INTRODUCTION

Krishi Vigyan Kendra has been sanctioned to Satpuda Education Society, Jalgaon Jamod, Buldana by Indian Council of Agriculture Research, New Delhi vide letter No. 3-4/94-KVK-AEII dated 19.10.1994 for catering need based trainings to Practicing Farmers, Rural Youth and In-service Extension Functionaries, on-farm testing and Front-Line Demonstration of different crops, which are grown in Buldana District.

KVK Jalgaon Jamod falls under agro-climatic zone "Western Plateau and Hills Region (IX)" with sub zones like Ghat track, Black plains and Saline Alkali track. Zone having annual rainfall range in between 750 to 900mm. Buldana district is located at the latitude: 19.51^0 to 21.170 North, longitude 75.57^0 to 76.49^0 and it is situated 305m above mean sea level.

Most of the area of Buldana district comes under black cotton soils. The major kharif crops grown in district are Cotton, Soybean, Pigeon Pea, Greengram and Blackgram. In rabi season crops such as Bengalgram, Wheat, Onion is grown. The district is having soybean and cotton based cropping pattern. In fruit crops fruits like Citrus, Banana, Custard Apple, Guava, Aonla are the major in district.

As per PRA Survey and need assessment, OFTs, FLDs, Training Programmes and Extension Activities are planned under different disciplines of KVK for the year 2022 and are given in prescribed format in forthcoming pages.

Buldana
Date: - 07.07.2022

(Vikas G. Jadhao)
Sr. Scientist & Head
KVK Buldana-I (M.S.)

ICAR-ATARI, Pune

DETAILS OF ACTION PLAN OF KVKs DURING 2022

(1st January 2022 to 31st December 2022)

1. GENERAL INFORMATION ABOUT THE KVK

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

Address with PIN code	Telephone		E mail	Website address & No. of visitors (hits)
	Office	Fax		
Krishi Vigyan Kendra, Jalgaon Jamod, Dist: Buldana (M.S.) 443402	07266 - 221620	--	kvkbuldana@gmail.com	www.kvkbuldana.com

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

Address	Telephone		E mail	Website address
	Office	FAX		
Satpuda Education Society, Jalgaon Jamod, Dist: Buldana (M.S.) 443402	07266 - 221620	--	sesjj2015@gmail.com kvkbuldana@gmail.com	--

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

Name	Telephone / Contact		
	Office	Mobile	Email
Vikas G. Jadhao	--	9423338595	kvkbuldana@gmail.com

1.4. Year of sanction: October, 1994

1.5. Staff Position (as on January 31, 2022)

Sl. No.	Sanctioned post	Name of the incumbent	Mobile No	Discipline	If Permanent, Please indicate		Date of joining	If Temporary, pl. indicate the consolidated amount paid (Rs./month)
					Current Pay Matrix	Current Pay		
1	Sr. Scientist and Head	Vikas G. Jadhao	9423338595	Agril. Engg.	131400-217100	143600	28.11.18	Permanent
2	Subject Matter Specialist	Anil T. Gabhane	9527568788	Plant Protection	56100 – 177500	107500	27.06.95	Permanent
3	Subject Matter Specialist	Shyamsunder A. Borde	9850470123	Extension Education	56100 – 177500	87400	25.02.05	Permanent
4	Subject Matter Specialist	Sanjay M. Umale	9404710228	Agronomy	56100 – 177500	84900	19.06.06	Permanent
5	Subject Matter Specialist	Dr. Vinod S. Janotkar	9822728287	Vet Science	56100 – 177500	80000	18.12.08	Permanent
6	Subject Matter Specialist	Shashank P. Datey	9975019962	Horticulture	56100 – 177500	77700	08.07.09	Permanent
7	Subject Matter Specialist	Nitin P. Talokar	9404424501	Agril. Engg.	56100 – 177500	73200	08.03.11	Permanent
8	Programme Assistant (HS)	Vacant						
9	Computer Programmer	Yogesh R. Wakekar	9604357100	Computer	35400 - 112400	64100	19.02.02	Permanent
10	Farm Manager	Samadhan J. Bagade	9423266281	--	35400 - 112400	74300	17.06.95	Permanent
11	Assistant	Pradip E. Raut	9921860995	--	35400 – 112400	64100	10.07.95	Permanent
12	Stenographer	Vacant						
13	Driver	Mangesh S. Verulkar	9689877007	--	21700-69100	23800	13.11.18	Permanent
14	Driver	Vacant						
15	Supporting staff1	Ramesh T. Wankhade	9503629927	--	1800-56900	32400	01.08.96	Permanent
16	Supporting staff2	Ab. Samir Ab. Sadik Deshmukh	8600591228	--	1800-56900	19700	13.11.18	Permanent

1.6. Total land with KVK (in ha): 20.59 ha

S. No.	Item	Area (ha)
1	Under Buildings	1.00
2.	Under Demonstration Units	0.40
3.	Under Crops	13.82
4.	Horticulture	4.97
5.	Others if any	0.40
	Total	**20.59**

1.7. Infrastructural Development:

A. Buildings

S. N.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1	Administrative Building	ICAR	26.05.03	549.90	3407729/-	--	--	--
2	Farmers Hostel	ICAR	31.03.05	304.77	1739490/-	--	--	--
3	Staff Quarters (6)	ICAR	31.03.07	377.64	3197870/-	--	--	--
4	Demonstration Units (2)	ICAR	31.03.06	160.00	421335/-	--	--	--
5	Fencing	ICAR	31.03.06	2018rmt	486000/-	--	--	
6	Rain Water harvesting structure	ICAR	31.03.07	--	839665/-	---	--	--
7	Shed net house	NHM	30.06.09	525.00	212435/-	--	--	--
8	Polytunnel	NHM	30.06.09	213.00				
9	Vermicompost Unit	Agril. Dept.	2008	80.00	Completed	--	--	--
10	Threshing floor	ICAR	31.03.11	27.00	100050/-			
11	Farm godown	ICAR	31.03.11	67.66	500000/-			
12	Medicinal Nursery (Shadenet house)	NHM	30.03.13	525	400000/-	--	--	--
13	Minor millets processing unit	Agril. Dept.	31.03.13	660	400000/-	--	--	--
14	Compost Unit	ICAR	31.03.19	--	22500/-	--	--	--

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Motorcycle	Jan. 1995	40128/-	Closed	Not in working condition
Tractor (Massey Ferguson) procured under RKVY with implements such as BBF planter, Rotavator, Seed Drill,	Feb. 2012	700000/-	4776 hrs.	Working
Tractor (John Deer) procured through ICAR fund	Mar.2012	710000/-	4212 hrs	Working
Mobile Soil Testing Van Under Manav Vikas Programme	Mar. 2012	3500000/-	7715 km	Working
Jeep (Mahindra Bolero)	Nov. 2019	796500/-	29941 km	Working

C) Equipment's & AV aids

Name of the equipment	Year of purchase	Quantity	Cost (Rs.)	Present status
Equipment's				
Telephone	13.07.1995	01	2000.00	Working condition
Typewriter	19.08.95	01	9740.00	Not in Working condition
OHP with carrying case	30.12.95	01	7119.00	Working condition
Slide Projector with tray	30.12.95	01	15302.00	Working condition
Screen	30.12.95	02	2598.00	Not in Working condition
Camera	30.03.96	01	1695.00	Not in Working condition
Home Science utensils	95-96, 96-97	01 set	6662.00	Working condition
Refrigerator	28.03.96	01	12900.00	Not in Working condition
Mixture	13.03.95	01	2275.00	Working condition
Oven	13.03.96	01	2175.00	Working condition
Cooker	27.03.96	01	1200.00	Working condition
Sewing machine	30.11.95	01	3093.00	Working condition
Hipro Ginning Machine	2006-07	01	59280.00	Working condition
Generator	17.02.05	01	62200.00	Working condition
Inverter set	19.02.05	01	12781.00	Working condition
STL equipment & acc.	24.03.05	01 set	820153.00	Working condition
LPG connection (STL)	11.02.05	02	2740.00	Working condition
Refrigerator (STL)	08.02.05	01	15000.00	Working condition
Software (STL)	30.03.05		22040.00	Working condition
Computer with printer	23.03.06	02	99970.00	Working condition
LCD projector	Mar 06	01	77500.00	Working condition
TV	Feb 06	01	22100.00	Working condition

Xerox Machine	Mar 08	01	118800.0	Not in working condition
Laptop Comp.	Mar 08	01	31200.00	Working condition
Office almirah	28.02.95,19.08.95,11.03.96, 27.03.01,30.03.02, Mar 06	13	67300.00	Working condition
Office table	28.02.95,19.08.95, 11.03.96 30.03.96,15.12.96 16.02.05	18	44754.00	5 tables are not in working condition
Stool	19.08.95	06	1350.00	Not in Working condition
Chairs	28.02.95, 11.03.96	73	59870.00	12 Not in Working condition
Water cooler	Mar 06	02	27150.00	Working condition
Crates	28.02.95	06	2244.00	Not in Working condition
Trolley	28.02.95, 29.03.96	02	3200.00	Not in Working condition
Office utensils	05.08.95	Set	1417.00	Not in Working condition
Lock	1995-96,1996-97, 1997-98	11	807.00	Not in Working condition
Fan	19.09.95, 28.01.97	07	7275.00	4 Not in Working condition
Brief case	31.12.95	01	679.00	Not in Working condition
Lecture stand	30.03.96	01	2715.00	Working condition
Tube light	12.03.96	03	570.00	Not in Working condition
Library cases	11.03.96, 27.03.01	04	12400.00	Working condition
FH bed, bedding & Utensils 4 rooms	Mar 06	08	35504.00	Working condition
Training cum conference hall furniture	Mar 06		182045.00	Working condition
Iron Rack (sericulture)	28-29.11.95, 19.03.96	04	3556.00	Working condition
Drip irrigation set	29-03-95	1 set	7023.00	Not in Working condition
Wooden hoe	19.10.95	1	150.00	Not in Working condition
Secautor	30.11.95	10	1200.00	Not in Working condition
Knife	30.11.95	6	300.00	Not in Working condition
Duster	29.03.97	1	990.00	Not in Working condition
Knapsack sprayer	29.03.97	1	3650.00	Not in Working condition
Knapsack sprayer	29.03.97	3	3479.00	Not in working condition
Cultivator Blade	20.7.96	3	400.00	Not in Working condition
Rabbit cage	05.11.96	1	2107.00	Not in Working condition
Kudali	04.02.97	1	40.00	Not in Working condition
Matok	04.02.97	2	80.00	Not in Working condition
Bucket	05.02.97	1	75.00	Not in Working condition

Spade	04.02.97	5	220.00	Not in Working condition
Ghamela	05.02.97	6	420.00	Not in Working condition
Axe	20.07.96	1	50.00	Not in Working condition
Sericulture Unit implements	13-25.11.95		7201.00	Not in Working condition
Jack	30.03.96	1	380.00	Working condition
Disc harrow	2006-07	1	43304.00	Working condition
Seed drill	2006-07	1	29102.00	Not in Working condition
Dibbler	2006-07	2	1500.00	Working condition
Seed treatment drum	2006-07	1	1400.00	Working condition
Harrow	2006-07	1	2500.00	Working condition
Bullock drawn ridger	2007-08	1	3000.00	Working condition
Tractor drawn ridger	2007-08	1	20280.00	Working condition
Rechargeable sprayer	2007-08	1	4400.00	Not in Working condition
Power sprayer	2007-08	1	16500.00	Not in Working condition
Laptop HCL	2007-08	1	31200.00	Working condition
Power tiller	2008-09	1	121000.0	Not in Working condition
Generator	2008-09	1	2610000.00	Working condition
Camera	2008-09	1	22000.00	Not in Working condition
PKV Dal Mill	2009-10	1	45800.00	Working condition
Window AC ONIDA	2009-10	1	13899.00	Provided by ICAR & ERNET India under E-linkage project
Godrej table	2009-10	06	45266.00	
Godrej chairs	2009-10	20	34166.00	
Godrej Printer table	2009-10	02	11041.00	
Rack	2009-10	01	6350.00	
Computer server system	2009-10	01	62400.00	
Desktop computer	2009-10	05	114400.00	
Laser printer	2009-10	01	13000.00	
Dot matrix printer	2009-10	01	17500.00	
Scanner	2009-10	1	5200.00	
Earthing switch	2009-10	1	6500.00	
UPS 650VA	2009-10	1	27040.00	
Online UPS 3 KVA	2009-10	1	95425.00	
VSAT	2009-10	1 set	138000.00	
Multimedia speaker, Headphone, Webcam	2009-10	5 set	--	
Stabilizer with battery	2009-10	1 set	--	
Pulverizer machine	2011-12	1	49028.00	Working condition
Systonic Digital Ph meter	2011-12	1	10940.00	Working condition (RF A/c)
Systonic digital conductivity meter	2011-12	1	12970.00	Working condition (RF A/c)
Systonic colorimeter	2011-12	1	17150.00	Working condition (RF A/c)
Distillation unit	2011-12	1	19260.00	Working condition (RF

				A/c)
Laptop Acer	2012-13	1	34000.00	Working condition
Mobile Phone with GPS	2012-13	1	20000.00	Working condition
Samsung Mobile Tab	2012-13	1	22500.00	Working condition
Mobile soil testing lab equipment's	2012-13	1 set	1431300.00	Under Manav Vikas
Servo Voltage Stabilizer	2012-13	1	22500.00	Working condition
Ahuja Wireless mounting amplifier	2012-13	1	11900.00	Working condition
Foot operated sealing machine	2012-13	1		Provided by Director Agri Processing & Planning Pune
Destoner	2013-14	1		
Dehuler	2013-14	1		
Floor shifter	2013-14	1		
Pulverizer	2013-14	1		
PKV Dal Mill	2013-14	1		Provided by Dr. PDKV Akola
Fruit Grader	2013-14	1		
LCD projector Benq	2014-15	1	23500.00	Working condition
Projector Screen	2014-15	1	3000.00	Working condition
Mike	2014-15	2	5530.00	Working condition
LCD projector BENQ	2016-17	1	27800.00	Working condition
Audio system Ahuja	2016-17	1 set	29520.00	Working condition
Desktop with printer	2016-17	1	39050.00	Working condition (RF a/c)
UPS	2016-17	2	3600.00	Working condition (RF a/c)
GPS meter	2016-17	1	15000.00	Working condition
Lenovo Tab	2016-17	1	9990.00	Working condition
Laptop HP	2016-17	1	37650.00	Working condition
Flame Photometer	2017-18	1	44480.00	Working condition
Spectro Photo Meter	2017-18	1	46600.00	Working condition
Colour Printer	2017-18	1	11000.00	Not in working condition
Mruda Parikshak Kit	2017-18	1	72000.00	Working condition
Distillation Unit	2017-18	1	42871.00	Working condition
Nitrogen Analyzer	2017-18	1	193260.00	Working condition
Solar Power Generating system	2017-18	1 set	738359.00	Working condition (RF A/c)
Reversible plough	2019-20	1	63000.00	Working condition
Cotton Slasher	2019-20	1	155000.00	Working condition
Post Hole Digger	2019-20	1	134999.00	Working condition
Desktop Computers	2020-21	2	72600.00	Working condition
Double distilled water unit	2020-21	1	117000.00	Working condition

1.8. Details of SAC meetings to be conducted in the year

Sl. No.	Particulars	Date
1	Scientific Advisory Committee – Meeting 1	July, 2022
2	Scientific Advisory Committee – Meeting 2	November, 2022

2. DETAILS OF JURISDICTIONAL AREA UNDER KVK (No. of Talukas – 07)

2.1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1	***Sole Crop(s)*** • Kharif Sorghum • Cotton
2	***Inter Cropping (s)*** • Cotton + Green gram 1 : 1 • Cotton + Black gram 1 : 1 • Cotton + Red gram 8 : 2 or 10 : 2 • Sorghum + Green gram 3 : 6 or 3 : 3 • Sorghum + Black gram 3 : 6 or 3 : 3 • Sorghum + Red gram 3 : 3 or 6 : 3 • Red gram + Green gram 2 : 4 • Red gram + Black gram 2 : 4 • Red gram + Soybean 2 : 4 • Cotton + Sorghum + Red gram + Sorghum 6 : 1 : 2 : 1 • Soybean + Sorghum + Red gram 9 : 2 : 1
3	***Double Cropping: Rainfed situation (If late rains are received)*** • Green gram - Sunflower / Wheat / Gram / Safflower • Black gram - Safflower / Wheat / Gram / Onion • Soybean - Wheat / Gram / Onion

2.2. Description of Agro-Climatic Zone & Major Agro Ecological situations (based on soil and topography)

a. Soil type

Sl. No	Agro-climatic Zone	Characteristics
1	Ghat Tract	This sub-zone occupies greater part of Buldana District with 9 blocks viz. Chikhali, Buldana, Deulgaon Raja, Mehkar, Lonar, Malkapur, Sindhkhed Raja, Motala and Nandura. Elevation varies from 350 to 600 m above Sea Level. Annual rainfall varies from 750 to 850 mm. Soil ranges from very shallow to moderately deep. The topography is rolling and land slopes are around upto 7%. In this ghat tract Sorghum & Cotton are predominant crops.
2	Black Plains	This sub-zone spreads over Khamgaon and Shegaon blocks of Buldana districts along with 15 blocks of Akola and Amravati. Annual Precipitation varies from 750 to 900 mm. Soils are moderate to deep and predominantly vertisols with several situations of ill drainage due to that crop suffer more of wet conditions during years of relatively higher rains.

3	Saline Alkali Tract	This sub-zone includes major parts of 5 blocks viz. Jalgaon, Sangrampur, Shegaon, Nandura and Malkapur blocks of Buldana District. The soils are vertisols, deep and saline to saline alkali in reaction. Annual precipitation varies between 750 to 850 mm. Open wells in the tract have saline water as a result of which the same cannot be utilized for irrigation purpose. Cotton and Sorghum are the major crops of the tract together with rainfed wheat during rabi season. Poor drainage during rainy season is rampant.

b. Topography

S. No.	Agro ecological situation	Characteristics
1	AES I	The AES-I lies on the North-East part of the district with main characteristic of black cotton soil, high rainfall and hilly topography in another side. The blocks covered under this AES I are Sangrampur (95%) and Jalgaon Jamod (70%). The crops like cotton, wheat and gram grown in the area. The two villages Eklara (Bk) and Sungaon were selected as representative of AES for data collection.
2	AES II	This AES situated in West-North direction of the district. The blocks covered by AES II are Malkapur (100%), Nandura (100%), Shegaon (100%), Sangrampur (5%) and Khamgaon (15%). The main feature of AES II is plain topography with saline soil called *Kharpanpatta* locally. The major crops grown in this AES II are cotton, gram and sunflower. For the data collection two representative villages were selected namely Nipana and Kalkhed.
3	AES III	This AES situated in western side of the Buldana district. The blocks covered are Motala (100%), Buldana (100%) and Chikhali (30%). The Buldana and Chikhali are situated at high attitude as compared to Motala. The main features of AES III are hilly topography, medium to shallow soil. The major crops grown are cotton, jowar, maize, soyabean, wheat and gram. The horticultural crops custard apple, aonla and vegetable crops like, chilli, brinjal and tomato are also grown in this AES.
4	AES IV	AES IV comprises of Mehkar (100%), Khamgaon (85%) and Chikhali (70%) blocks. This AES is situated in east side of the district. The main feature of AES-IV is assured rainfall, well irrigated, medium to shallow soils. The AES-IV has favorable weather condition for grape production in Chikhali block. The agricultural crops grown in this area are soybean, cotton, jowar & maize in Kharif and gram & wheat in Rabi season. The horticultural crops grown in this AES IV are grape, Guava, mango, custard apple and sweet orange with vegetables like chili, onion, tomato and onion seed production. For data collection of AES IV, the two representative villages were selected namely, Nagzari and Hiwarkhed.
5	AES V	The AES-V is characterized by hilly and undulating topography, medium to shallow soils and rainfed area covering Deulgaon Raja (100%), Sindkhed Raja (100%) and Lonar (100%) blocks. This AES is situated in south of the district. The major crops grown in Kharif are soybean, Cotton, Jowar and Wheat, Gram, Safflower in rabi season. The major horticultural crops citrus, grapes, papaya, pomegranate grown in this AES. The climate is favorable for custard apple and aonla and has wide scope in this AES.

2.3. Soil Types

S. No	Soil type	Characteristics	Area in ha
1	Vertisoles	(Heavy black soil)	199318.00
2	Inseptisoles	(Medium black)	265757.00
3	Entisoles	(Light soil)	273139.00

2.4. Area, Production and Productivity of major crops cultivated in the district

S. No	Major Field Crop	Area (ha)	Production (MT)	Productivity (kg/ha)
Kharif Season				
1	Kharif Jowar	10449	12899	1234
2	Maize	26276	13459	546
3	Bajra	585	351	600
4	Redgram	77957	80080	1027
5	Greengram	17254	13142	761
6	Blackgram	18679	12234	655
7	Soybean	371528	416772	1121
8	Ground Nut	355	346	974
9	Sesamum	976	236	242
10	Cotton	210909	183242	147
Rabi Season				
1	Rabi Jowar	12932	11742	908
2	Maize	24158	32557	1347
3	Wheat	95635	217514	2415
4	Bengalgram	177025	280159	1582
Summer Season				
1	Maize	251	377	1500
2	Summer groundnut	256	302	1180

(Source- Forth advance estimate, GOM 2020)

Area Production & Productivity of Major fruit crop in Buldana District

Sr. No.	Name of Crop	Area (Ha)	Production (ton)	Productivity (t/ha)
01	Mandarin	1489	10655	7.15
02	Aonla	70	627	8.89
03	Banana	564	16467	29.15
04	Custard-apple	240	3941	16.42
05	Guava	467	3497	09.35
06	Mango	312	1222	03.90
07	Papaya	291	3164	10.84
08	Pomegranate	764	7847	09.29
09	Sapota	72	453	06.28
10	Kagzi-lime	269	2134	07.90
11	Sweet Orange	421	5473	12.99

(Source- SAO, Buldana 2020)

Area Production & Productivity of Major Vegetable crop in Buldana District

Sr.No	Name of Crop	Area (Ha)	Production (ton)	Productivity (ton/ha)
01	Brinjal	464	5988	12.89
02	Cabbage	219	2360	10.76
03	Sweet pepper	27	183	6.79
04	Green Chilli	846	11799	13.93
05	Okra	290	1315	4.53
06	Onion	3877	28656	7.38
07	Tomato	518	6090	11.74
08	Ginger	211	2139	10.11
09	Turmeric	442	47208	106.69
10	Garlic	136	518	3.80
11	Cauliflower	229	2425	10.58

(Source- SAO, Buldana 2018)

2.5. Weather data

Month	Rainfall (mm)	Temperature 0 C		Relative Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
January	0.0	25.8	14.0	69	50
February	0.0	29.5	16.2	54	36
March	5.0	32.9	19.6	52	30
April	0.0	38.2	24.5	40	26
May	13.3	41.3	27.6	41	23
June	200.1	33.2	23.6	78	58
July	236.8	31.4	23.3	83	69
August	239.9	28.4	22.5	88	76
September	228.9	29.2	22.5	87	76
October	23.0	29.9	21.9	74	64
November	18.0	28.9	17.5	56	45
December	2.0	28.2	15.3	64	50
Total / Average	**968.6**	**31.4**	**20.7**	**66**	**50**
Source : IMD & Rainfall Recording, Analysis Department, Govt. of Maharashtra					

2.6. Production and Productivity of Livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
Crossbreed	10071	105.30	9.98
Indigenous	93344	129.80	1.48
Buffalo	129370	343.23	6.53
Sheep	93388	--	--
Goats	334757	--	--
Pigs	17151	--	--
Poultry	172000	--	--

(Source- District Statistics Dept, Buldana 2019)

2.7. Details of Operational area / Villages

Sl. No.	Name of Taluka	Name of the village	Major crops & enterprise	Major problem identified	Identified Thrust Areas
1 2	Jalgaon Jamod Sangra mpur	Patan Hadiya mahal	Cotton	Sowing of Cotton in light soil & rainfed situation. Management practices (wider spacing, Seed treatment, No proper gap filling, Protective irrigation at critical stages) Imbalance nutrient management (Soil test Based Fertilizer application Inadequate & low-Quality organic matter used) Improper Pest, diseases mgt.	Method, quantity & time of fertilizer application. Integrated Nutrient Management Integrated pest & diseases management.
			Soybean	Unawareness about New variety, No use of good quality seed, Imbalance nutrient management, (No use of 2%foliar spray of Urea) Improper Pest, diseases mgt.	New Variety, Integrated Nutrient Management, Proper Pest & diseases management
			Maize	Scarcity of Labour for Weeding, Higher cost for Weeding, Imbalance nutrient management	Weed Management, Integrated Nutrient management
			Red gram / Green-gram/ B.Gram /	Imbalance nutrient management, Excess Urea Application, Improper pest & disease management	Integrated Nutrient management, Foliar Application of 2% Urea, Integrated pest & diseases management

			Wheat	Low yield due to use of traditional crop varieties, Improper Sowing time, Imbalance nutrient management	Importance of New High Yielding Varieties, Nutrient management Weed Management
			Ground Nut	Unawareness about New Technology, Secondary and micronutrient deficiencies	BBF or Polyethylene Mulching, Nutrient management, Proper Pest & diseases management
			Horticult-ural crops	Non availability of guanine planting Material, Improper Management Practices, Improper Spacing, Imbalance Nutrient Management, Improper Insect Pest and disease Management, Improper use of irrigation facilities, Flower and fruit drop, Post-harvest losses of fruit Crops, Less returns due to direct selling, Non availability of value added products	Improved Nursery techniques for vegetable seedlings, Application of growth regulator in vegetable and fruit crops, Pre harvest & Post harvest techniques of vegetable, fruits & other Horticultural crops, Micronutrient application in Horticultural crops, Fruit & vegetable preservation, Irrigation management in Horticultural crops, Introduction of new Horticultural crops of low water requirement, Cultivation of tissue culture banana
			Soil & water conservati on (Agril. Engg.)	Improper tillage operation & seed bed preparation, Water scarcity, Non adoption of in-situ soil & water conservation techniques	Soil and water conservation, Use of proper implements, Maintenance of tractor & tractor drawn implements, Post-harvest technology, Care and maintenance of Plant Protection equipments
			Irrigation	Improper method of irrigation	
			Post-Harvest Technology	Lack of knowledge of simple techniques of PHT *viz*. clean Cotton picking, grading,	

				available fruit packaging grading & processing	
			Mechanization	Lack of knowledge about improved Agriculture implements	
			Drudgery in field operation	Drudgery in agricultural operation, Time consuming traditional method of operation	
			Cattle	Management & health, Non adoption of proper housing systems, Manage mental problems like identification, dehorning, castration, Unawareness about Vaccination, Irregular Deworming, Unavailability of timely treatment, Low Milk Yield	Formulation of balance ration for Dairy animals, Scientific feeding of animals, Ecto-parasitic infection in animals, Inbreeding problems in goat & dairy animals, Worms problems in animals, Improving backyard poultry, Proper housing of animals, Vaccination and healthcare in animals, Entrepreneurship development through Dairy, Poultry & Goatry
			Buffalo	High Mortality in Calves, Silent Heat, Highly Worms, Infection in Milch Buffalo	
			Goat & Sheep	Highly abortion rate, High incidence of FMD, Less Use of Concentrate in Feeding, Mortality in Rainy season	
			Poultry	Rearing of Deshi Breeds, lack of knowledge about proper Poultry management, High Cost of Feed, Higher Mortality, Effect of climate on poultry production	

			Agriculture Technology & Marketing	Lack of upgradation of improved agriculture, Weak extension linkage between extension workers & farmers, Improper adoption of Improved agriculture technologies, Women empowerment Unavailability of current market prices at village level	Taking up suitable measures to impart knowledge about modern agriculture amongst the farmers' community, Creation of awareness amongst the farmers, farmwomen, rural youth regarding improved agricultural technologies
			Rural Women & Child Nutrition, Hygiene & Health	Iron deficiency in women, Underweight & mal nutrition, Balance diet, Hygienic problems	Nutrient deficiency of farm women & child, Heavy physical stress due to tradition methods in agricultural operations, Women empowerment Value addition of agricultural commodities
			Women Drudgery reduction	Lack of awareness about agriculture tools & implements	
			Agro-processing & value addition	Heavy losses in agriculture commodities due to unavailability of agro processing facilities.	

2.8. Priority thrust areas:

Discipline	Thrust Area
Agronomy	
Cereals	
Maize	Integrated Nutrient Management, Weed Management, Crop Diversification.
Sorghum	Integrated Nutrient Management
Wheat	Variety, Integrated Nutrient Management, Weed management
Oilseed	
Soybean	Variety, Integrated Nutrient Management
Groundnut	Variety, INM,
Pulses	
Greengram, Blackgram, Pigeon pea, Bengal gram	Variety, Integrated Nutrient Management
Fiber crop	
Cotton	Integrated Nutrient Management
Plant Protection	
Maize	Integrated Pest Management, FAW management
Soybean, Sorghum, Ground Nut, Greengram, Blackgram, Pigeon pea, Bengalgram	Integrated Pest & Disease Management
Cotton	Integrated Pest & Disease Management, PBW management
Citrus, Onion	Pest & disease management.
Horticulture	
Custard Apple	Improved variety, Integrated crop management
Banana, Citrus	Nutrient Management, Water management, Pre/post-harvest management
Papaya	IPM, IDM
Watermelon/Muskmelon	Polythene mulch, ICM
Onion, Tomato, Brinjal, Chilli	Integrated crop management, Nutrient Management
Safed Musli	Improved variety, plantation management, post-harvest management.
Agricultural Engineering	
Mechanization	Use of Improved implements for mechanization of dryland Agriculture
Soil & Water conservation	In-situ soil moisture conservation
Micro Irrigation system	Use of improved irrigation methods like drip & Sprinkler irrigation system
Small scale processing	PKV Mini Dal Mill for pulses processing, PKV Deseeding machine for custard apple
Veterinary Science	
Dairy	Feed & Fodder production, Animal health, Use of mineral mixture
Goat	Up gradation of local goat, Health
Poultry	Feed & Rearing of birds
Home Science	
Women & Child care	Nutrition status
Drudgery Reduction	Use of drudgery reducing farm implements/equipment's
Capacity Building	Strengthening up of SHG / farmers club

3. TECHNICAL PROGRAMME

3.1. A. Details of targeted mandatory activities by KVK

OFT		FLD (including CFLD)	
(1)		(2)	
Number of OFTs	Number of Farmers	Area (ha)	Number of Farmers
14	142	21	425

Training		Extension Activities	
(3)		(4)	
Number of Courses	Number of Participants	Number of activities	Number of participants
		54	1200

Seed Production (qt.)	Planting material (Nos.)	Animal / Bird production (Nos.)	Soil Samples to be test
(5)	(6)	(7)	(8)

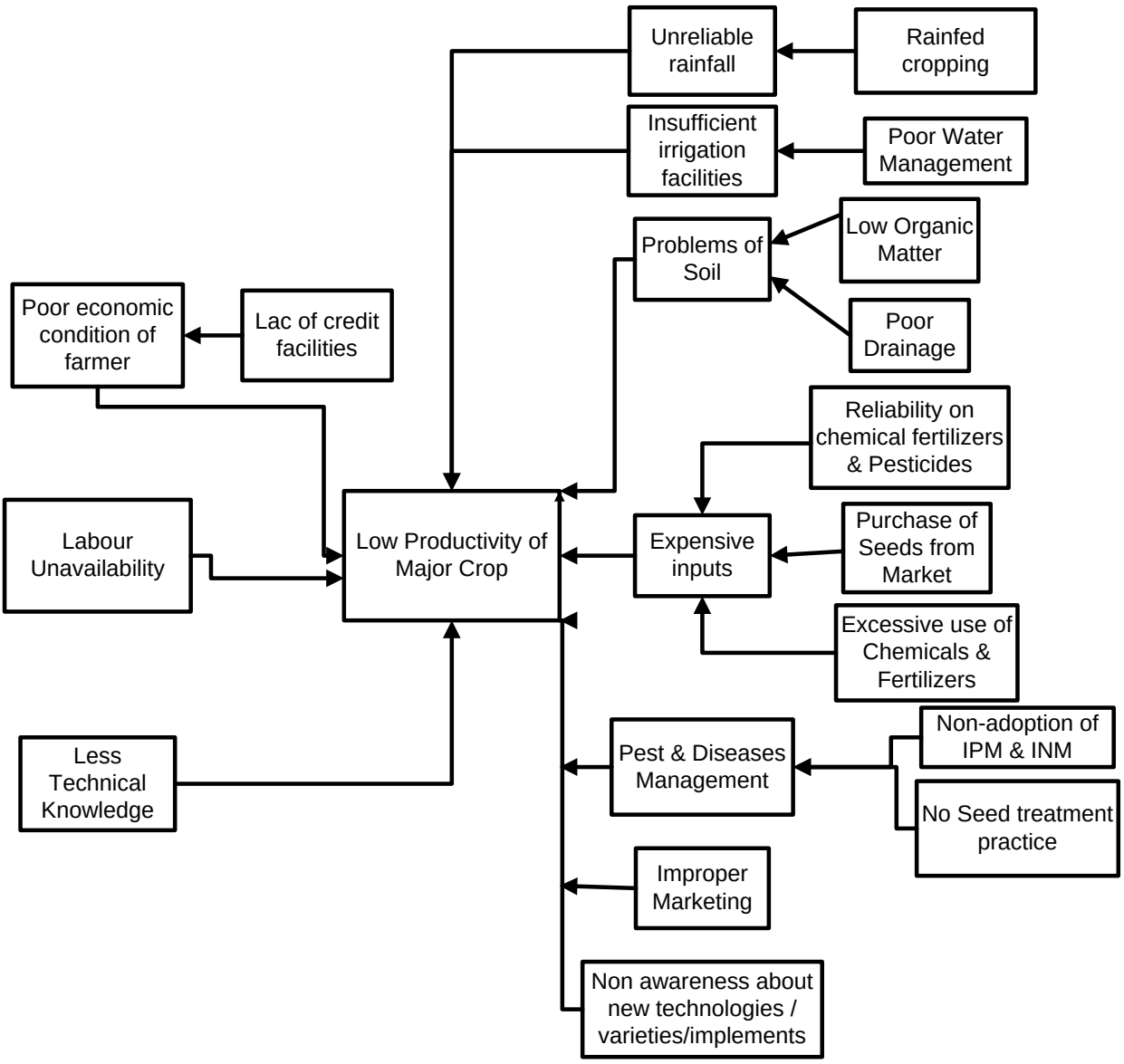
3.1. B. Operational areas details proposed during 2022

S.N.	Major crops & enterprises being practiced in cluster villages	Prioritized problems in these crops/ enterprise	Extent of area (ha/No.) affected by the problem in the district	Names of Cluster Villages identified for intervention	Proposed Intervention (OFT, FLD, Training, extension activity etc.)*
1	Cotton	Low yield due to 1.Heat Stress 2.Pink bollworm infestation 3.Nutrient Management	134164	Dhanora Jungam, Wadgaon wan	OFT, FLD, Training, Field visit
2	Soybean	Low yield due to 1.Varietal Monoculture 2.Excess Vegetative Growth 3.Infestation of stem fly and girdle beetle	74742	Dhanora Jungam, Wadgaon wan	FLD Training, Field visit
3	Pigeon pea	Low yield due to 1.variety 2.Nutrient Management 3. Helicoverpa infestation 4.Wilt Management	32567	Dhanora Jungam, Wadgaon wan	OFT, FLD, Training Field visit

4	Maize	Incidence of Fall Army Worm in maize in Kharif, Rabi & Summer season	17592	Dhanora Jungam, Wadgaon wan	FLD, Training, Field visit
5	Bengalgram	Low yield due to Helicoverpa and wilt	45700	Dhanora Jungam, Wadgaon wan	OFT, Training, Field visit
6	Linseed	Low yield	New crop	Dhanora, Sungaon Wadgaon wan, Sagoda	OFT, CFLD, Training,
7	Mustard	Low yield	New crop	Dhanora,Wadgaon wan, Sagoda	CFLD, Training
8	Onion	Varietal evaluation	10000 ha	Jamod, Pimpri Gawali, Vihigaon, sangrampur	OFT
9	Turmeric	Low yield, disease attack	17500 ha	Nandura, Warvat Pimpalgaon,	OFT
10	Custard apple	Poor fruit set	1500 ha	Sungaon, shegaon, Usra, Asalgaon	FLD
11	Chilli	Poor yield, pest/disease attack	850 ha	Khamgaon, Jalgaon, Palshi	FLD
12	Turmeric	Poor yield, disease attack	17500ha	Nandura, Warvat Pimpalgaon,	FLD
13	Poultry deshi	Less eggs production Low weight gain Low growth rate	--	Umapur, Charban	1.OFT 2.Training
14	Cattle	Low production of fodder crop	--	Dhanora Jangam Wadgaon Van,	1.OFT 2.Training
15	Heifer	Low conception rate, failure of oestrous,	--	Dhanora jangam Charban	1.OFT 2.Training
16	Goat	Ignorance of regular deworming Parasitic infestation Low body weight gain	--	Dhanora Jangam Charban,Umapur,	1. FLD 2. Training.
17	Dairy	Low milk Production Non availability of green fodder during scarcity period, Wastage of fodder	--	Dhanora Jangam Wadali,wadati	1.FLD. 2. Training
18	Milch animals	Incidence of mastitis. High cost of treatment. Low milk yield. Economic loss	--	Dhanora Jangam Wadali, Malegaon gond	1.FLD. 2.Training
19	Subsoiler	Ill drains hard and compacted soil.	130 ha	Borala, Bhastan Matergaon	FLD, Training
20	Cotton shredder	Improper agro waste management	247600 ha	Nimbhora, Jalgaon Umapur	FLD, Training
21	BBF (soybean)	Low productivity of soybean crop	240000 ha	Pimpalgaon Kale	FLD, Training
22	BBF Groundnut	Low productivity of groundnut crop	1101 ha	Shelgaon Mukund, Sungaon	FLD, Training

23	Deseeding machine (Custard apple)	Yield loss due to unfavorable climatic condition & value addition in peak production of custard apple	1300 ha	Khedra, Jalgaon and Asalgaon	FLD, Training
24	BBF (Maze planting)	Low productivity and high labour demand in planting operation	3400 ha	Wadgaon patan, Kurangad	OFT
25	BBF Sorghum	Low productivity	4200 ha	Changeful Rudhana	OFT
26	Post Hole Digger (Horticulture Plantation	Labour scarcity, high cost of labour and time	3800 ha	Sonala, Tunki	OFT and training
27	Processing / Value Addition (Pulses)	unavailability of minimum processing facility Unemployment in rural youth	84000 ha	All district	Vocational training
28	Animal drawn Sprayer	High cost of labour for spraying operation	745000 ha	All district	Method demonstration
29	Animal drawn 3-tyne hoe	High labour cost in intercultural operation	240000 ha	All district	Method demonstration
30	Animal drawn CRIDA Planter	Low yield due to improper plant population	240000 ha		Method demonstration
31	Micro Irrigation	Low economical life of micro irrigation unit	84000 ha		Training cum Method demonstration
32	Oyster mushroom	Unawareness about chemical sterilization method	--	Jamod, Asalgaon Sungaon Nandura,	OFT, training Extension activity
33	Revolving stool and stand	Drudgery in milking	--	Tunki Rajura Wadgaon, Dhanora Jungam	OFT, training Extension activity
34	Solar dryer technology	Dehydrated food in unhygienic condition	--	Khangaon Jalgaon, Rajura	FLD Training Extension activity
35	Nutritional kitchen garden	Low nutritious diet	--	Dhanora, Rajura, Kherda ,	FLD, training Extension activity
36	Vegetable Transplanter	High cost of transplanting, Drudger, Time consuming	--	Jalgaon, Sungaon	FLD, Training

3.1. C. Problem cause diagram of major problems.



3.2. Technologies to be assessed

A.1. Abstract on the number of technologies to be assessed in respect of crops

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	Others	Total
Varietal Evaluation	--	--	--	--	01	--	--	--	--	--	**01**
Seed / Plant production	--	--	--	--	--	--	--	--	--	--	--
Weed Management	01	--	--	--	--	--	--	--	--	--	**01**
Integrated Crop Management	--	01	--	--	--	--	--	--	--	--	**01**
Integrated Nutrient Management	--	01	--	--	--	--	--	--	01	--	**02**
Integrated Farming System	--	--	--	--	--	--	--	--	--	--	--
Mushroom cultivation	--	--	--	--	--	--	--	--	--	--	--
Drudgery reduction	--	--	--	--	--	--	--	--	--	01	**01**
Farm machineries	02	--	--	--	--	--	--	01	--	--	**03**
Value addition	--	--	--	--	01	--	--	--	--	--	**01**
Integrated Pest Management	--	--	02	01	--	--	--	--	--	--	**03**
Integrated Disease Management	--	--	--	--	--	--	--	--	--	--	--
Resource conservation technology	--	--	--	--	--	--	--	--	--	--	--
Small Scale income generating enterprises	--	--	--	--	--	--	--	--	--	--	--
Human Health	--	--	--	--	--	--	--	--	--	--	--
TOTAL	**03**	**02**	**02**	**01**	**02**	**--**	**--**	**01**	**01**	**01**	**13**

A.2. Abstract on the number of technologies to be assessed in respect of livestock / enterprises

Thematic areas	**Cattle**	**Poultry**	**Sheep**	**Goat**	**Piggery**	**Wormi culture**	**Fisheries**	**TOTAL**
Evaluation of Breeds	--	01	--	--	--	--	--	**01**
Nutrition Management	--	--	--	--	--	--	--	**--**
Disease of Management	--	--	--	--	--	--	--	**--**
Value Addition	--	--	--	--	--	--	--	**--**
Production and Management	01	--	--	--	--	--	--	**01**
Feed and Fodder	01	--	--	--	--	--	--	**01**
Small Scale income generating enterprises	--	--	--	--	--	--	--	**--**
TOTAL	**02**	**01**	**--**	**--**	**--**	**--**	**--**	**03**

B. Details of On Farm Trial / Technology Assessment during 2022

SN	Crop/ enterprise & Season	Prioritized problem	Title of OFT	Technology options	Source of Technology	Name of critical input	Qty per trial	Cost per trial	No. of trials	Total cost for the OFT (Rs.)	Parameters to be studied	Team members
1	Bt Cotton	Low Yield, Small Boll Size	Assess the performance of Foliar spray of 25 PPM Gibrelic acid (13.9 gram GA in 500 lit.water per ha on Bt Cotton at the time of square formation and boll development stage	T_1 - Farmer Practice T2 - Foliar Spray of 2% Urea T3 - foliar spray of GA @ 13.9 gram/ha at the time of square	PDKV (2019)	GA	4 gm	500	7	3500	Plant height, No of square, No of boll Boll size Yield	S.M.Umale A.T.Gabhane
2	Linseed		Assess the performance of Linseed + Chickpea (4:2) intercropping	T_1 – Farmers practice (Sowing of sole Chickpea T2 – Sowing of Linseed + Chickpea (4:2) T3 – Sowing of sole linseed variety PKV NL260	PDKV (2015)	Linseed Seed variety PKV NL 260	16 kg	300	7	2100	Plant height No of pods/plant Yield qt/ha Net Return	S.M.Umale A.T.Gabhane
3	Wheat		Assess the performance of Post emergence application of clodinafop propargyl+ Metsulfuran	T_1 - No Spraying T_2 - Post emergence (application Metsulfuran Methyl @ 20gm ai/ha) At 35DAS	PDKV (2019)	Metsulfuran Methyl clodinafop propargyl+ Metsulfuran	8 gm 160 gm	1060	7	7420	Monocot Weed Count /sqmt, Dicot Weed Count /sqmt, Yield qt/ha, WI(%)	S.M.Umale A.T.Gabhane

			Methyl @ (0.06+0.004 Kg ai/ha) at 35DAS for controlling the weed flora in wheat	T_3 - Post emergence application of clodinafop propargyl+ Metsulfuran Methyl @ (0.06+0.004 Kg ai/ha) At 35DAS		Methyl						
4	Cotton	PBW has developed resistance to Bt cotton. Reduction in yield due to Incidence of PBW	Management of Pink bollworm (*Pectinophora gossypiella*) in Bt cotton	T1 (Farmers Practice) - 1 or 2 chemical pesticide sprays comprising of Chlorpyriphos 20 EC 30ml, Triazophos 40 EC 30 ml per 10 lit water							Percent green boll damage Percent loculi damage at harvest Yield (qt/ha) Cost of PP (Rs/ha) C:B ratio	Mr. Anil Gabhane & Mr. Sanjay Umale
				T2- 1st Spray profenophos 50 EC @ 20 ml per 10 lit water at 60 DAS 2nd Spray Emamectin benzoate 5 SG @ 4.4 g per 10 lit water at 80 DAS and 3rd spray Lambda cyhalothrin 5 EC @ 10 ml per 10 lit water at 100 DAS	MPKVR ahuri, Joint Agrosco - 2018	Profenophos 50 EC Emamectin Benzoate 5 SG Lambda cyhalothrin 5 EC	500 ml 100 g 250 ml	284 420 197	07	1988 2960 1379 6327		
				T3- Installation of Pheromone Traps @ 2/acre for monitoring at square formation, Spray Azadirachtin 300 ppm @ 50ml/10 lit at flower initiation, 6 to 7 Inundative releases of	IPM packag e for Cotton 2017, Dr. PDKV, Akola	Pheromone traps Pectinolures Azadirachtin 300 ppm Trichocard Thiodicarb 75WP Deltamethrin	2 4 500 ml 18 500g 250 ml	25 20 237 900 1200 135	07	350 560 1659 6300 8400 945 17269		

				Trichogramma bactreae 60,000 per acre, Plucking of rosette flowers, ETL based application of Thiodicarb 75 WP 20 g per 10 lit water at boll formation followed by Deltamethrin 2.8 EC 10 ml per 10 lit water		2.8 EC						
5	Pigeon pea	Reduction in yield due to incidence of pod borer complex	Management of pigeonpea pod borer complex	T1- Farmers practice 2-3 Spraying of Propenophos @ 40ml, 2nd sray Emammectin Benzoate @ 10 gm and Clorantriniprole @ 4ml per 10 lit water		Propenophos @ 40ml, Emammectin Benzoate @ 10 gm and Clorantriniprole @ 4ml	500 ml 100 gm 60 ml	540 450 720	07	3780 3150 5040 11970	Percent pod damage Yield (qt/ha) Cost of PP (Rs/ha) C:B ratio	Mr. Anil Gabhane & Mr. Sanjay Umale
				T2- 1st spray - Clorantraniliprole 18.5 SC @3 ml per 10 lit water at 50 per cent flowering 2nd spray- Flubendiamide 39.35 SC @2 ml per 10 lit water at pod filling stage	Dr. VNMKV, Joint Agresco-2018	Clorantraniliprole 18.5 SC Flubendiamide 39.35 SC	60 ml 40 ml	720 450	07	5040 3150 --- 8190		
				T3- 1st spray Azadirachtin 300 ppm 50 ml /10 lit water 50% flowering 2nd Spray Emamectin Benzoate 5 SG 4.4 g/10 lit water based on ETL 3rd spray	Major uses of Pesticides, CIBRC publication 2018	Azadirachtin 300 ppm Emamectin benzoate 5 SG Lambda cyhalothrin	500 ml 100 g 250 ml	237 420 197	07	1659 2940 1379 --- 5978		

				Lamdacyhalothrin 5 EC 10 ml/10 lit water based on ETL								
6	Bengal gram	Jaki - 9218	Management of Helicoverpa in Bengalgram	1 T1- Farmers practice- 2 to 3 sprsys o f Proenophos @40 ml, Emamectin Benzoate 5 SG 10 g/10 lit water, Clorantraniliprole 18.5 SC @3 ml per 10 lit		Proenophos Emamectin Benzoate 5 SG Clorantraniliprole 18.5 SC	500ml 100 gm 60ml	550 420 720	07	3850 2940 5040 ---------- 11830	Percent pod damage Yield (qt/ha) Cost of PP (Rs/ha) C:B ratio	Mr. Anil Gabhane & Mr. Sanjay Umale
				T2—Etection of bird perches @15 /ha at 30 DAS Spraying of HaNPV @500 LE /Ha at bud formation stage followed by 2nd spraing of HaNPV at 10 days interval. Spraying of Azadirction 300PPM @ 50ml /10liter of water after 10 days of 2nd sprays of HaNPV.	Joint Agrosco 2019	HaNPV @500 LE /Ha Azadirction 300PPM	200 LE 500ml	800 500	07	5600 3500 --------- 9100/-		
				T3-- Spraying of Ethion 50EC @ 20 ml /10 liter of water at 50% flowering followedby clorantriniliprole 18.5 SC @ 2.5 ML /10 lter of water	Joint Agrosco 2019	Ethion 50EC clorantriniliprole 18.5 SC	500 ml 60 ml	650 720	07	4550 5040 9590/-		
7	Turmeric	Nutrient management	To Asses Turmeric special nutrient and rdf dose	T1- Farmers practice					07	9600/-	Avg yield, No of finger/rhizomes, C:B ratio	Mr. Shashank Date
				T2- Application of turmeric special micronutrient	IISR, Kozhikode	Turmeric special micronutrient	02kg	4500				

				T3 - Spray of Boron, Fe & Zn two spray @ 25-day interval	TNAU, Coimbatore	Boron Fe Zn	800 gm each	2300				
8	Onion	Varietal evaluation	To asses Bhima Shakti & Bhima Kiran variety for superior yield quality & better storage life in Buldana	T1 - Farmers practice						21000/-	Avg yield, no of days to harvest, C:B ratio	Mr. Shashank Date
				T2 - Bhima Kiran variety of onion	DOGR, Rajgurunagar	Bhima Kiran onion variety	1kg	10500	07			
				T3 - Bhima Shakti variety of onion	DOGR, Rajgurunagar	Bhima Shakti onion variety	1kg	10500				
9	Poultry	1.Low eggs production 2. Low weight gain.	Assess the performance of new variety Kaveri breed under back yard Poultry	T_1 – Deshi birds T2- Giriraja birds T_3 – Kaveri birds 1 month age	Central Poultry development organisation Odisha	Kaveri birds 1 month age	10	2000	11	22000	Avg. body weight gain Age at sexual maturity stage Avg Eggs prod	V.S. Janotkar
10	Feed and Fodder	Low yield and non-availability of green fodder during scarcity period	Evaluation of Hybrid napier variety of fodder CO5	T_1 – Farmers practice Cultivation of maize T_2 – Cultivation of CO4 T3 – Cultivation of CO5	TNAU, Coimbatore.	Thomb	250 sets	1000	11	11000	Avg Green fodder production Avg. Milk Production B:C Ratio	V.S. Janotkar
11	Cow Heifer	Failure of oestrous. Infertility. Low conception rate	Induction of oestrous in anoestrous Heifer	T1 – Locally available feed & fodder T2 - T1 + Mineral mixture 50 gms daily +3 gm deworming bolus once T3- T1 + Vitamin A D_3 + Deworming + Mineral mixture Inj.	MAFSU Nagpur	Inj.Vit.AD 3 Mineral mixture 50 gms Dewormer bolus 3 gm Ovisynch protocol	10	1000	10	10000	1. Oestrous Induction response in treated 2. Time required for oestrous after treatment 3. Conception rate	

				GnRh Inj PGF2 α and timely AI		Inj, GnRh 5ml PgF2alpfa, Inj,GnRh 5 ml,						
12	Maize	Low Productivity &High Labour cost of transplanting	Enhancing productivity of Maize crop through use of BBF Planter for sowing	T1- Local practice (planting manually) T2 – BBF planter for sowing of Maize	Dr. PDKV Akola 2018	Hiring charges of tractor and BBF Planter	0.4 ha per trial	1000/-	15	15000	Yield, qt/ha Net return, Rs/ha	N.P, Talokar V.G. Jadhao
13	Sorghum	Low Productivity	Enhancing productivity of Sorghum crop through use of BBF Planter for sowing	T1 - Local practice (bullock drawn seeddrill) T2 - BBF planter for sowing of sorghum	Dr. PDKV Akola 2018	Hiring charges of tractor and BBF Planter	0.4 ha per trial	1000/-	15	15000	Yield, qt/ha Net return, Rs/ha	N.P, Talokar V.G. Jadhao
14	Garlic	High labour cost and time in planting operation	Use of PDKV Garlic planter	T1 - Local practice (planting manually) T2 – Use of Garlic Planter	Dr. PDKV Akola 2019	Hiring charges of tractor and Garlic Planter	0.4 ha per trial	1000/-	15	15000	Yield, qt/ha Net return, Rs/ha	N.P, Talokar V.G. Jadhao
15	Mushroom	Unawareness about chemical sterilization method	Assess the effect of straw sterilization practice on yield of oyster mushroom	T1: Boiling method T2: Chemical method (formalin & Bavistin)	Dr. PDKV Akola	Formalin, Bavistin	--	600/-	10	6000/-	Yield% Quality, Incubation period Labour, time saving	J.W. Bobde V.G. Jadhao
16	Milking stool and stand	Unawareness about Drudgery reduction tools	Assess the effect of milking stool & stand for drudgery reduction	T1: Farmers practice T2: Use of Milking Stool	VNMKV Parbhani	Milking stool and stand	--	1000/-	07	7000/-	Time required Drudgery	J.W. Bobde V.G. Jadhao

3.3. Frontline Demonstrations

A. Details of FLDs to be organized -

Sl. No.	Crop	Variety	Thematic area	Technology for demonstration	Critical inputs with cost (Rs.)	Season and year	Area (ha)	No. of farmers/ demon.	Parameters identified
1	Wheat	PDKV-Sardar	Variety	Variety PDKV-Sardar	Seed 22000/-	Rabi 2021	10	25	Plant height No of tiller No of grains/ panicle Yield(qt/ha)
2	Soybean	JS-335	IPM	Management of stem fly and girdle beetle in soybean	T1 (Farmers Practice)- 1 or 2 chemical pesticide sprays comprising of Profenophos 50 EC 20 ml, Emamectin benzoate 5 SG @ 5 g per 10 lit water T2-(Recommended Technology)-Seed treatment with Thiamethoxam 30 FS @ 10 ml/kg seed followed by ETL based spray of cholorantriniprole 18.5% EC @ 3 ml/10 lit water. Total Rs.65550/-	Kharif-2021	10	25	1)Per cent stem fly incidence 2) Girdle beetle incidence per MRL 3)yield (kg/ha) 4)B:C Ratio
3	Piegaon pea	ICPL-87119	IDM	Management of wilt in pigeaon pea Treat the seed of pigeon pea with combined product	T1 (Farmers Practice)- No seed treatment T2-(Recommended Technology)- Treat the seed of pigeon pea	Kharif-2021	10.0	25	1) Disease Intensity (%) 2) Yield (kg/ha) 3) B:C Ratio

				of fungicide Carboxin 37.5% + Thiram 37.5 % @ 3 g/kg followed by Trichodermavirde @ 10 g/ kg seed to reduce the wilt incidence and more monetary return	with combined product of fungicide Carboxin 37.5% + Thiram 37.5 % @ 3 g/kg followed by Trichodermavirde @ 10 g/ kg seed to reduce the wilt incidence and more monetary return. Total cost Rs.9375/-				
4	Maize	PRO AGRO RIDER	IPM	Management of fall army worm in Maize	T1 (Farmers Practice)-1 or 2 chemical pesticide sprays comprising of Chloropyriphos 20EC @ 20ml or Profenophos 50 EC 20 ml T2(Recommended Technology)-Use of pheromone traps @ 2 traps /acre for monitoring, seed treatment of cyantraniliprole 19.8% + thiamethoxam19.8% @ 4ml per kg seed ETL base spraying of Azadiraction 1500PPM @ 50ml per 10liter of water followed by ETL based spraying of Clorantriniliprole	Kharif-2021	10	25	1) No of affected plants/mrl 2) yield (kg/ha) 3)B:C Ratio

					18.5% @ 3ml per 10 lit of water (Ministry of Agriculture& farmer welfare, GOI, New Delhi, circular dt 6 May2019and use of insecticides 28 may 2018) Total Rs.75000/-				
5	Turmeric	IISR Pragati	Varietal evaluation	IISR Pragati variety for demonstration	Turmeric Bulb 24500/-	Kharif-2021	5.6	14	Yield/ha, crop duration, Finger/bunch, wt. of bunch, B:C ratio
6	Garlic	AKG-7, G-41	Varietal evaluation	AKG-7, G-41 variety for demonstration	AKG-7, G-41	Rabi- 2022	2.8	07	Yield/ha, crop duration, Aveg Wt of Bulb B:C ration
7	Citrus	Nagpur Mandarin	Nutrient management	Application of capsulated biofertilizer to soil @2 capsule /acre	IISR developed Microbial consortium	Mrug bahar 2022	5.6	14	Avg yield, Days to harvest, Avg 'A' grade fruit/plant%, B:C ratio

Sponsored Demonstration (CFLDs on O & P/Others)

Sr. No	Crop	Variety	Season & Year	Area (ha)	No. of farmers
1	Greengram	BM2003-1	Kharif 2021	10	25
2	Blackgram	AKU10-1	Kharif 2021	10	25
3	Pigeonpea	BDN716	Kharif 2021	10	25
4	Chickpea	RVG202/ Fule Vikram	Rabi 2021	20	50
5	Linseed	PKV NL260	Rabi 2021	10	25
6	Mustard	TAM-108-1	Rabi 2021	10	25
7	Summer Ground Nut	TAG-24	Summer 2021	10	25

B. Extension and Training activities under FLDs

S. No.	Activity	No. of activities	Months	Number of participants
1	Field days	10	Sept., Nov, Dec	570
2	Farmers Training	12	May. Sept, Oct	400
3	Media coverage	12	June, Oct, Nov	
4	Training for extension functionaries	6	June, Sept, Nov, Dec.	150
5	Field visit	30	June, Sept, Nov, Dec.	150

C. Details of FLD on Enterprises

a. Farm Implements

Name of Technology	Crop	Season and year	No. of farmers	Area (ha)	Critical inputs	Performance parameters / indicators
Cotton Slasher	Cotton	Jan 21-Feb21	25	10	Cost of operation – 25000/-	Biomass incorporation t/ha Labor and cost saving
BBF Planter	Ground nut	Jan 21-Feb 21	25	10	Cost of operation – 25000/-	Yield and net return
Subsoiler	Cotton	Mar 21-June 21	15	06	Cost of operation – 15000/-	Yield, Stage-wise m.c.%
Deseeding machine	Custard apple	Sep 21-Oct 21	15	06	Cost of operation – 15000/-	Pulp recovery kg/hr, time and cost saving

b. Livestock and Fisheries Enterprises

Enterprise	Breed	No. of farmers	No. of animals, poultry birds etc.	Critical inputs	Performance parameters / indicators
Goat	Local	10	50	Inj. Ivermectin	Av. Weight gain Health status Exam. Faecal sample before and after trail
Cattle	Local	10	20	Supply of Silage bag	Av. Milk yield Health status Acceptability of feed for consumption
Cow	Local	12	20	Supply of CMT reagent	Av. Milk Production Expenditure on treatment Incidence of mastitis

c. Other Enterprises (Mushroom, Apiculture, Sericulture, Vermicompost, Value Addition, Women empowerment, etc)

Enterprise	Technology demonstrated	No. of farmers	No. of units	Critical inputs	Performance parameters / indicators
Women & Child care	Nutritional garden	50	10	Vegetable seeds, fruit plant, medicinal plant Rs. 1000/-	Vegetable cost of saving /month Yield Consumption ratio fruit and Vegetable
Drudgery reduction	Vegetable Transplanter	10	--	Vegetable Transplanter Rs.15000/-	Field coverage, ha/hr Time & cost of operation

3.4. Training (Including the sponsored and FLD training programmes)

A. ON Campus

Thematic Area	No. of Courses	No. of Participants						
		Others			SC/ST			Grand Total
		M	F	T	M	F	T	
(A) Farmers & Farm Women								
I. Crop Production								
Weed Management	0	0	0	0	0	0	0	0
Resource Conservation Technologies	0	0	0	0	0	0	0	0
Cropping Systems	0	0	0	0	0	0	0	0
Crop Diversification	0	0	0	0	0	0	0	0
Integrated Farming	0	0	0	0	0	0	0	0
Water management	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0
Integrated Crop Management	4	112	35	147	17	11	28	175
Fodder production	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0
II. Horticulture								
a) Vegetable Crops	0	0	0	0	0	0	0	0
Production of low volume and high value crops	01	15	00	15	05	00	05	20
Off-season vegetables	01	15	00	15	05	00	05	20
Nursery raising	0	0	0	0	0	0	0	0
Exotic vegetables like Broccoli	0	0	0	0	0	0	0	0
Export potential vegetables	0	0	0	0	0	0	0	0
Grading and standardization	0	0	0	0	0	0	0	0
Protective cultivation (Green Houses, Shade Net etc.)	01	15	00	15	05	00	05	20
b) Fruits								
Training and Pruning	0	0	0	0	0	0	0	0
Layout and Management of Orchards	0	0	0	0	0	0	0	0
Cultivation of Fruit	01	15	00	15	05	00	05	20
Management of young plants/orchards	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0
Export potential fruits	0	0	0	0	0	0	0	0
Micro irrigation systems of orchards	0	0	0	0	0	0	0	0
Plant propagation techniques	0	0	0	0	0	0	0	0
c) Ornamental Plants								
Nursery Management	0	0	0	0	0	0	0	0
Management of potted plants	0	0	0	0	0	0	0	0
Export potential of ornamental plants	0	0	0	0	0	0	0	0
Propagation techniques of Ornamental Plants	0	0	0	0	0	0	0	0

d) Plantation crops								
Production and Management technology								
Processing and value addition	0	0	0	0	0	0	0	0
e) Tuber crops								
Production and Management technology	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0
f) Spices								
Production and Management technology	01	15	00	15	05	00	05	20
Processing and value addition	0	0	0	0	0	0	0	0
g) Medicinal and Aromatic Plants								
Nursery management	0	0	0	0	0	0	0	0
Production and management technology	0	0	0	0	0	0	0	0
Post-harvest technology and value addition	0	0	0	0	0	0	0	0
III. Soil Health and Fertility Management								
Soil fertility management	0	0	0	0	0	0	0	0
Soil and Water Conservation	0	0	0	0	0	0	0	0
Integrated Nutrient Management	1	15	3	18	1	1	2	20
Production and use of organic inputs	2	30	6	36	2	2	4	40
Management of Problematic soils	0	0	0	0	0	0	0	0
Micro nutrient deficiency in crops	0	0	0	0	0	0	0	0
Nutrient Use Efficiency	0	0	0	0	0	0	0	0
Soil and Water Testing	1	15	3	18	1	1	2	20
IV. Livestock Production and Management								
Dairy Management	02	25	03	28	02	0	02	30
Poultry Management	01	10	03	13	02	0	02	15
Piggery Management	0	0	0	0	0	0	0	0
Rabbit Management/goat	0	0	0	0	0	0	0	0
Disease Management	01	10	03	13	02	0	02	15
Feed management	02	30	0	30	10	0	10	40
Production of quality animal products	01	14	03	17	03	0	03	20
V. Home Science/Women empowerment								
Household food security by kitchen gardening and nutrition gardening	0	0	0	0	0	0	0	0
Design and development of low/minimum cost diet	0	0	0	0	0	0	0	0
Designing and development for high nutrient efficiency diet	0	0	0	0	0	0	0	0
Minimization of nutrient loss in processing	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0
Storage loss minimization techniques	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0
Income generation activities for empowerment of rural Women	02	00	30	30	00	10	10	40
Location specific drudgery reduction technologies	02	00	30	30	00	10	10	40
Rural Crafts	01	00	15	15	00	05	05	20
Women and child care	0	0	0	0	0	0	0	0

VI. Agril. Engineering								
Installation and maintenance of micro irrigation systems	0	0	0	0	0	0	0	0
Use of Plastics in farming practices	0	0	0	0	0	0	0	0
Production of small tools and implements	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	01	8	8	16	04	04	08	24
Small scale processing and value addition	01	8	8	16	04	04	08	24
Post-Harvest Technology	01	8	8	16	04	04	08	24
VII. Plant Protection								
Integrated Pest Management	03	54	0	54	06	0	06	60
Integrated Disease Management	01	18	0	18	02	0	02	20
Bio-control of pests and diseases	01	18	0	18	02	0	02	20
Production of bio control agents and bio pesticides	0	0	0	0	0	0	0	0
VIII. Fisheries								
Integrated fish farming	0	0	0	0	0	0	0	0
Carp breeding and hatchery management	0	0	0	0	0	0	0	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0
Hatchery management and culture of freshwater prawn	0	0	0	0	0	0	0	0
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0
Portable plastic carp hatchery	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0
Edible oyster farming	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0
Fish processing and value addition	0	0	0	0	0	0	0	0
IX. Production of Inputs at site								
Seed Production	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0
Vermi-compost production	2	40	0	40	10	0	10	50
Organic manures production	0	0	0	0	0	0	0	0
Production of fry and fingerlings	0	0	0	0	0	0	0	0
Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0
Small tools and implements	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0
X. Capacity Building and Group Dynamics								
Leadership development								
Group dynamics	2	45	0	45	05	0	05	50
Formation and Management of SHGs	0	0	0	0	0	0	0	0
Mobilization of social capital	0	0	0	0	0	0	0	0
Entrepreneurial development of	2	45	0	45	05	0	05	50

farmers/youths								
WTO and IPR issues	0	0	0	0	0	0	0	0
XI. Agro-forestry								
Production technologies	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0
Integrated Farming Systems	0	0	0	0	0	0	0	0
XII. Others (Pl. Specify)	0	0	0	0	0	0	0	0
TOTAL	**39**	**580**	**158**	**738**	**107**	**52**	**159**	**897**
(B) RURAL YOUTH								
Mushroom Production	01	00	15	15	00	05	05	20
Bee-keeping	01	15	0	15	05	0	05	20
Integrated farming	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0
Production of organic inputs	02	33	3	36	03	01	04	40
Integrated Farming (Medicinal)	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0
Vermi-culture (vermi compost production)	01	18	0	18	02	0	02	20
Sericulture	02	45	0	45	05	0	05	50
Protected cultivation of vegetable crops	0	0	0	0	0	0	0	0
Commercial fruit production	01	15	00	15	05	00	05	20
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0
Nursery Management of Horticulture crops	0	0	0	0	0	0	0	0
Training and pruning of orchards	01	15	00	15	05	00	05	20
Value addition	0	0	0	0	0	0	0	0
Production of quality animal products	0	0	0	0	0	0	0	0
Dairying	02	27	0	27	03	0	03	30
Sheep and goat rearing	01	15	0	15	05	0	05	20
Quail farming	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0
Rabbit farming	0	0	0	0	0	0	0	0
Poultry production	01	10	07	17	03	0	03	20
Ornamental fisheries	0	0	0	0	0	0	0	0
Para vets	0	0	0	0	0	0	0	0
Para extension workers	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0
Freshwater prawn culture	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0
Cold water fisheries	0	0	0	0	0	0	0	0
Fish harvest and processing technology	0	0	0	0	0	0	0	0
Fry and fingerling rearing	0	0	0	0	0	0	0	0
Small scale processing	01	06	06	12	04	04	08	20
Post-Harvest Technology	0	0	0	0	0	0	0	0
Tailoring and Stitching	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0
TOTAL	**14**	**199**	**31**	**230**	**40**	**10**	**50**	**280**

(C) Extension Personnel								
Productivity enhancement in field crops	01	30	05	35	05	01	06	41
Integrated Pest Management	02	240	40	280	40	20	60	340
Integrated Nutrient management	01	15	05	20	05	05	10	30
Rejuvenation of old orchards	01	15	05	20	05	05	10	30
Protected cultivation technology	01	15	05	20	05	05	10	30
Formation and Management of SHGs	0	0	0	0	0	0	0	0
Group Dynamics and farmers organization	01	20	0	20	05	0	05	25
Information networking among farmers	0	0	0	0	0	0	0	0
Capacity building for ICT application	01	20	0	20	05	0	05	25
Care and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0
WTO and IPR issues	01	20	0	20	05	0	05	25
Management in farm animals	0	0	0	0	0	0	0	0
Livestock feed and fodder production	01	15	0	15	03	0	03	18
Household food security	02	00	60	60	00	20	20	80
Women and Child care	01	00	30	30	00	10	10	40
Low cost and nutrient efficient diet designing	0	0	0	0	0	0	0	0
Production and use of organic inputs	1	14	2	16	3	1	4	20
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0
Weed management	0	0	0	0	0	0	0	0
Seed Production Technique	1	15	2	17	2	1	3	20
TOTAL	**15**	**419**	**154**	**573**	**83**	**68**	**151**	**724**
G. Total	**67**	**1183**	**343**	**1526**	**225**	**130**	**355**	**1881**

B. OFF Campus

Thematic Area	No. of Courses	No. of Participants						
		Others			SC/ST			Grand
		M	F	T	M	F	T	Total
(A) Farmers & Farm Women								
I. Crop Production								
Weed Management	0	0	0	0	0	0	0	0
Resource Conservation Technologies	0	0	0	0	0	0	0	0
Cropping Systems	0	0	0	0	0	0	0	0
Crop Diversification	0	0	0	0	0	0	0	0
Integrated Farming	1	15	3	18	1	1	2	20
Water management	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0
Integrated Crop Management	0	0	0	0	0	0	0	0
Fodder production	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0
II. Horticulture								
a) Vegetable Crops								
Production of low volume and high value crops	01	15	00	15	05	00	05	20
Off-season vegetables	0	0	0	0	0	0	0	0
Nursery raising	0	0	0	0	0	0	0	0
Exotic vegetables like Broccoli	0	0	0	0	0	0	0	0
Export potential vegetables	0	0	0	0	0	0	0	0
Grading and standardization	0	0	0	0	0	0	0	0
Protective cultivation (Green Houses, Shade Net etc.)	0	0	0	0	0	0	0	0
b) Fruits								
Training and Pruning	01	15	00	15	05	00	05	20
Layout and Management of Orchards	0	0	0	0	0	0	0	0
Cultivation of Fruit	01	15	00	15	05	00	05	20
Management of young plants/orchards	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0
Export potential fruits	0	0	0	0	0	0	0	0
Micro irrigation systems of orchards	0	0	0	0	0	0	0	0
Plant propagation techniques	0	0	0	0	0	0	0	0
c) Ornamental Plants								
Nursery Management	0	0	0	0	0	0	0	0
Management of potted plants	0	0	0	0	0	0	0	0
Export potential of ornamental plants	0	0	0	0	0	0	0	0

Propagation techniques of Ornamental Plants	0	0	0	0	0	0	0	0
d) Plantation crops								
Production and Management technology	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0
e) Tuber crops								
Production and Management technology	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0
f) Spices								
Production and Management technology	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0
g) Medicinal and Aromatic Plants								
Nursery management	0	0	0	0	0	0	0	0
Production and management technology	0	0	0	0	0	0	0	0
Post-harvest technology and value addition	0	0	0	0	0	0	0	0
III. Soil Health and Fertility Management								
Soil fertility management	2	30	6	36	2	2	4	40
Soil and Water Conservation	0	0	0	0	0	0	0	0
Integrated Nutrient Management	0	0	0	0	0	0	0	0
Production and use of organic inputs	0	0	0	0	0	0	0	0
Management of Problematic soils	1	15	3	18	1	1	2	20
Micro nutrient deficiency in crops	0	0	0	0	0	0	0	0
Nutrient Use Efficiency	0	0	0	0	0	0	0	0
Soil and Water Testing	0	0	0	0	0	0	0	0
IV. Livestock Production and Management								
Dairy Management	0	0	0	0	0	0	0	0
Poultry Management	0	0	0	0	0	0	0	0
Piggery Management	0	0	0	0	0	0	0	0
Rabbit Management /goat	0	0	0	0	0	0	0	0
Disease Management	03	40	3	43	2	0	2	45
Feed management	02	30	0	30	5	0	5	35
Production of quality animal products	0	0	0	0	0	0	0	0
V. Home Science/Women empowerment								
Household food security by kitchen gardening and nutrition gardening	01	00	15	15	00	05	05	20
Design and development of low/minimum cost diet	0	0	0	0	0	0	0	0

Designing and development for high nutrient efficiency diet	0	0	0	0	0	0	0	0
Minimization of nutrient loss in processing	01	00	15	15	00	05	05	20
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0
Storage loss minimization techniques	01	00	15	15	00	05	05	20
Value addition	02	00	30	30	00	10	10	40
Income generation activities for empowerment of rural Women	01	00	15	15	00	05	05	20
Location specific drudgery reduction technologies	01	00	15	15	00	05	05	20
Rural Crafts	0	0	0	0	0	0	0	0
Women and child care	0	0	0	0	0	0	0	0
VI. Agril. Engineering								
Installation and maintenance of micro irrigation systems	02	10	10	20	04	04	08	28
Use of Plastics in farming practices	0	0	0	0	0	0	0	0
Production of small tools and implements	01	06	06	12	04	04	08	20
Repair and maintenance of farm machinery and implements	02	10	10	20	06	06	12	32
Small scale processing and value addition	0	0	0	0	0	0	0	0
Post-Harvest Technology	0	0	0	0	0	0	0	0
VII. Plant Protection								
Integrated Pest Management	04	72	0	72	08	0	08	80
Integrated Disease Management	02	36	0	36	04	0	04	40
Bio-control of pests and diseases	02	36	0	36	04	0	04	40
Production of bio control agents and bio pesticides	0	0	0	0	0	0	0	0
VIII. Fisheries								
Integrated fish farming	0	0	0	0	0	0	0	0
Carp breeding and hatchery management	0	0	0	0	0	0	0	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0
Hatchery management and culture of freshwater prawn	0	0	0	0	0	0	0	0
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0
Portable plastic carp hatchery	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0
Edible oyster farming	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0

Fish processing and value addition	0	0	0	0	0	0	0	0
IX. Production of Inputs at site								
Seed Production	0	0	0	0	0	0	0	0
Planting material production (Horti.)	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0
Vermi-compost production	02	45	0	45	05	0	05	50
Organic manures production (A.S.)	0	0	0	0	0	0	0	0
Production of fry and fingerlings	0	0	0	0	0	0	0	0
Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0
Small tools and implements	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0
X. Capacity Building and Group Dynamics								
Leadership development	0	0	0	0	0	0	0	0
Group dynamics	0	0	0	0	0	0	0	0
Formation and Management of SHGs (HS)	0	0	0	0	0	0	0	0
Mobilization of social capital	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	02	45	0	45	05	0	05	50
WTO and IPR issues	0	0	0	0	0	0	0	0
XI. Agro-forestry								
Production technologies	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0
Integrated Farming Systems (Agro)	0	0	0	0	0	0	0	0
XII Others (Pl. Specify)	0	0	0	0	0	0	0	0
TOTAL	**36**	**435**	**146**	**581**	**66**	**53**	**119**	**700**

C. Consolidated table (ON and OFF Campus)

Thematic Area	No. of Courses	No. of Participants						
		Others			SC/ST			Grand Total
		M	F	T	M	F	T	
(A) Farmers & Farm Women								
I. Crop Production								
Weed Management	0	0	0	0	0	0	0	0
Resource Conservation Technologies	0	0	0	0	0	0	0	0
Cropping Systems	0	0	0	0	0	0	0	0
Crop Diversification	0	0	0	0	0	0	0	0
Integrated Farming	1	15	3	18	1	1	2	20
Water management	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0
Integrated Crop Management	4	112	35	147	17	11	28	175
Fodder production	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0
II. Horticulture								
a) Vegetable Crops								
Production of low volume and high value crops	01	15	00	15	05	00	05	20
Off-season vegetables	01	15	00	15	05	00	05	20
Nursery raising	0	0	0	0	0	0	0	0
Exotic vegetables	0	0	0	0	0	0	0	0
Export potential vegetables	01	15	00	15	05	00	05	20
Grading and standardization	0	0	0	0	0	0	0	0
Protective cultivation (Green Houses, Shade Net etc.)	01	15	00	15	05	00	05	20
b) Fruits								
Training and Pruning	0	0	0	0	0	0	0	0
Layout and Management of Orchards	0	0	0	0	0	0	0	0
Cultivation of Fruit	03	45	00	45	15	00	15	60
Management of young plants/orchards	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	01	15	00	15	05	00	05	20
Export potential fruits	0	0	0	0	0	0	0	0
Micro irrigation systems of orchards	0	0	0	0	0	0	0	0
Plant propagation techniques	0	0	0	0	0	0	0	0
c) Ornamental Plants								
Nursery Management	0	0	0	0	0	0	0	0
Management of potted plants	0	0	0	0	0	0	0	0
Export potential of ornamental plants	0	0	0	0	0	0	0	0
Propagation techniques of Ornamental Plants	0	0	0	0	0	0	0	0

d) Plantation crops								
Production and Management technology	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0
e) Tuber crops								
Production and Management technology	01	15	00	15	05	00	05	20
Processing and value addition	0	0	0	0	0	0	0	0
f) Spices								
Production and Management technology	01	15	00	15	05	00	05	20
Processing and value addition	0	0	0	0	0	0	0	0
g) Medicinal and Aromatic Plants								
Nursery management	0	0	0	0	0	0	0	0
Production and management technology	0	0	0	0	0	0	0	0
Post-harvest technology and value addition	0	0	0	0	0	0	0	0
III. Soil Health and Fertility Management								
Soil fertility management	2	30	6	36	2	2	4	40
Soil and Water Conservation	0	0	0	0	0	0	0	0
Integrated Nutrient Management	1	15	3	18	1	1	2	20
Production and use of organic inputs	2	30	6	36	2	2	4	40
Management of Problematic soils	1	15	3	18	1	1	2	20
Micro nutrient deficiency in crops	0	0	0	0	0	0	0	0
Nutrient Use Efficiency	0	0	0	0	0	0	0	0
Soil and Water Testing	1	15	3	18	1	1	2	20
IV. Livestock Production and Management								
Dairy Management	02	25	03	28	02	0	02	30
Poultry Management	01	10	03	13	02	0	02	15
Piggery Management	0	0	0	0	0	0	0	0
Rabbit Management/goat	0	0	0	0	0	0	0	0
Disease Management	04	50	06	56	04	0	04	60
Feed management	04	60	0	60	15	0	15	75
Production of quality animal products	01	14	03	17	03	0	03	20
V. Home Science/Women empowerment								
Household food security by kitchen gardening and nutrition gardening	01	00	15	15	00	05	05	20
Design and development of low/minimum cost diet	0	0	0	0	0	0	0	0
Designing and development for high nutrient efficiency diet	0	0	0	0	0	0	0	0
Minimization of nutrient loss in processing	01	00	15	15	00	05	05	20
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0
Storage loss minimization techniques	01	00	15	15	00	05	05	20
Value addition	04	00	60	60	00	20	20	80
Income generation activities for	03	00	45	45	00	15	15	60

empowerment of rural Women								
Location specific drudgery reduction technologies	02	00	30	30	00	10	10	40
Rural Crafts	0	0	0	0	0	0	0	0
Women and child care	0	0	0	0	0	0	0	0
VI. Agril. Engineering								
Installation and maintenance of micro irrigation systems	2	10	10	20	4	4	8	28
Use of Plastics in farming practices	0	0	0	0	0	0	0	0
Production of small tools and implements	1	6	6	12	4	4	8	20
Repair and maintenance of farm machinery and implements	1	8	8	16	4	4	8	24
Small scale processing and value addition	3	18	18	36	10	10	20	56
Post-Harvest Technology	1	8	8	16	4	4	8	24
VII. Plant Protection								
Integrated Pest Management	07	126	0	126	14	0	14	140
Integrated Disease Management	03	54	0	54	06	0	06	60
Bio-control of pests and diseases	03	54	0	54	06	0	06	60
Production of bio control agents and bio pesticides	0	0	0	0	0	0	0	0
VIII. Fisheries								
Integrated fish farming	0	0	0	0	0	0	0	0
Carp breeding and hatchery management	0	0	0	0	0	0	0	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0
Hatchery management and culture of freshwater prawn	0	0	0	0	0	0	0	0
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0
Portable plastic carp hatchery	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0
Edible oyster farming	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0
Fish processing and value addition	0	0	0	0	0	0	0	0
IX. Production of Inputs at site								
Seed Production	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0
Bio-fertilizer production	1	14	2	16	3	1	4	20
Vermi-compost production	04	85	0	85	15	0	15	100
Production of organic input	0	0	0	0	0	0	0	0
Production of fry and fingerlings	0	0	0	0	0	0	0	0

Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0
Small tools and implements	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0
X. Capacity Building and Group Dynamics								
Leadership development								
Group dynamics	02	45	0	45	05	0	05	50
Formation and Management of SHGs	0	0	0	0	0	0	0	0
Mobilization of social capital	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	04	90	0	90	10	0	10	100
WTO and IPR issues								
XI. Agro-forestry								
Production technologies	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0
Integrated Farming Systems	0	0	0	0	0	0	0	0
Sponsored training	0	0	0	0	0	0	0	0
TOTAL	**75**	**1015**	**304**	**1319**	**173**	**105**	**278**	**1597**
(B) RURAL YOUTH								
Mushroom Production	01	00	15	15	00	05	05	20
Bee-keeping	0	0	0	0	0	0	0	0
Integrated farming	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0
Production of organic inputs	02	33	3	36	03	01	04	40
Integrated Farming	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0
Vermi-culture (vermi compost production)	01	18	0	18	02	0	02	20
Sericulture	02	45	0	45	05	0	05	50
Protected cultivation of vegetable crops	0	0	0	0	0	0	0	0
Commercial fruit production	01	15	00	15	05	00	05	20
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0
Nursery Management of Horticulture crops	0	0	0	0	0	0	0	0
Training and pruning of orchards	01	15	00	15	05	00	05	20
Value addition	0	0	0	0	0	0	0	0
Production of quality animal products	0	0	0	0	0	0	0	0
Dairying	02	27	0	27	03	0	03	30
Sheep and goat rearing	01	15	0	15	05	0	05	20
Poultry production	01	10	07	17	03	0	03	20
Ornamental fisheries	0	0	0	0	0	0	0	0
Para vets	0	0	0	0	0	0	0	0
Para extension workers	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0
Freshwater prawn culture	0	0	0	0	0	0	0	0

Shrimp farming	0	0	0	0	0	0	0	0
Cold water fisheries	0	0	0	0	0	0	0	0
Fish harvest and processing technology	0	0	0	0	0	0	0	0
Fry and fingerling rearing	0	0	0	0	0	0	0	0
Small scale processing	01	06	06	12	04	04	08	20
Post-Harvest Technology	0	0	0	0	0	0	0	0
Tailoring and Stitching	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0
TOTAL	**13**	**184**	**31**	**215**	**35**	**10**	**45**	**260**
(C) Extension Personnel								
Productivity enhancement in field crops	01	30	05	35	05	01	06	41
Integrated Pest Management	02	240	40	280	40	20	60	340
Integrated Nutrient management	01	15	05	20	05	05	10	30
Rejuvenation of old orchards	01	15	05	20	05	05	10	30
Protected cultivation technology	01	15	05	20	05	05	10	30
Formation and Management of SHGs	0	0	0	0	0	0	0	0
Group Dynamics and farmers organization	01	20	0	20	05	0	05	25
Information networking among farmers	0	0	0	0	0	0	0	0
Capacity building for ICT application	01	20	0	20	05	0	05	25
Care and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0
WTO and IPR issues	01	20	0	20	05	0	05	25
Management in farm animals								
Livestock feed and fodder production	01	15	0	15	03	0	03	18
Household food security	02	00	60	60	00	20	20	80
Women and Child care	01	00	30	30	00	10	10	40
Low cost and nutrient efficient diet designing	0	0	0	0	0	0	0	0
Production and use of organic inputs	1	14	2	16	3	1	4	20
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0
Weed management	0	0	0	0	0	0	0	0
Seed Production Technique	1	15	2	17	2	1	3	20
Total	**15**	**419**	**154**	**573**	**83**	**68**	**151**	**724**
G. TOTAL	**103**	**1618**	**489**	**2107**	**291**	**183**	**474**	**2581**

Details of training programmes attached in **Annexure -I**

3.5 Extension Activities (including activities of FLD programmes)

Nature of Extension Activity	No. of activities	Farmers			Extension Officials			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	13	502	128	630	18	12	30	520	140	660
Kisan Mela	02	155	20	175	20	05	25	175	25	200
Kisan Goshti	02	25	05	30	02	02	04	27	07	34
Exhibition	01	760	190	950	40	10	50	800	200	1000
Film Show	02	20	05	25	05	0	05	25	05	30
Farmers Seminars	01	70	15	85	10	05	15	80	20	100
Workshop	02	155	20	175	20	05	25	175	25	200
Group meetings	10	190	45	235	10	05	15	200	50	250
Lectures delivered as resource persons	42	1882	172	2054	81	26	107	1883	198	2181
Newspaper coverage	50	---	--	---	--	--	--	--	--	--
Radio talks	6	---	--	---	--	--	--	--	--	--
TV talks	12	---	--	---	--	--	--	--	--	--
Popular articles	22	---	--	---	--	--	--	--	--	--
Extension Literature	15	---	--	---	--	--	--	--	--	--
Advisory Services	36	---	--	---	--	--	--	--	--	--
Scientific visit to farmers field	50	415	35	450	35	15	50	450	50	500
Farmers visit to KVK	150	4800	950	5750	200	50	250	5000	1000	6000
Diagnostic visits	30	130	05	135	20	05	25	150	10	160
Exposure visits	03	45	10	55	05	0	05	50	10	60
Ex-trainees Sammelan	02	60	20	80	05	02	07	65	22	87
Soil health Camp	2	75	25	100	4	1	5	79	26	105

Animal Health Camp	08	162	12	184	05	-	05	167	12	179
Agri mobile clinic	--	---	--	---	--	--	--	--	--	--
Soil test campaigns	1	80	20	100	3	1	4	83	21	104
Farm Science Club Conveners meet	---	---	--	---	--	--	--	--	--	--
Self Help Group Conveners meetings	5	0	75	75	0	5	5	0	80	80
Mahila Mandals Conveners meetings	2	0	30	30	0	0	0	0	30	30
Celebration of special days (specify) World soil health day	1	130	30	170	5	2	7	135	32	167
World Women Day World Food Day Kisan Diwas Kisan Mahila Diwas	4	70	90	160	10	05	15	80	95	175
World veterinary day	1	52	10	62	04	01	05	56	11	67
Krishi Mohotsav (Sitafal)	1	210	25	235	10	05	15	220	30	250
Pre Kharif Kisan Mela	1	210	25	235	10	05	15	220	30	250
Pre Rabi Kisan Mela	1	210	25	235	10	05	15	220	30	250
Swachhata Pakhwada	1	300	75	375	5	2	7	305	77	382
Sanvidhan Din	1	35	5	40	0	0	0	35	5	40
Total	**480**	**10743**	**2067**	**12830**	**537**	**174**	**711**	**11200**	**2241**	**13441**

3.6. Target for Production and supply of Technological products

Seed Material

Sl. No.	Crop	Variety	Quantity (qt)
Cereals	Wheat	PDKV-Sardar	10
Oilseeds	Soybean	Fule Kimya, AMS-1001	30
Pulses	Pigeon pea	BDN-716, Vipula	20
	Chickpea	Fule Vikram, RVG-202	20
Spices	Turmeric	IISR- Pragati	10
		PDKV Waigaon	10
Others	Azolla culture	--	1.50
	Grass roots slips	CO-4, CO-5, Yashwant	2000 sets

Planting Materials

Sl. No.	Crop	Variety	Quantity (Nos.)
Fruits	Custard-apple	Balanagar	15000
		Phule - Janki	100
	Kagzi-lime	Pramalini	5000
	Mandarin	Nagpur santra	1000
	Guava	L-49	1000
Vegetables	Chilli, Brinjal, Tomato	Teja-4, Mahyco-11, Arka Rakshak	15000

Bio-products

Sl. No.	Product Name	Species	Quantity	
			kg	Lit
Vermicompost	Compost	Eisenia fetida	4000	--
Azolla	Azolla culture	Pinnata	95	--

Livestock

Sl. No.	Type	Breed	Quantity (nos)
Poultry	Broiler	Vencob	1600
	Layer	Giriraja, Kaveri	100

Value Added Products

Crop / Commodity	Name of the product	Quantity to be prepared (kg or litre)	Sale value (Rs)
Fruit crops – Aonla	Aonla fruit candy	10 kg	1000
	Aonla Juice	10 lit	600
	Aonla RTS	10 lit	1200
Custard-apple	Pulp	10 kg	2000
	Rabdi	05 kg	1000
	Shake	10 lit	2000
Oilseeds and pulses	Dal	350 kg	35000
Spices and condiments	Turmeric	10 kg	3000
	Total	**555**	**45800**

3.7. Action plan for management of KVK instructional farm

Total land with KVK: 20.59 ha Cultivable land: 18.79 ha
(Irrigated: 15.0 ha, Rainfed: 3.79 ha) Micro-irrigation facility available at KVK: Yes

S. No.	Name of crop	Area (ha)	Variety	Date of sowing / Planting	Date of harvest	Expected yield (q)
1	**Crops**					
	Cotton	3.0	AKA-8, Ajeet-155	June 21	Oct.21	60
	Maize	4.0	Dhanya 8255 Dhanya 879	June 21	Nov. 21	200
	Sorghum	0.40	CSH-14, CSH-17	June 21	Sept.21	15
	Greengram	0.40	BM 2003-2	June 21	Sept.21	3
	Blackgram	0.40	TAU-1, AKU 10-1	June 21	Sept.21	3
	Wheat	1.0	AKAW4210-6	Nov.21	Mar.22	35
2	**Fruit crops**					
	Custard-apple	0.40	Phule Janki	Jun-2019	--	00
		0.63	Balanagar	Jun-2006	Oct.21	100
		0.40	Arka Sahan	Jun-2006	Oct.21	50
	Mandarin	0.43	Nagpur santra	Jun-2006 / Jun 2020	Feb- 22 --	145 00
	Sweet orange	0.31	Nucellar	Jun-2006 / Jun 2020	Sept- 21 --	200 00
	Guava	0.50	L-49	Jun-2006 / Jun 2020	Nov-21	150

3	**Vegetable crops**	--				
4	**Seed production**					
	Soybean	2.0	Fule Kimya AMS-1001	June 21	Oct.21	30
	Redgram	2.0	BDN-716, Vipula	June 21	Dec. 21	20
	Bengalgram	1.0	Fule Vikram, RVG-202	Oct.21	Feb.22	20
5	**Fodder crops**					
	Fodder crop	0.40	CO4, CO5	Jul 21	Oct 21	4
6	**Technology cafeteria**					
	Soybean	0.40	Fule Kimya AMS-1001, MAUS-71, JS-335, JS-9305, MACS-1188, NRC-127	June 21	Oct. 21	
	Greengram		BM 2003-2, AKM-9911, AKM-8828	June 21	Sept.21	
	Blackgram		TAU-1, AKU 10-1, AKU-15	June 21	Sept.21	
	Bengalgram		Fule Vikram, RVG-202, JAKI-9218, PDKV Kanchan	Oct.21	Feb.22	
	Wheat		PDKV- Sardar, AKW-4627, AKAW-1071 PDKV-Washim, Trimbak	Nov-21	Mar-22	
	Linseed		NL-260, Local	Nov. 21	Mar. 22	
	Mustard		Pusa Bold	Oct. 21	Feb. 22	
7	**Nutritional Garden**					
	Spinach, Potato Coriander, Okra, Brinja, Fenugreek, Chilli, Tomato, Cucurbits, Pumpkin, Radish, Carrot	0.10		Oct. 21	Jan 22	

8. IFS Model

Sr. No.	Component	Crop/Enterprise/breed	Area/No.
01	Horticulture	Mandarin, Guava, Custard-apple	0.40 ha
02	Agronomical crops	Greengram, Blackgram, Bengalgram, wheat	0.40 ha
03	Poultry	Giriraja, Kaveri	400 nos.
04	Goatary	Osmanabadi, Non-descript	50 nos
05	Vermicompost unit	Eisenia fetida	1000 sq ft
06	Azolla unit	Pinnata	200 sq ft

4. Literature to be Developed/Published

A. Literature developed/published

S. No.	Topic	Number
1	Research papers	04
2	Technical reports	02
3	News letters	02
4	Training manuals	02
5	Popular articles	12
6	Extension literature	10
7	E-publication	01
	Total	**30**

B. Details of Electronic Media to be produced

S. No.	Type of media (CD / VCD / DVD / Audio-Cassette) and video clippings	Title of the programme	Number
1	Video clipping	Various Crops	10

C. Details of social media platforms to be started / continued

S. No.	Type of social media platform	Title / Purpose	Number
1	YouTube Channel	KVK Buldana-I	01
2	Facebook page	www.facebook.com/KVKBuldana1	01
3	Mobile Apps	Satpuda App	01
4	WhatsApp groups	Farmers awareness	1500
5	Twitter Account	KVK Buldana-I @BuldanaI	01

D. Success stories/Case studies identified for development as a case (Based on previous years success)

S. No.	Title of success story / case study identified	Proposed month for case/story to be prepared/ developed
1	Production of Organic Inputs (Bio Fertilizers and Biopesticide)	MAY-21
2	Organic farming under RKVY	Aug 21
3	Dal Mill	Nov. 21
4	Protected cultivation of Vegetables & Vegetable nursery	Dec. 21

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

A. Practicing Farmers

a) PRA
b) Group Discussion
c) Village Survey

B. Rural Youth

a) PRA
b) Group Discussion
c) Village Survey

C. In-service personnel

Group discussion

5.2. Indicate the methodology for identifying OFTs/FLDs

For OFT:

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

For FLD:

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

5.3. Field activities

i. Name of villages identified/adopted with block name (from which year) -
   a. Dhanora Jangam, Tq: Nandura (year 2019-20)
   b. Wadgaon wan, Tq: Sangrampur (year 2019-20)
ii. No. of farm families selected per village: 100
iii. No. of survey/PRA conducted: 02

iv. No. of technologies taken to the adopted villages: 12

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

Integrated Nutrient Management, Integrated Pest Management, Use of bio-fertilizer, Varietal evaluation, weed management, Polythene Mulch, BBF technology, Cotton Shredder, Feed & Fodder management, Kitchen Gardening, Value addition, biofertilizer production, seed production, fruit & vegetable cultivation.

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

Impact will be assessed after completion of 3 years period of adoption on basis of production, income, employment, area of spread (horizontal & vertical) etc.

vii. Constraints if any in the continued application of these improved technologies – Saline track, depleting water table year by year, market rate fluctuation, costly inputs etc.

6. LINKAGES

6.1. Functional linkage with different organizations

Sl. N	Name of organization	Nature of Linkage (pl. specify)
1	Dr. P.D.K.V., Akola	Technical guidance regarding training, demonstrations & other extension activities etc.
2	Agril. Commissioner, Pune	Implementation of Govt. sponsored scheme & non-granted scheme.
3	State Agriculture Department (ATMA)	Collaboration in implementation of training, demonstrations, other extension activities & other schemes of State Govt. Provides financial support for conducting On Farm Testing, Demonstrations, Trainings & other extension activities under ATMA. KVK Scientists work as a Resource Person
4	District Soil Survey & Soil Testing Office Buldana	Joint Implementation of Soil Analysis
5	ICRISAT, Hyderabad	Monitoring demonstrations under SDC project
6	MANAGE, Hyderabad	Technical and Financial, DAESI Programme – One year diploma Programme for input dealers.
7	NIPHM, Hyderabad	Certificate Course on Insecticide Management for Insecticide Dealers/Distributors (12 Days)
8	A.D.O., Z.P., Buldana	Collaboration in implementation of extension activities. KVK Scientists work as a Resource Person for various training programmes & other activities.
9	State Animal Husbandry Dept.	To arrange & conduct livestock health & diagnostic camps. KVK Scientists work as a Resource Person for various training programmes & other activities.
10	MAFSU	To arrange & conduct livestock health & diagnostic camps.
11	NABARD	To establish self-help groups (SHG) in villages
12	GSDA	Technical backstopping
13	PoCRA, Mumbai	Technical back stopping and monitoring of Farm Field

		School activities
14	MAVIM, Buldana	To conduct need based training.
15	Manav Vikas Mission, Buldana	Financial support for establishment of MSTL Van
16	Care India (NGO)	Technical backstopping
17	Krishi Vikas (NGO)	Technical backstopping
18	Mahatma Phule Samaj Seva Mandal, Karmala, Dist Solapur NGO)	Technical backstopping
19	BAIF India (NGO)	Technical backstopping
20	RCF India	Technical backstopping
21	Dipak Fertilizer	Technical backstopping
22	Godrej Agrovet	Technical backstopping
23	Bhart Bhuddeshiya Sanstha, Asalgaon	Technical support
24	Krushi va Gramin Prashikshan Sanstha, Talni	Technical support
25	Sadhna Shikshan Mandal, Shegaon	Technical support, students project formulation

6.2. Details of linkage with ATMA

S. No.	Programme	Nature of linkage
1	Training	Conducting training programmes
2	Demonstration	Conducting demonstrations
3	Extension Activities	Joint Implementation
4	Diagnostic Visits	Joint Implementation

6.3. Give details of programmes under National Horticultural Mission - NA

S. No.	Programme	Nature of linkage
1	--	

6.4. Nature of linkage with National Fisheries Development Board - NA

S. No.	Programme	Nature of linkage
1	**--**	

6.5. Additional Activities Planned including sponsored projects (NARI/DAESI/DAMU/DFI/PKVY,Skill Trainings, etc.) / schemes during 2022, if involved.

S.No.	Name of the agency / scheme	Name of activity	Technical programme with quantification	Financial outlay (Rs.)	Names of the team members involved
1	DAESI	Diploma course	2	1480000/-	S.A. Borde
2	Department of Agriculture PoCRA	Training cum Demo. On use of BBF Planter	30	105000/-	N.P. Talokar S.A.Borde V.G. Jadhao

3	PKVY	Model Organic Demonstration	Training-2 Exposure Visit DBT to Farmers Certification packing	375000/-	S.M.Umale V.G.Jadhao
4	NIPHM, Hyderabad	Certificate Course on Insecticide Management	Two batches of 40 candidates each (12 days)	608000/-	A.T.Gabhane V.G. Jadhao

6.5.1. Details of activities planned in Doubling Farmers' Income (DFI) villages

Name of DFI village selected	Total No. of families in the village	Interventions planned during 2022	No. of families to be covered under the intervention	Present annual income of the family (Rs /annum)	Expected annual income of the family after intervention (Rs/ annum)
Dhanora Jangam	137	Improved varieties, INM, IPM, Subsidiary business, On farm production of Biofertilizer & Biopesticides, Vermicomposting, Nutrition Garden'	85	Rs. 45000/-	Rs. 65000/-
Charban	81		45	Rs. 35000/-	Rs. 55000/-

6.5.2. Details of activities planned under NARI (Including FSN project) - NA

S. No.	Name of the village	Activities planned	No. of families to be covered
	--		

6.5.3. Details of activities planned under Paramaparagat Krishi Vikas Yojana (PKVY)

S. No.	Name of the village	Activities planned	No. of families to be covered
1	Garpeth	Model Organic Demonstration	21

6.5.4. Details of skill trainings planned (sponsored by ASCI)

S. No.	Name of Job Role	Duration (No. of hours)	No. of participants
1	Nursery Grower	200	25

6.5.5. Details of activities planned under TSP - NA

S. No.	Name of the village	Activities planned	No. of families to be covered
	--		

6.5.6. Details of activities planned under Krishi Kalyan Abhiyan (KKA) - NA

S. No.	Name of the village	Activities planned	No. of families to be covered
	--		

6.5.7. Details of seed production planned under Seed Hub on Pulses - NA

S. No.	Name of the crop	Variety	Stage (Foundation / Certified)	Quantity of seed to be produced (q)
	--			
			Total	

6.6. Activities planned in respect of FPOs / FPCs

1. No. of FPOs / FPCs to be formed: 05
2. No. of existing FPOs / FPCs to be facilitated: 10
3. Type of support to be provided to existing FPOs / FPCs: Technical Backstopping

S. No	Name of the FPO / FPC	No. of members	Major activities of FPO / FPC	Type of support to be provided by KVK
1	Shramsafalya FPO Ltd., At.Po. Pimpalgaon Kale Tq: Jalgaon Jamod, Dist: Buldana	1000	Seed Production	Training and Technical Support
2	Shodh FPO Ltd, At.Po. Asalgaon Tq: Jalgaon Jamod, Dist: Buldana	400	Agriculture Service Provider	Training and Technical Support
3	Awajisiddha FPO Ltd At.Po. Sungaon Tq: Jalgaon Jamod, Dist: Buldana	500	Seed Production	Training and Technical Support
4	Shetikranti FPO At.Po. Jalgaon Jamod Tq: Jalgaon Jamod, Dist: Buldana	400	Agriculture Machinery	Training and Technical Support
5	Shatak Agro Producer Co At.Po. Kakanwada Tq: Sangrampur, Dist: Buldana	1000	Seed Production	Training and Technical Support
6	Sonala Agro Producer Co At.Po. Sonala Tq: Sangrampur, Dist: Buldana	500	Seed Production	Training and Technical Support
7	Muktai Krushi Vikas & Gramin Prashikshan FPO At.Po. Manaradi	500	Agriculture Service Provider	Training and Technical Support

	Tq: Sangrampur Dist: Buldana			
8	Supo Farmer Prodcing Company	400	Goat Farming	Training and Technical Support
9	Krishidoot Farmer Producing Co, Jalgaon	350	Organic Farming	Training and Technical Support
10	Navnath Farmer Prodcing Company, Mohidepur	450	Production of Organic Fertilizers	Training and Technical Support

6.7. Activities planned in respect of developing Integrated Farming System (IFS) Models on farmers' fields during 2022

S. No	Name of the village	No. of IFS models to be identified / developed	Major components of IFS model
1	Hiwarkhed, Tq: Khamgaon	01	Horticulture, Animal, Farm pond
2	Yeulkhed, Tq: Shegaon	01	Horticulture, Animal, Farm pond

7. Convergence with other agencies and line departments in the district:

S. No.	Name of the department / Agency	Type of convergence	Area (ha) / No. of farmers to be benefited
1	BAIF	Demonstration	325
2	CARE	Demonstration	110

8. Innovator Farmer's Meet 2022

Sl. No.	Particulars	Details	Expected No. of participants
1	Farm innovators meet planned	Oct. 2022	40

9. Utilization of hostel facilities

S. No.	Month	No. of days utilized
1	January	20
2	February	10
3	March	450
4	April	300
5	May	400
6	June	300
7	July	400
8	August	400
9	September	500
10	October	450
11	November	400
12	December	350
	Total	**3980**

10. Details of online activities planned (If any)

S. No.	Type of activities	No. of programmes	Mode of implementation (Video conferencing / Audio Conferencing / Facebook Live / YouTube Live, etc)	No. of participants to be covered
1	Farmers trainings	10	Video conferencing	700
2	Farmers scientist's interaction Programme	3	Video conferencing	120
3	Farmers seminars	3	Video conferencing	120
4	Expert lectures	3	Video conferencing	120

11. Details of collaborative applied research projects planned if any -

S. No.	Name of the research project	Funding agency	Collaborating organizations	Year of commencement	Major activities planned
1	AICRP on utilization of animal energy	AICRP, VNMKV, Parbhani	VNMKV, Parbhani	2018-19	Demonstration Trainings
2	Agriculture resilience Linking Insurance & Technology with Climate Adopted Farming System (SDC)	ICRISAT Hyderabad	ICRISAT Hyderabad	2019-20	Demonstration Observations Technical backstopping

Annexure - I

Training Programme

i) Farmers & Farm women (On Campus)

Date	Clientele	Title of the training programme	Duration in days	Number of participants			Number of SC/ST			G. Total
				M	F	T	M	F	T	
Crop Production										
June	PF	Improved Production Technology of major pulses	1	46	13	59	9	7	16	75
Sept	PF	Improved Production Technology of Linseed and Mustard	1	17	5	22	2	1	3	25
Oct.	PF	Improved Production Technology of Bengalgram	1	32	12	44	4	2	6	50
Nov.	PF	Improved Production Technology of Wheat	1	17	5	22	2	1	3	25
Horticulture										
June	PF	Ultra-density orchard plantation preparation for site	01	15	00	15	05	00	05	20
July	PF	Management of Mrig Bahar in crop	01	15	00	15	05	00	05	20
August	PF	Pre-mansoon vegetable production, scope for new farmers	01	15	00	15	05	00	05	20
Sept	PF	Integrated crop management in Chilli	01	15	00	15	05	00	05	20
Livestock prod.										
Jan	PF	Importance of silage making for dairy animals during scarecity period	01	15	0	15	5	0	5	20
Feb	PF	Importance of Mineral mixture in dairy animals	01	15	0	15	0	0	0	15
April	PF	Care and management during summer season	01	10	3	13	2	0	2	15
March	PF/ FW	Backyard poultry farming	01	10	3	13	2	0	2	15
August	RY	Clean milk production	01	15	0	15	0	0	0	15
Sept	PF	Heat detection and new technique for anoestrous problem & artificial insemination	01	12	03	15	03	0	03	18
Oct	PF	Various Contagious disease & their control in dairy animals	01	10	3	13	2	0	2	15
Agril. Engg.										
Mar	PF	Repair and maintenance of farm tractor and implements.	1	8	8	16	4	4	8	24
Dec	PF	Dal mill enterprising	1	8	8	16	04	04	08	24

Oct	PF	Post-harvest technologies for agriculture produce	01	8	8	16	4	4	8	24
Home Sc.										
Feb	PF	Mushroom cultivation	01	02	13	15	02	03	05	20
Apr	PF	Technique of preparation of Phenyl and soap making	02	05	10	15	00	05	05	20
May	PF	Use of small agricultural implement for drudgery reduction of farm women	01	03	02	15	02	03	05	20
Nov	PF	Preparation of custard apple products	02	05	10	15	00	05	05	20
Dec	PF	Technique for Aonla value added products	02	00	15	15	00	05	05	20
Plant Protection										
Jan /Feb	PF	IPM in onion	01	18	0	18	02	0	02	20
April /May	PF	IPM in cotton	01	18	0	18	02	0	02	20
July/Aug	PF	Integrated disease management in pulses	01	18	0	18	02	0	02	20
Aug/Sept	PF	Bio control management of pest &diseases	01	18	0	18	02	0	02	20
	PF									
Extension Education										
Jan./ Apr	PF	Vermicompost Production	02	40	0	40	10	0	10	50
Feb. / May	PF	Group Dynamics	02	45	0	45	05	0	05	50
May / June	PF	Entrepreneurship development	02	45	0	45	05	0	05	50
Fisheries										
--	--	--	--	--	--	--	--	--	--	--
Soil Health										
Feb	PF	Importance of Soil Testing	1	15	3	18	1	1	2	20
Apr	PF	Integrated Nutrients Management of Major Kharif Crop	1	15	3	18	1	1	2	20
Apr	PF	Vermi-compost production	1	15	3	18	1	1	2	20
Mar	PF	Organic manures production	1	15	3	18	1	1	2	20

ii) Farmers & Farm women (Off Campus)

Date	Clientele	Title of the training programme	Duration in days	Number of participants			Number of SC/ST			G. Total
				M	F	T	M	F	T	
Crop Production										
Horticulture										
Oct.	PF	Plantation of marigold, Chrysanthemum & improved package of practices	01	15	00	15	05	00	05	20
Nov	PF	Crop Diversification of Ajwain, Fennel over Agronomical crops	01	15	00	15	05	00	05	20
Dec	PF	Kagzi-lime, cash fruit crop for small farmers of Buldana district	01	15	00	15	05	00	05	20
Jan	PF	Nursery management in Vegetable crops	01	15	00	15	05	00	05	20
Feb	PF	Effect of cold waves on banana cultivation	01	15	00	15	05	00	05	20
March	PF	Post-harvest technology in Turmeric & Ginger	01	15	00	15	05	00	05	20
Jan	PF	Improved package of practices in Watermelon cultivation	01	15	00	15	05	00	05	20
Feb	PF	Water management in high-value crops at scarcity time	01	15	00	15	05	00	05	20
Livestock prod.										
May	PF	Fodder cultivation and conservation	01	15	0	15	0	0	0	15
June	PF	Technique to control endo / ecto parasitic infestation	01	10	3	13	2	0	2	15
July	PF	Care and management of metabolic diseases in dairy animals	01	15	0	15	0	0	0	15
August	PF	Various contagious diseases and their control	01	15	0	15	0	0	0	15
Dec	PF	Importance of silage making for dairy animals during scarcity period	01	15	0	15	5	0	5	20
Agril. Engg.										
Nov.	PF	Processing and value addition in custard apple	01	05	05	10	03	03	06	16
Dec	PF	Oilseed processing for entrepreneurship	01	05	05	10	03	03	06	16
June	PF	Micro irrigation operation and maintenance	01	04	04	08	02	02	04	12
Jul	PF	Fertigation for effective use of micro irrigation unit	01	06	06	12	02	02	04	16
Oct	PF	Small tools and implements production	1	6	6	12	4	4	8	20

Home Sc.										
Mar	PF	Preparation Neemboli Ark and Neem products	01	0	15	15	0	5	5	20
Apr	PF	Safe storage technique of food grain	01	0	15	15	0	5	5	20
May	PF	Technique preparation of dashparni ark and jivamrut	01	0	15	15	0	5	5	20
June	PF	House hold food security by kitchen gardening	01	0	15	15	0	5	5	20
Sept.	PF	Technique of preparation aonla value added products	02	0	15	15	0	5	5	20
Oct.	PF	Cooking method	01	0	15	15	0	5	5	20
Plant Protection										
March /April	PF	Integrated pest and disease management in watermelon	01	18	0	18	02	0	02	20
April / May	PF	Integrated pest management for pink bollworm in cotton	01	18	0	18	02	0	02	20
May /June	PF	Integrated pest management in cotton	01	18	0	18	02	0	02	20
July	PF	Integrated pest management in soybean	01	18	0	18	02	0	02	20
Oct/sept	PF	Integrated pest management in red gram	01	18	0	18	02	0	02	20
Sept/Nov	PF	Safe use of pesticides	01	18	0	18	02	0	02	20
July/ Aug	PF	FAW management in maize	01	18	0	18	02	0	02	20
Sept/ Nov	PF	Integrated pest disease management in bengalgram	01	18	0	18	02	0	02	20
Extension Education										
Jul / Aug	PF	Vermi compost production	02	45	0	45	05	0	05	50
Setp/ Oct	PF	Entrepreneurship development	02	45	0	45	05	0	05	50
Fisheries										
--	--	--	--	--	--	--	--	--	--	--
Soil Health										
Mar	PF	Management of Problematic soil	1	15	3	18	1	1	2	20
Apr	PF	Importance of Organic carbon	1	15	3	18	1	1	2	20
Dec	PF	Crop residue management	1	15	3	18	1	1	2	20

ii) Vocational training programmes for Rural Youth

Crop / Enterprise	Identified Thrust Area	Training title*	Month	Duration (days)	No. of Participants			SC/ST participants			G. Total
					M	F	T	M	F	T	
Biofertilizer and Biopesticide	Production of Inputs at site	On farm Production of Biofertilizer and Biopesticide	May	04	14	2	16	3	1	4	20
vermicompost	Production of organic inputs	Vermicompost production	May	04	18	0	18	02	0	02	20
biopesticide	Production of biopesticide	Production of biopesticide	June	04	18	0	18	02	0	02	20
Protected cultivation	Protected cultivation	Protected cultivation of vegetable crops	Oct	05	20	05	25	05	01	06	31
Poultry	Poultry farming	Poultry farming – A subsidiary business	Oct	05	10	07	17	03	0	03	20
Goat	Goat farming	Goat farming for meat purpose	Dec	05	15	0	15	05	0	05	20
Cattle	Dairy Farming	Dairy farming	Aug	05	12	0	12	03	0	03	15
Dal Mill	Small scale processing	Employment of rural youth in small scale enterprises dal mill	Mar	04	06	06	12	04	04	08	20
Income generating activity	Income generating activity	Paper Bag Making & cocoon value addition	KVK	04	00	15	15	00	05	05	20
		Total		40	113	35	148	27	11	38	186

iii) Training Programme for extension functionaries

Date	Clientele	Title of the training Programme	Duration in days	No. of participants			Number of SC/ST			G. Total
				M	F	T	M	F	T	
On Campus										
June 21	EF	Seed Production Technique	01	15	2	17	2	1	3	20
Sept 21	EF	Improved cultivation of Mustard and Linseed	01	15	2	17	2	1	3	20
May 21	EF	On farm Production of Biofertilizer and Biopesticide	01	14	2	16	3	1	4	20
July 21	EF	Integrated pest management in cotton, soybean, Maize and kharif pulses	01	120	20	140	20	10	30	170
Oct 21	EF	Integrated pest management in redgram, Maize and bengalgram.	01	120	20	140	20	10	30	170
May - 21	EF	Improved cultivation of Custard apple	01	30	05	35	05	04	09	44
Dec- 21	EF	Exotic vegetable crop cultivation	01	30	05	35	05	04	09	44
Oct 21	EF	Various fodder production technique like azolla, hydroponics	01	15	0	15	03	0	03	18
May 21	EF	Farm Mechanization in Agriculture	01	30	05	35	05	01	06	41
Mar 21	EF	Capacity building for ICT	01	20	0	20	05	0	05	25
Oct 21	EF	WTO and IPR issue	01	20	0	20	05	0	05	25

iv) Sponsored Programme

Discipline	Sponsoring agency	Clientele	Title of the training programme	No. of courses	No. of participants			Number of SC/ST			G. Total
					M	F	T	M	F	T	
a) Sponsored training Programme											
Agril Engg	PoCRA	PF	Training and Method demonstration of BBF Planter	30	450	15	465	130	02	132	597
Agril. Extn	ATMA	PF	INM in cotton	25	800	100	900	80	20	100	1000
Agril. Extn	ATMA	PF	INM in soybean	25	800	100	900	80	20	100	1000
Agril. Extn	ATMA	PF	INM in bengalgram	25	800	100	900	80	20	100	1000
			Total								
b) Sponsored research programme											
	--										
			Total								
c) Any special programmes											
	--										
			Total								

Annexure - II

Details of Budget Estimate (2022-23) based on proposed action plan (Rs. in Lakhs)

S. No.	Particulars	proposed BE 2022-23
1	**Recurring Contingencies**	
1.1	**Pay & Allowances**	**150.00**
1.2	**Traveling allowances**	**2.00**
1.3	**Contingencies**	
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	**4.00**
B	POL, repair of vehicles, tractor and equipment's	
D	Meals/refreshment for trainees (ceiling up to Rs.150/day/trainee be maintained)	**8.00**
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	
G	Training of extension functionaries	
H	Maintenance of buildings	
I	Establishment of Soil, Plant & Water Testing Laboratory	
J	Library	
	TOTAL Recurring Contingencies	**164.00**
2	**Non-Recurring Contingencies**	
2.1	**Works**	**25.00**
2.2	**Equipment's including SWTL & Furniture**	**10.00**
2.3	**Vehicle** (Four-wheeler/Two-wheeler, please specify)	**--**
2.4	**Library** (Purchase of assets like books & journals)	**0.25**
	TOTAL Non-Recurring Contingencies	**35.25**
3	**REVOLVING FUND**	**--**
	GRAND TOTAL	**199.25**