yielding variety 40% more yield than BDN-711. Red colour seed. It is high no. of branches and no. of pod. It is resistant to wilt disease. Escape terminal drought. It's given in one time of maturity. The variety of BDN 711 is susceptible to wilt in this year but less than BSMR 736.
- .It is very important for increasing plant height and No of branches during dry spell situation. It is increasing test eight and seed yield by the application of KNO3 at dry spell situation. The plant do not uptake nutrient from soil at the time of dry situation this its supplement dose for plant growth.
- Mastiguard spray of TANUVAS was very excellent and no problems of cut, cracks and sluffing of teat skin were not at all. The appearance of teat is shiny and feels soft as compare to mastilep and local practice.
- The Kaveri birds are very excellent. The age of first laying is less than local deshi breed. The egg production is more i.e. 152/birds/year which more than double of local deshi breeds i.e. 60/birds/year.

- Farmer were grown salem variety since many years observed that although it is 9 months old but the rhizome quality, weight and color is very attractive beside this dry recovery from this is very high i.e 20% which fetch higher price in the market as compare to IISR-Pragati with recovery percentage is 14%.
- As watermelon and muskmelon area in Nanded district increasing at rapid rate but in the initial stage seedlings of this vegetables were greatly affected by sucking pest mostly leaf minor, white fly, aphid and thrips which reduce immunity of seedling thus farmer were very happy by this cover crop in early stages which not only produce disease free seedlings but also quality of fruit is also attractive and fetch better price in market. Beside this fruits are disease and pest free and free from frost injury.
- Farmers were very happy with the introduction this new seeds spice which is of short duration and free from pest and disease required less water with less cost of cultivation.
- Installation of Pheromone traps is an easy and eco-friendly technology for management of pink bollworm in cotton.Use of 5% NSKE is very effective and cost effective.
- Management of Fall Army worm form beginning of crop stage was effective than spraying of insecticides after heavy infestation, was very difficult and costly.
- Management of CMV form beginning of crop stage was effective than spraying of insecticides after heavy infestation, was very difficult and costly. After heavy infestation rouging of infected plant is the only option.

#### **Technology Demonstrated:**

- The training on IPM Technology is very effective for us to identify the different insect pest and beneficial insects.
- Use of Neem ark or NSKE 5% is very effective for manage the pest in early stages of crops. The number of Natural enemies have observed this year due to the use of NSKE. It is very easy to prepare at home.
- Application of *Metarhizium anisopli* is very effective for controlling the white Grub in Turmeric.
- This post and pre emergence herbicide is very best for control weed in soybean.
- It is due to increasing soybean yield by the application of pre emergence herbicide. The post emergence herbicide of imzathyper + imzomox is not control all weeds. This herbicide application is given in time for better result.
- No availability of labor for weeding in given time and its high cost for weeding as compared to pre and post herbicides.
- With the availability of banana special produce by IIHR Bengaluru and skirtingbags blue colour from Reliance polymers Chennai at right time during the emergence of bunch and the development farmers were very happy with the attractive fruit color good bunch weight and size of fingers which was totally free from pest and disease and fetch good market price during the pandemic. Farmers were greatly influence by the use of banana special as a micronutrient formulation in collaboration with skirting bag.
- Ankur 930 is a popular and promising F1 of chili amongst district farmers, but when this F1 grown by raising seedlings and transplanting them in main field on mulching paper height of the plant recorded more with more number of flowers and fruits, less flower and fruit drop and fruit free from pest and disease. Percentage of weed is also less which saves extra expenditure on intercultivation. This practice is now a days is very popular in chili growing areas of nanded district.

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

#### **Plant Protection:**

- IPM technology is very useful in every crop for reducing cost of plant protection up to 40 to 60 %. It was very effective in Soybean, Turmeric, Chick pea and Pigeon pea for management of pest and diseases.
- Installation of Pheromone traps for monitoring and trapping of the pest is very cost effective method for reducing the pest population. Most of the farmers have installed the pheromone traps in Soybean, Chick pea and Pigeon pea for management of pest and diseases.
- Rhizome seed treatment and drenching with Trichoderma in Turmeric crop for effective management of Rhizome rot.
- Field days celebration helps to aware the farmers about IPM technology.

#### Agronomy:

- It observed that the pre emerge herbicide got very good result as compared to post emergence.
- The farmers face the problem of application of post emergence herbicide due to heavy rainfall so these application not given in time.
- The B:C ratio of pre emergence herbicides is her than post emergence as well as farmer practice.
- The higher yield obtained from farmers practice as compare to post emergence herbicide but less than pre emergence herbicide.

#### Horticulture:

• Instead of blue color skirting bag if white color skirting bags available this helps in clear visibility of bunch development.

#### 11. Technology Week celebration during2021:No,

#### **12.** Interventions on drought mitigation (if the KVK included in this special programme) A. Introduction of alternate crops/varieties

State	Crops/cultivars	Area (ha)	Number of beneficiaries

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

Crops	Area (ha)	Number of beneficiaries
Oilseeds		
Pulses		

Cereals	
Vegetable crops	
Tuber crops	
Total	

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

State	Livestock components	Number of interactions	No.of participants
Total			

#### D. Animal health camps organized

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

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

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

# F. Large scale adoption of resource conservation technologies

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

#### G. Awareness campaign

State	Meet	ings	Gost	hies	Field	d days	Farr	ners fair	Exhib	ition	Film	show
	No.	No.of	No.	No.of	No.	No.of	No.	No.of	No.	No.of	No.	No.of
		farmers		farmers		farmers		farmers		farmers		farmers
Total												

#### **13. IMPACT**

A. Impact of KVK activities (Not to be restricted for reporting period).

Name of specific	No. of	% of	Change in inc	ome (Rs.)
technology/skill	participants	adoption	Before	After
transferred			(Rs./Unit)	(Rs./Unit)
Improved variety	50	33	795	1210
Improved variety	25	33	2543	3019
Improved variety	50	66	767	1021
Improved variety	25	66	2044	2621

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	1	10153	245
Feb 2021	1	10153	268
March 2021	0	0	0
April 2021	0	0	0
May 2021	0	0	0
Jun 2021	2	1230	145
Jul 2021	1	8945	152
Aug 2021	1	8947	147
Sept 2021	1	8945	298
Oct 2021	1	8945	758
Nov.2021	1	8945	654
Dec.2021	1	857	130
	10	67120	2797

			Type of Messages							
Name of KVK	Message Type	Crop	Livestock	Weather	Marketing	Awar e- ness	Other enterpris e	Total		
	Text only	03	01	01	0	05	0	10		
Nanded-I	Voice only	05				03	02	10		
	Voice & Text both	08	01	01	0	08	02	20		
	Total Messages	08	02	02	0	08	02	20		
	Total farmers Benefitted	8745								

#### **15. PERFORMANCE OF INFRASTRUCTURE IN KVK A. Performance of demonstration units (other than instructional farm)**

		Year		D	etails of production	1	Amou	nt (Rs.)	
Sl. No.	Demo Unit	of establi shment	Area (ha)	Variety	Produce	Qty.	Cost of inputs	Gross income	Rema rks
1	Vermi compost	2021	04 ponds	Eisenia fetida	Vermi compost	2 tons	4000	30000	
1	Azolla unit	2013	150 sq. ft.						
2	Fodder unit	2013	0.025 ha	DHN-6, Phule Jaywanat	Green fodder	20000	9000	20000	
4	Bio organic unit	2017			Trichoderma, Metarhizium, Neem ark, Panchamrut, Bioboost, Waste decomposer	15541	299323	1731800	

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

Nama	Data of	Data of	а (	Details	of produc	tion	Amount (Rs.)		
of the crop	sowing	harvest	Are (ha	Variety	Type of Produce	Qty.	Cost of inputs	Gross income	Remarks
Cereals									
Pulses									
Red gram	15/06/2021	15/01/2022	0.40	BDN- 711	ТР	4 Qt	5000	24000	
Chick pea	10/11/2020	10/03/2021	1.20	Phule Vikram	TP	4 Qt	8000	30000	
Oilseeds									
Soybean	17/06/2021	25/10/2021	2.5	MAUS- 162	TP	20 Qt	45000	120000	
Soybean	17/06/2021	25/10/2021	1	DS-228	CF	10 Qt	25000	60000	
Soybean	17/06/2021	25/10/2021	2.5	MAUS- 162	CF	20 Qt	50000	120000	
Fibers									
Cotton	10/06/2021	20/10/2021	1	PKV- 081	-	5 Qt	15000	40000	
Spices & Plant	ation crops				-	-	-	-	
Floriculture									
Fruits									
Vegetables									

Sugarcane					

				Amount	(Rs.)	Dam
Sl.No.	<mark>Bio Products</mark>	Name of the Product	<mark>Qty (kg/lit)</mark>	Cost of	Gross	Rem
				inputs	income	arks
01	<b>Bio-</b> Fertilizers	Vermi comost culture	10 kg		4000	
		Vermi compost	2 ton		30000	
		Bio boost	4183 liter		418300	
02	Bio- Fungicides	Trichoderma	6634 kg	202222	663400	
03	Bio- pesticides	Neem ark	400 liter	505525	20000	
		Waste decomposer	50 liter		2500	
		Metarhizium	4124 kg		618600	
		Panchamrut	150 liter		9000	
	Total			303323	1765800	

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

Sl.	Name	Details	Details of production			Amount (Rs.)		
No	of the animal / bird / aquatics	Breed	Type of Produce	Qty.	Cost of inputs	Gross income	Remarks	
01	Goat	Osmanabadi	Meat	17		105111		

#### E. Utilization of hostel facilities

Accommodation available (No. of beds):

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
January 2021			
February 2021			
March 2021			
April <b>2021</b>			
May <b>2021</b>			
June <b>2021</b>			
July <b>2021</b>			
August 2021			
September 2021			
October <b>2021</b>			
November 2021			
December 2021			

# F. Database management

S. No	Database target	Database created

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

Amou	Expendit	Details of		Activities conducted					Area
nt sancti on (Rs.)	ure (Rs.)	infrastruct ure created / micro irrigation system etc.	No. of Training program mes	No. of Demonstra tion s	No. of plant materi als produc ed	Visit by farme rs (No.)	Visit by offici als (No.)	ty of water harvest ed in '000 litres	irrigate d / utilizati on pattern

H. Performance of Nutritional Garden at KVK farm

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

#### Nutritional Garden developed at KVK farm

Area under nutritional garden (ha)	Component of Nutritional Garden	No. of species / plants in nutritional garden	No. of farmers visited
	Vegetable crops	Leafy vegetables, Fruit vegetables, Root & Tuber	
3000 Sqft	Fruit crops	Banana, Lime, Sapota, Papaya	225
	Others	Medicinal plant, Tulsi, Pudina,	
		Amrutveli	

#### 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
0.0	Vegetable crops	Leafy vegetable Methi, Palak, Chuka, Sepu,	150
06	Fruit crops	Papaya, Banana, Lime, Medicinal plant	150

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

	Name of	Nama of	Dunation		Γ	No. of p	articipants		
S.No.	KVKs/SAUs/ICAR	Name of OP/Job rolo	Duration (hrs)	SC	Cs/STs	0	thers	Т	otal
	Institutes	Q1/J00 1010	(115)	Male	Female	Male	Female	Male	Female
		Nursery							
1	KVK Nanded-I	management	7 days	3	0	12	0	15	0
		Value							
		addition in							
2	KVK Nanded-I	Turmeric	01 day	12	4	32	3	44	7

# **17. FINANCIAL PERFORMANCE A. Details of KVK Bank accounts**

Bank	Name of	Location	Branch	Account	Account	MICR	IFSC
account	the bank		code	Name	Number	Number	Number
With Host	SBI	Nanded	0433	Jawaharlal	32939437775	-	SBIN0000433
Institute				Nehru			
				Institute of			
				Education			
				science and			
				Technological			
				Research			
With	SBI	Nanded	0433	KRISHI	32939439159	431002881	SBIN0000433
KVK				VIGYAN			
				KENDRA			

# B. Utilization of KVK funds during the year 2021-22 (Rs. in lakh)(Till Dec, 2021)

S. No	Particulars	Sanctioned	Released	Expendi ture
A. R	ecurring Contingencies			
1	Pay & Allowances	12500000	10318000	8973210
2	Traveling allowances	100000	100000	59745
3	Contingencies	1000000	634000	390930
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)			
В	POL, repair of vehicles, tractor and Equipments			
С	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)			
Ε	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			
Н	Maintenance of buildings			
Ι	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
	TOTAL (A)	13600000	11052000	9423885
<b>B.</b> N	on-Recurring Contingencies			
1	Works			
2	<b>Equipments including SWTL &amp; Furniture</b>			
3	Vehicle (Four wheeler/Two wheeler, please specify)			
4	Library (Purchase of assets like books & journals)			
TOT	TAL (B)			
C. R	EVOLVING FUND			
<b>GR</b> /	AND TOTAL (A+B+C)	1360000	11052000	9423885

Year	Opening balance as on 1 <sup>st</sup> April	Income during the year	Expenditure during the year	Net balance in hand as on 1 <sup>st</sup> April of each year
April 2018 to	652613.05	4073771.56	4558295.10	168089.51
March 2019				
April 2019 to	168089.51	6848578	6818695.20	197972.31
March 2020				
April 2020 to	197972.31	4559753.01	4653568.25	104157.07
March2021				
April 2021 to	104157.07	3393293	3299823.95	197626.12
December, 2021				

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

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

Name of the staff	Designation	Title of the training programme	Institute where attended	<mark>Mode</mark> (Online/ Offline)	Dates
Dr. D.A. Deshmukh	SMS- Horticulture	Starting of incubation	IIHR, Bangalore	Online	28.12.2021
Dr. D.A. Deshmukh	SMS- Horticulture	Agriculture legislation	MANAGE, Hyderabad	Online	20-24 .11.2021
Mr. S.H. Jaybhaye	SMS- Agronomy	Workshop on CFLD Oilseed	KVK, Goa.	Off line	18.11.2021
Dr. D.A. Deshmukh	SMS- Horticulture	Protected Cultivation in Vegetables	NIPHM, Hyderabad.	Online	04- 08.10.2021
Dr. D.A. Deshmukh	SMS- Horticulture	On farm production of Bio-agents	NIPHM, Hyderabad.	Online	13- 19.09.2021
Dr. D.A. Deshmukh	SMS- Horticulture	Irrigation system in advantages	NIPHM, Hyderabad.	Online	10- 12.08.2021
Dr. D.A. Deshmukh	SMS- Horticulture	National webinar on Value addition on coconut	NAU, Nausari.	Online	09.08.20221
Mr. M.G. Kalyankar	SMS- Plant Protection	Road map for KVk to enhance Mushroom Production & construction	IIHR, Bangalore	Online	09- 11.08.2021
Mr. M.G. Kalyankar	SMS- Plant Protection	Orientation cum training on	The society of KVK	Online	13- 14.08.2021
Dr. Ambore M.N.	SMS- Veterinary Science	Approaches for improving Livestock productivity through nutrition & animal health management	MANAGE, Hyderabad.	Online	21- 23.07.2021
Dr. Ambore M.N.	SMS- Veterinary Science	National training sustainable Goat production under climate change	MAFSU. Nagpur	Online	13- 17.07.2021

Dr. D.A.	SMS-	T.P. on extension	MANAGE,	Online	27-
Deshmukh	Horticulture	Horticultural	Hyderabad, IIHK, Bangalore	Online	29.07.2021
		Webinar on	Daligaloic		
Dr. D.A.	SMS-	precision farming	IIHR. Bangalore	Online	23.07.2021
Deshmukh	Horticulture	with IOTS	,		
		One day training on			
Dr. D.A.	SMS-	organic production	IIHR Bangalore	Online	02 07 2021
Deshmukh	Horticulture	of fruit &	mm, Dangaloic	Omme	02.07.2021
		Vegetables			
Mr. M.C	CMC Dlant	Microbial bio			
Mr. M.G. Kalvankar	SIMS- Plant Protoction	pesticides Next	AAU	<b>Online</b>	02.07.2021
Kaiyalikai	TIOLECTION	preparation			
Mr M G	SMS- Plant	Operation of Kisan	IT Unit IASRI		
Kalyankar	Protection	Sarathi	ATARI, Pune	Online	24.07.2021
Mr. S.H.	SMS-	On anti- n of Vison	IT Unit IASRI,	Outing	24.07.2021
Jaybhaye	Agronomy	Operation of Kisan	ATARI, Pune	Online	24.07.2021
Mr SH	SMS-	All India fodder			12-
Javbhave	Agronomy	production officer	IGFRI, Zansi	Online	14 07 2021
		kharif	NANJA GE		10
Dr. D. A.	SMS-	Use of Extension in	MANAGE,	Online	10-
Desnmukn	Horticulture	Kharii	Hyderabad		14.05.2021
Dr. D. A.	SMS-	Smart tech. in	MANAGE	Online	03-
Deshmukh	Horticulture	Soybean	Hyderabad	Omme	07.05.2021
D D A	G) (G	Value chain			02
Dr. D. A.	SMS-	management in	DOGR, Pune	<b>Online</b>	03-
Desnmukn	Horticulture	Onion & garlic			07.03.2021
Dr. D. A.	SMS-	Mushroom	DMRC,	Online	18-
Deshmukh	Horticulture	Production	MANAGE, Hyd.		20.05.2021
Dr. D. A.	SMS-	Int. webinar on			16.05.0001
Deshmukh	Horticulture	climate resilient	MPUAT, Udaypur	Online	16.05.2021
		Agrii. National webinar			
Dr. D. A.	SMS-	on Biological	MPUAT Udayour	Online	17 05 2021
Deshmukh	Horticulture	Control	wir orri, ouuypur	omme	17.00.2021
Dr. M. N	SMS-				
Dr. M. N.	Veterinary	Gorajkatta	COVAS, Parbhani	<b>Online</b>	19.05.2021
Allibore	Science				
Dr. D. A.	SMS-	Cyber Crime	MANAGE,	Online	28 04 2021
Deshmukh	Horticulture		Hyderabad.	<u> </u>	2010 112021
Dr. D. A.	SMS-	Ornamental Fishery	CIFA, Hyderabad.	<b>Online</b>	22-
Desiiiiukh	nonculture	New innovative			24.04.2021
Dr. D. A.	SMS-	Extension	MANAGE,	Online	28-
Deshmukh	Horticulture	techniques	Hyderabad.	<u>Omme</u>	30.04.2021
D. D. A	G) ( G	Int. Webinar on			
Dr. D. A.	SMS-	Climate resilient	MPUAT, Udaipur	<b>Online</b>	16.04.2021
Desimukii	Tiorneulture	Agricultural			

Dr. Ambore M. N.	SMS- Veterinary Science	Linking dairy farmers to consumer	MANAGE, Hyderabad.	Online	24.04.2021
Dr. Ambore M. N.	SMS- Veterinary Science	Exploring the pathways of inspiring veterinaries	CPDO, Mumbai	Online	25.04.2021

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

Name of the	Total No. of	Key interventions	No. of farmers	Change in incom	ne (Rs/unit)
village	families surveyed	implemented	covered in each intervention	Before (base year)	After (current year)
Bondar Nerli, Tq & Dist-Nanded	120	Agri supplementary business, Varietal introduction, Value addition.	40	<mark>38000</mark>	52000
Dhamdari, Tq. Ardhapur	102	Agri-supplementary business, Varietal introduction, Value addition.	34	<mark>42000</mark>	57500

#### 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	No of Training	No of Beneficiaries	No of Extension	No of Beneficiaries	No of Unit established	Char inc	nge in ome	No. Of Groups
Enterprise	Conducted		Activities			Before	After	Formed
-	-	-	-	-	-		-	-

#### **21. Details of SAP**

S.	Types of major Activity conducted- SwachhtaPakhwada, Cleaning,	No. of	No. of
No.	Awareness Workshop, Microbial based Agricultural Waste	Programmes	Participants
	Management by Vermicomposting etc.	conducted	_

**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	71	1744	495	2239
Rural youths	13	354	160	514
Extension functionaries	12	297	52	349
Sponsored Training	01	15	0	15
Vocational Training	0	0	0	0
Total	<b>97</b>	2410	707	3117

#### 2. Frontline demonstrations

Crops/Enterprise	No. of Farmers	Area(ha)	Units/Animals
Oilseeds	105	40	04
Pulses	115	46	04
Cereals	10	04	01
Vegetables	10	01	01
Other crops	30	10	02
Hybrid crops	0	0	0
Total	270	101	12
Livestock & Fisheries	30		30 animals
Other enterprises	80	0.30	03
Total	110	0.30	
Grand Total	380	101.30	16

#### 3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	08	51	51
Livestock	02	20	20
Various enterprises	04	20	20
Total	14	91	91
Technology Refined			
Crops	-	-	-
Livestock	-	-	-
Various enterprises	-	-	-
Total	-	-	-
Grand Total	14	91	91

#### 4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	661	28004
Other extension activities	86	
Total	747	28004

# 5. Mobile Advisory Services

		Type of Messages						
Name of KVK	Message Type	Crop	Livesto ck	Weathe r	Mark e-ting	Awar e- ness	Other enterpri se	Total
	Text only	3	1	1	0	5	0	10
Nanded-I	Voice only	5	0	0	0	3	2	10
	Voice & Text both	8	1	1	0	8	2	20
	Total Messages	08	01	01	0	08	02	20
	Total farmers Benefitted	8745						

# 6. Seed & Planting Material Production

	Quintal/Number	Value (Rs.)
Seed (q)	117	142000
Planting material (No.)	49850	391000
Bio-Products (kg)	10768	1286000
Bio-Products (liter)	4783	449800
Livestock Production (No.)	17	105111
Milk(liter)	1201	48040
Fishery production (No.)		
Total		2421951

# 7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value (Rs.)
Soil	475	47500
Water	54	2700
Plant	-	-
Total	529	50200

#### 8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	03
2	Conferences	-
3	Meetings	08
4	Trainings for KVK officials	31
5	Visits of KVK officials	18
6	Book published	-
7	Training Manual	03
8	Book chapters	-
9	Research papers	-
10	Lead papers	-
11	Seminar papers	-
12	Extension folder	18
13	Proceedings	-
14	Award & recognition	-
15	On-going research projects	-