

**ANNUAL ACTION PLAN**  
**(January 2023 to December 2023)**



**KRISHI VIGYAN KENDRA**  
**(ICAR-ATARI, Zone-Jabalpur)**  
**Burhanpur (M.P.) 450331**

**LOKMATA DEVI AHILIYA BAI HOLKAR SOCIAL  
NATIONAL MISSION**

## Contents

<b>Sl. No.</b>	<b>Particulars</b>	<b>Page No</b>
1.	General Information	03 – 13
2.	On Farm Testing	13 – 36
3.	Achievements of Frontline Demonstrations	36 – 38
4.	Cluster Demonstration on Oilseed & Pulses	38 – 39
5.	Training programmes	39 – 47
6.	Extension Activities	47 – 47
7.	Production and supply of Technological products	47 – 48
8.	Literature Developed/Published (with full title, author & reference)	48 – 48
9.	Activities of Soil and Water Testing Laboratory	49 – 49
10.	Field Activities	49 – 49
11.	Linkages	49 – 49
12.	Action Plan for Flagship Programme	50 – 50
13.	Planning for Crop Cafeteria	50 – 50
14.	Detail of Demo units Activities	50 – 50

# ANNUAL ACTION PLAN 2023

**KVK BURHANPUR**

Year of sanction: 2007

## 1.1 Name of the Programme Coordinator with phone & mobile No

Name	Telephone / Contact		
	Office	Mobile	Email
Dr. Sandip Kumar Singh	6265002626	9359426101	<a href="mailto:Sandipsingh11@rediffmail.com">Sandipsingh11@rediffmail.com</a>

## 1.2 Staff Position on (31<sup>th</sup> Dec.2022)

S. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale with present basic (Rs.)	Date of Joining	Date of joining this KVK (Year)	Contact No.	Email ID	Photo
1	Programme Coordinator	Dr. Sandip Kr. Singh	Sr. Scientist and Head	Agronomy	131400	21.03.2022	21.03.2022	9359426101	<a href="mailto:Sandipsingh11@rediffmail.com">Sandipsingh11@rediffmail.com</a>	
2	Subject Matter Specialist	Shri. Bhupendra Singh	SMS/Scientist 1	Agronomy	69050	16.09.2013	16.09.2013	9424840115	<a href="mailto:bhupendra66666@gmail.com">bhupendra66666@gmail.com</a>	
3	Subject Matter Specialist	Smt. Monika Jaiswal	SMS/Scientist 2	Extension	69050	16.09.2013	16.09.2013	9806247711	<a href="mailto:monikajaiswal8@rediffmail.com">monikajaiswal8@rediffmail.com</a>	
4	Subject Matter Specialist	Shri. Kartikey Singh	SMS/Scientist 3	Plant Protection	69050	18.09.2013	18.09.2013	9424417643	<a href="mailto:kartikey.malapat@gmail.com">kartikey.malapat@gmail.com</a>	
5	Subject Matter Specialist	Smt. Megha Vibhute	SMS/Scientist 4	Horticulture	69050	19.09.2013	19.09.2013	8817454047	<a href="mailto:meghavibhute@gmail.com">meghavibhute@gmail.com</a>	
6	Subject Matter Specialist	Shri. Amol Deshmukh	SMS/Scientist 5	Animal Husbandry	67020	01.01.2016	01.01.2016	9096870449	<a href="mailto:amold2010@gmail.com">amold2010@gmail.com</a>	
7	Subject Matter Specialist	Shri Rahul Satarkar.	SMS/Scientist 6	Genetics & Plant Breeding	56100	21.03.2022	21.03.2022	9826936777.	<a href="mailto:satarkarahul@gmail.com">satarkarahul@gmail.com</a>	
8	Programme Assistant	VACANT (since 21.03.2022)								
9	Computer Programmer/ Programme Assistant	Shri. Mohd Tauheed	Computer Programmer	M.Com PGDCA	53640	17.07.2007	17.07.2007	9479604311	<a href="mailto:tauheed.kvkburhanpur@gmail.com">tauheed.kvkburhanpur@gmail.com</a>	
10	Farm Manager	Shri. Sandeep Rathod	Farm Manager	M.Sc. Ag.	43610	23.12.2014	23.12.2014	7745921204	<a href="mailto:sandiprathod443@gmail.com">sandiprathod443@gmail.com</a>	
11	Assistant	Shri Sayed Navid	Accountant / superintendent	M.Com MBA	43610	22.12.2014	22.12.2014	8103646884	<a href="mailto:sayednavidquadrif29@gmail.com">sayednavidquadrif29@gmail.com</a>	
12	Jr. Stenographer /	Smt. Afrin Syed	Stenographer	B.Com.	39780	17.07.2007	17.07.2007	9827304942	<a href="mailto:Afrin.kvkburhanpur@gmail.com">Afrin.kvkburhanpur@gmail.com</a>	

	Comp. Operator									
13	Driver	Shri. Shakil Uddin	Driver	8 <sup>th</sup>	30120	17.07.2007	17.07.2007	9755810055	<a href="mailto:kvkburhanpur@rediffmail.com">kvkburhanpur@rediffmail.com</a>	
14	Driver	Shri. Wasim Sahab	Driver	8 <sup>th</sup>	30120	17.07.2007	17.07.2007	9039547508	<a href="mailto:kvkburhanpur@rediffmail.com">kvkburhanpur@rediffmail.com</a>	
15	Supporting staff	Shri. Manoj Tayde	Supporting staff, if any	BA	27250	17.07.2007	17.07.2007	9926057804	<a href="mailto:manojtayde178@gmail.com">manojtayde178@gmail.com</a>	
16	Supporting staff	Shri. Mahesh Singh	Supporting staff, if any	10 <sup>th</sup>	27250	17.07.2007	17.07.2007	9179621744	<a href="mailto:kvkburhanpur@rediffmail.com">kvkburhanpur@rediffmail.com</a>	

### 1.3 Total land with KVK (in ha): 21.6

S. No.	Item	Area (ha)
1	Under Buildings	550 sqm.
2	Under Demonstration Units	1.6
3	Under Crops	14
4	Orchard/Agro.forestry	03
5	Others (specify)	03
<b>Total</b>		-

### 1.4 Infrastructural Development:

#### A) Buildings

S. No.	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	2011.2012	550 Sqm..	5500000.00	March 2009.10	550 Sqm..	Good
2	Farmers Hostel	ICAR	2011.2012	305 Sqm..	3050000.00	March 2009.10	305 Sqm..	Good
3	Staff Quarters (Nos. 06)	ICAR	2011.2012	400 Sqm..	4000000.00	March 2009.10	400 Sqm..	Good
4	Demonstration Units (Nos. 06)	-	-	-	-	-	-	-
4.1	Poultry Unit	MKTY	2017-18	1500Sqf.	300000.00	2016-17	1500Sqf.	Working
4.2	Goatery unit	MKTY	2017-18	3000 Sqf	400000.00	2016-17	3000 Sqf	Working
4.3	Livestock unit	ICAR IFS	2017-18	1500 Sqf	547860.00	2017-18	1500 Sqf	Working
4.4	Vermicomposting Unit	KVK	2020-21	1600 Sqf			1600 Sqf	Working
4.5	Azolla Unit	KVK	2018-19	720 Sqf			720 Sqf	Working
4.6	Natural farming Unit	KVK	2022-23	1 ha	-	-	1 ha	Working
5	Fencing	-	-	-	-	-	-	-
6	Rain Water harvesting system	-	-	-	-	-	-	-
7	Threshing floor	-	-	-	-	-	-	-
8	Farm godown	-	-	-	-	-	-	-

#### B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Tractor (Power Tiller)	2007	512475.00	-	Good
Motor Cycle 2	2010	-	-	-
Bolero(Jeep)	2019	800000.00	48709	Good
Other (Pl. specify)	-	-	-	-

**C) Equipment & AV aids**

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Projector	2010	36500.00	Working
Xerox Machine	2009	60187.00	Not working
Generator	-	-	-
Video Camera	2012	24000.00	Not working
GPS Machine	2015	15800	Not working
Computer, Laser Printer	-	-	-
Computer & Laser Printer HP	2007	34900.00	Not working
Computer Lenovo	2008	22556.00	Working
Printer Scanner & Fax Machine	2008	15000.00	Not Working
Laptop I	2010	36900.00	Not working
Computer & Laser Printer UPS	2012	45000.00	Working
Computer & EPSON Printer	2020	62200.00	Working
Computer & Canon Printer UPS	2021	65800.00	Working
Laptop II	2018	35000.00	Working
Mobile Phone	2018	14990	Working
UPS 600 VA	-	-	-
Stabilizer 2 KVA	-	-	-
Stabilizer	-	-	-
Inverter 600 VA (2)	2009	25190.00	Not working
Inverter Battery (2)	2013	22000.00	Working

**1.5.( A). Details of SAC meeting to be conducted in the year**

S. No.		Tentative Date
1	Kharif	May 2023
2	Rabi	October 2023

**2. DETAILS OF DISTRICT**

**Major farming systems / enterprises (based on the Agro.ecological situation analysis made by the KVK) Add AES if needed**

S. No.	Farming system/enterprise	Description
1	AES – 1 Nimar valley Agro climatic Zone	Banana-Gram/Wheat/Maize Cotton-Wheat/Gram Soybean-Maize Onion/Coriander/Watermelon
2	AES – 2 Nimar valley Agro climatic Zone	Soybean-Wheat/gram Cotton-Gram Maize-Wheat

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

S. No.	Agro.climatic Zone	Characteristics
1	AES – 1 Nimar valley Agro climatic Zone	Block- Burhanpur and Khaknar Area: 129600 ha Cropping Pattern: Banana-Gram/wheat/Maize Cotton-Wheat/Gram Soybean-Maize Onion/Coriander/Watermelon
2	AES – 2 Nimar valley Agro climatic Zone	Block- Burhanpur and Khaknar Area: 194400 ha Cropping Pattern: Soybean-Wheat/Gram Cotton-gram Maize-wheat

**SWOT Analysis of each Agro Ecological Situations of district  
AES.1 (Nimar valley Agro climatic Zone (MP-11))**

<b>Strength</b>	<b>Weakness</b>	<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"> <li>• Availability of land resources enriched with black cotton soil</li> <li>• Farmers attraction towards cultivation of fruit crop ie Banana</li> <li>• Potential area for cultivation of cereals and pulses due to suitable agro climatic condition</li> <li>• Suitable climate condition for cattle, goat and poultry rearing</li> </ul>	<ul style="list-style-type: none"> <li>• Poor soil fertility management unawareness about green Manuring, composting techniques</li> <li>• Imbalance use of fertilizers and insecticide specially blind use of urea</li> <li>• Reluctance of farmers towards modern varieties and their POP, faith in traditional or old varieties</li> <li>• Water level of the district is very low due to banana cultivation long year</li> <li>• Cultivation with very low input and unawareness /negligence for use of available natural resources</li> </ul>	<ul style="list-style-type: none"> <li>• Scope for promotion of natural farming and its trade at national and global level</li> <li>• Promotion of horticultural crops ,fruits and vegetables in different pocket of the district</li> <li>• Favorable condition for promotion of the medicinal crop, aromatic plants and spices in the district</li> <li>• Improvement in the production of cattle, goat and poultry</li> <li>• Improvement in the productivity of pulses and cereal</li> </ul>	<ul style="list-style-type: none"> <li>• Erratic rainfall(Untimely and unseasonal) which causes soil loss and severe infestation of insect pest and diseases</li> <li>• Climatic storms causes maximum destruction of Banana field</li> <li>• Frosty weather condition during winter which causes crop loss and attack of insect and pest result into poor productivity</li> <li>• Attack of wild boar</li> </ul>

#### **AES.2 (Nimar valley Agro climatic Zone (MP-11))**

<b>Strength</b>	<b>Weakness</b>	<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"> <li>• Availability of land resources enriched with black cotton soil</li> <li>• Farmers attraction towards cultivation of fruit crop ie Banana</li> <li>• Potential area for cultivation of cereals and pulses due to suitable agro climatic condition</li> <li>• Suitable climate condition for cattle, goat and poultry rearing</li> </ul>	<ul style="list-style-type: none"> <li>• Poor soil fertility management unawareness about green Manuring, composting techniques</li> <li>• Imbalance use of fertilizers and insecticide specially blind use of urea</li> <li>• Reluctance of farmers towards modern varieties and their POP, faith in traditional or old varieties</li> <li>• Water level of the district is very low due to banana cultivation long year</li> <li>• Cultivation with very low input and unawareness /negligence for use of available natural resources</li> </ul>	<ul style="list-style-type: none"> <li>• Scope for promotion of natural farming and its trade at national and global level</li> <li>• Promotion of horticultural crops ,fruits and vegetables in different pocket of the district</li> <li>• Favorable condition for promotion of the medicinal crop, aromatic plants and spices in the district</li> <li>• Improvement in the production of cattle, goat and poultry</li> <li>• Improvement in the productivity of pulses and cereal</li> </ul>	<ul style="list-style-type: none"> <li>• Erratic rainfall(Untimely and unseasonal) which causes soil loss and severe infestation of insect pest and diseases</li> <li>• Climatic storms causes maximum destruction of Banana field</li> <li>• Frosty weather condition during winter which causes crop loss and attack of insect and pest result into poor productivity</li> <li>• Attack of wild boar</li> </ul>

#### **Land Use Pattern**

<b>Particulars</b>	<b>Area "000 ha"</b>
Total Geographical area	342741
Forest	224757
Waste Land	2329
Other than cultivated area	19854
Cultivable waste and alkaline land	-
Pastures	-
Bushes	-
Current Fallow	622
Other Fallow	1707
Agricultural Land	118716
Area Sown	103000
Kharif	118716
Rabi	66739
Zaid	

Cropping Intensity (%)	147
------------------------	-----

#### Irrigated Area with Different Sources:

S. No.	Description	Area (ha)
1	Canal	324
2	Well	34455
3	Tube well	19891
4	Ponds	4393
5	Others	3254

#### Soil types

S. No.	Soil type	Characteristics	Area "000 ha"	Percent (%) of total
1	Light Soil	Soil is light, warm, dry and tends to be acidic and low in nutrients. Light soils are often known as sandy soils due to their high proportion of sand and little clay (clay weighs more than sand). These soils have quick water drainage and are easy to work with	491.20	46.17 %
2	Medium Soil	Medium-textured soils have equal parts sand, silt and clay. Finely textured soils are mostly clay or clay and silt. The same weight of clay can hold 50 times as much water as very fine sand particles	195.00	18.34 %
3	Heavy Soil	Heavy clays have a very high water-holding capacity, but most of the water is tightly bound and not available to plants. The humus content is often higher than in other mineral soils. They do not form a crust when they dry.	377.20	35.48 %

**Note:** Figure. In parenthesis denotes the percentage of total area.

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

S. No	Crop	Area (ha)	Production (Qt.) or kg	Productivity (Q/ha) or Ton/ha
1	Rice	0.49	07.10	1450
2	Maize (Kharif)	18.85	761.54	4040
3	Jowar	4.94	181.58	3675
4	Pearl Millet	0.01	0.01	1050
5	Black Gram	1.20	06.96	580
6	Green Gram	1.25	07.25	580
7	Pigeonpea	6.99	122.32	1750
8	Sesame	0.21	02.25	1050
9	Groundnut	0.36	06.55	1795
10	Soybean	14.00	234.50	1675
11	Cotton	37.90	672.72	1775
12	Others	32.30	00.00	00
13	Wheat	22.38	85.06	3850
14	Maize (Rabi)	8.30	65.15	7900
15	Chickpea	21.72	41.49	1910
16	Pea	0.02	0.03	1250
17	Lentil	0.02	0.02	750
18	Mustard	0.01	0.01	1160
19	Flax	0.01	0.01	860
20	Safflower	0.01	0.01	930
21	Sugarcane	4.90	332.46	67850
22	Banana	20522	1436540	70
23	Guava	154	2156	14
24	Mango	135	1890	14
25	Papaya	135	10125	75
26	Pomegranate	197	3152	16
27	Lemon	270	3510	13
28	Brinjal	250	4536	18
29	Green Chilli	210	4935	23-50
30	Colocasia	110	1925	17-50
31	Ladyfinger	180	2160	12

32	Onion	726	14520	20
33	Tomato	325	19500	60
34	Red Chilli	496	1240	2-50
35	Turmeric	638	19140	30
36	Ginger	212	5300	25

#### Weather data (Jan, 2022. Dec., 2022)

Month /Year	Rainfall (m.m.)	Temperature ( ° C)	
		Maximum	Minimum
Jan, 22	1207.5	10	31
Feb, 22		12	34
Mar, 22		18	39
Apr, 22		23	40
May, 22		21	41
Jun, 22		22	41
July, 2022		22	30
Aug., 2022		22	33
Sept., 2022		20	32
Oct. 2022		15	32
Nov. 2022		12	31
Dec. 2022		11	31

#### Production and productivity of livestock, Poultry, Fisheries etc.

Category	Population	Production	Productivity
<b>Cattle</b>			
Crossbred/ Indigenous	137834	91.90 MT.	3.453 kg
<b>Buffalo</b>	54672		4.842 Kg
<b>Sheep</b>			
Crossbred/ Indigenous	30070	50.30 MT wool	..... Kg
<b>Goats</b>	121851	9760472 kg	0.550 gm
<b>Pigs</b> Crossbred/ Indigenous	231	...	...
<b>Rabbits</b>	208		
<b>Poultry</b>			
Hens	99746	90.39 Lakh eggs	..... eggs/ bird/yr
Turkey and others			
<b>Category</b>	<b>Area</b>	<b>Production</b>	<b>Productivity</b>
Fish	Data not provided by Fisheries department, Burhanpur		

#### Details of Operational area / Villages (2022)

S. No.	Tehsil	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Burhanpur	Burhanpur	Biroda, Loni, Patonda, Adgaon, Nachankheda, Jainabad, Umarda, Bhavsa etc	Banana, Soybean, Cotton, Maize, Chickpea, Wheat, Vegetable, onion, Turmeric and Goatery & Poultry	CMV, Sigatoka, Pinkwall worm, Falls army worm, IPM approach to manage insect pest unavailability of improved breed of poultry & Goatery, unavailability of green fodder, awareness of vaccination	Promotion of Integrated farming system, Livestock up gradation and Management, Seed replacement- use of high yielding varieties tolerant to biotic and abiotic factors, Promotion of Horticultural crops., Crop Diversification, Soil Health Improvement, Pest management in crops, Water Conservation and Management, Employment generation for rural youths through agri. Enterprises, Strengthening of marketing network
2	Nepanagar	Khaknar	Chandni, Andharwadi, Dawali, Guradia, Saikheda, Pipiraiyat,			
3	Khaknar	Khaknar	Nimandad, Dedtalia, Karkheda, Dhaba, Zhirmiti, Manjrod kala, Manjrod Khurd, Badnapur, Navra,			



**Priority / Thrust areas**

S. No.	Particulars
1.	Weed management
2.	Nutritional Security
3	Seed replacement- use of high yielding varieties tolerant to biotic and abiotic factors
4	Promotion of minor millets
5	Quality Production
6	Crop Diversification
7	Insect Pest & Disease management in Crop
8	Seed Production Technology
9	Promotion & awareness on Natural Farming
10	Awareness on Waste Decomposition
11	Promotion & Awareness on ITK
12	Disease Management in animals
13	Livestock up gradation and Management
14	Improvement of green fodder production
15	Feed Management
16	Nutrient management in crop
17	Promotion of intercropping
18	Value addition & food processing
19	Income Generation
20	Post harvest management practices
21	Promotion & awareness on new technologies in agriculture : protected cultivation, drone technology, integrated farming, Resource conservation technology, Cropping System & Water Management
22	Crop Production Technology
23	Improvement of Soil health

**TECHNICAL PROGRAMME**

**A. Details of targeted mandatory activities by KVK**

OFT		FLD and CFLD	
1		2	
Number of OFTs	Number of Farmers	Number of FLDs	Number of Farmers
24	240	14	140

Training		Extension Activities	
3		4	
Number of Courses	Number of Participants	Number of activities	Number of participants
72	1800	20	1000

Seed Production (Qtl.)	Planting material (Nos.)
200	10000*

\*Is net shade net house is available during financial year the planting material to be prepared

**B. Abstract of interventions to be undertaken**

S. No	Thrust area/ Thematic area	Crop/ Enterprise	Identified Problem	Interventions					
				Title of OFT if any	Title of FLD if any	Title of Training if any	Title of training for extension personnel if any	Extension activities	Supply of seeds, planting materials etc.
1	Weed management	Soybean Wheat	Low income due to high labor	Assessment on post emergence weedicide	Demonstration on diclosulam as pre	Weed Management	-	Field day, Media Coverage	-

			cost		emergenc weedicide				
2	Nutritional Security	Vegetables and Fruits	Nutritional Security	-	Demo. on nutritional kitchen garden	-	Nutritional Kitchen Garden	Field day, Media Coverage	Supply of seeds, planting materials etc.
3	Seed replacement - use of high yielding varieties tolerant to biotic and abiotic factors	Wheat Onion Okra Chickpea Soybean	Low income due to use of old and traditional varieties	Assessment on JS-2029 & 2069, Assessment on RVG-203 & 204, Assessment on ACR-1 &	Demo. on variety HI-1544 , Demo. on DBW-187, Demo. on Bhimashakti/red , Demo. on Kashi lalima, Demo. on Phule vikram	-	-	Field day, Media Coverage	-
4	Promotion of minor millets	Pearl millet Kodo Millet Kutki Millet	Nutritional Security & Income Generation	Assessment on variety ABH-1200, Dhanshakti, Assessment on variety JK-22, Parbhani Shakti-1	Demo. on variety JK-137, Demo. on JK-4	-	-	Field day, Media Coverage	-
5	Quality Production	Banana	Low income due to low quality production	-	Demo. on skirting bag	FIR technique	-	Field day, Media Coverage	-
6	Crop Diversification	Sweet corn	Low income due to low production	-	Demo. on variety HI – BRIX 39/53	-	-	Field day, Media Coverage	-
7	Insect Pest & Disease management in Crop	Maize Pigeon pea Soybean Watermelon Chickpea Pigeon pea Onion Banana Cotton Watermelon	Low income due to low production	Assessment on control of pod borer, Assessment on control of sucking pest, Assessment on purple blotch,	Demo. on fall army worm, Demo. on Fusarium wilt disease	Insect Pest & Disease management in Crop: CMV, Fall army worm, soil & seed borne disease, YMV, Sigatoka, Pod borer,	IPM in banana, Wilt management in chickpea, sucking pest management,	Field day, Media Coverage	-

				Assessment on powdery mildew					
8	Seed Production Technology	Soybean Sugarcane chickpea	Low income generation	-	-	Seed Production Technology	-	-	-
9	Promotion & awareness on Natural Farming	Chickpea Green gram Onion	Low income due to high production cost	Assessment of natural farming component	-	Natural farming	Natural farming	Awareness Programmes, Media Coverage	-
10	Awareness on Waste Decomposition	Sugarcane Banana	Low income due to high production cost	-	Demo. on waste decomposer	-	-	Field day, Media Coverage	-
11	Promotion & Awareness on ITK	Green Chilli	Low income due to high production cost	-	Demo. on ITK	-	-	Awareness Programmes, Field day, Media Coverage	-
12	Disease Management in animals	Buffalo	Mastitis	-	Demo. on control of mastitis	Disease Management in poultry & goatery, Vaccination & their importance	-	Field day, Media Coverage	-
13	Livestock up gradation and Management	Japanese Quail	Low income	Assessment on improved poultry breed kaveri & sonali	Demo. of Japanese quail	Goatery production, Poultry Production,	-	Field day, Media Coverage	-
14	Improvement of green fodder production	Berseem	Low milk production	-	Demo. of green fodder feeding	Green fodder production management	-	Field day, Media Coverage	-
15	Feed Management	Cattle	Low milk production	Assessment on bypass fat, Assessment on bypass protein, Assessment on chelated trace minerals	Demo. on probiotics	Silage making, Feed & Nutrition Management, Azolla production	-	Field day, Media Coverage	-
16	Nutrient management in crop	Green chilli Banana	Low income due to low production	Assessment on foliar spray of NAA	-	Fertigation technology	-	-	-
17	Promotion of intercropping	Banana	Low income due to low	Assessment on banana	-	-	Raising additional income	-	-

	g		production	based intercropping			through intercropping		
18	Value addition & food processing	Vegetable & fruits	Low income generation	-	-	-	Value addition & food processing	-	-
19	Income Generation	vermicompost production, nursery management, poultry production management, seed production	Low income generation	-	-	Backyard poultry production, backyard nutritional kitchen garden,	-	RY training on vermicompost production, nursery management, poultry production management, seed production	-
20	Post harvest management practices	-	High loss in storage	-	-	Post harvest management practices	-	-	-
21	Promotion & awareness on new technologies in agriculture : protected cultivation, drone technology, integrated farming, Resource conservation technology, Cropping System & Water Management	Protected cultivation, Drone technology, Integrated farming, Resource conservation technology, Cropping System & Water Management	Lack of knowledge towards new technologies in agriculture	-	-	Protected cultivation, Drone technology, Integrated farming, Resource conservation technology, Cropping System & Water Management	-	-	-
22	Crop Production Technology	Spices	Low income generation	-	-	Spices production, Rejuvenation of old orchard, Integrated crop management	-	-	-
23	Improvement of Soil health	-	Poor soil health	-	-	Natural farming, ITK, Soil testing	-	-	-

### Technologies to be assessed

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

Thematic areas	Cereals	Oilseeds	Pulses	Vegetables	Fruits	Millets	TOTAL
Varietal Evaluation	-	1 (Soybean)	1 (Chickpea)	1 (Coriander)	-	2 (Pearl millet, Sorghum)	05
Weed	1	-	-	-	-	-	01

Management	(Wheat)						
Natural Farming	-	-	3 (Chickpea, Green Gram, Onion)	-	-	-	<b>03</b>
IDM	-	-	-	2 (Onion, Coriander)	-	-	<b>02</b>
IPM	-	1 (Soybean)	1 (Pigeon pea)	-	Watermelon	-	<b>03</b>
Nutrient Management	-	-	-	1 (Green Chilli)	-	-	<b>01</b>
Intercropping	-	-	-	-	Banana	-	<b>01</b>
EXT & TOT	-	2 (Soybean)	2 (Chickpea, Pigeon pea)	-	-	-	<b>04</b>
<b>TOTAL</b>	<b>01</b>	<b>04</b>	<b>07</b>	<b>04</b>	<b>02</b>	<b>02</b>	<b>20</b>

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

Thematic areas	Cattle	Poultry	Buffalo	TOTAL
Breed Evaluation	-	01	-	<b>01</b>
Feeding Management	02	-	01	<b>03</b>
<b>TOTAL</b>	<b>02</b>	<b>01</b>	<b>01</b>	<b>04</b>

#### Details of On Farm Trial (OFT)

##### OFT.1 (Agronomy) Kharif

<b>Crop / Enterprise</b>	Soybean
<b>Title of on farm trial</b>	Assessment of High yielding varieties of soybean (II <sup>nd</sup> Year)
<b>Problem diagnosed</b>	Low yield of soybean due to use of old variety JS-335
<b>Farmers' Practices</b>	T <sub>1</sub> JS - 335 1994
<b>Details of technologies selected for assessment</b>	T <sub>2</sub> JS – 2029 (Maturity 90-95 days, Yield 25-30qt/ha, Resistant to YMV, pest and charcoal rot) 2014 T <sub>3</sub> JS – 2069 (Maturity 93-95 days, Yield 25-28qt/ha, Multiple Resistant to disease) 2016
<b>Source of technology</b>	JNKVV, Jabalpur
<b>Plot size</b>	0.2 ha/farmer
<b>No. of farmers</b>	10
<b>Total cost</b>	10000
<b>Critical input</b>	Soybean Seed Variety JS – 2029 & JS - 2069
<b>Performance indicators:</b> Technical. yield (q/ ha) Economic Social – Employment generation	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio

##### OFT. 2 (Agronomy) Rabi

<b>Crop / Enterprise</b>	Wheat
<b>Title of on farm trial</b>	Assessment of post emergence weedicide in wheat (1 year)
<b>Problem diagnosed</b>	Low yield and increase in cost of cultivation
<b>Farmers' Practices</b>	T <sub>1</sub> Hand weeding
<b>Details of technologies selected for assessment</b>	T <sub>2</sub> Spray of clodinafop 60gm ai/ha + metsulfuron methyl @ 4 gm .ai/ha at 25 - 30 DAS T <sub>3</sub> Spray of sulfosulfuron 25gm ai/ha + metsulfuron methyl @ 4 gm. ai/ha at 25-30 DAS
<b>Source of technology</b>	IARI, Indore, 2015 july extension bulletin Ist
<b>Plot size</b>	0.2 ha/farmer
<b>No. of farmers</b>	10
<b>Total cost</b>	10000/-
<b>Critical input</b>	Weedicide : clodinafop & sulfosulfuron

<b>Performance indicators:</b> i) Technical. yield (q/ ha) Economic Social – Employment generation	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio
---	---

#### OFT. 3 (Agronomy) Rabi

<b>Crop / Enterprise</b>	Chickpea
<b>Title of on farm trial</b>	Assessment of natural farming component in chickpea crop
<b>Problem diagnosed</b>	Soil health deterioration due to non-judicious use of chemical fertilizer
<b>Farmers' Practices</b>	T <sub>1</sub> use of chemical fertilizers
<b>Details of technologies selected for assessment</b>	T <sub>2</sub> N:P:K:S::20:50:20:20 kg/ha T <sub>3</sub> Natural farming ingredients from sowing with bijamrut and 4 application of Jivamrit after 21 days interval and application of 1 <sup>st</sup> spray of Nimastra and 2 <sup>nd</sup> spray of Bramhastra a week interval of flowering stage and Dashparni ark at pod filling stage
<b>Source of technology</b>	"Kam lagat Prakratic Kheti" Book, Acharya Devvrat, 2019
<b>Plot size</b>	0.2 ha/farmer
<b>No. of farmers</b>	10
<b>Total cost</b>	10000/-
<b>Critical input</b>	Sulphur+ Natural farming components
<b>Performance indicators:</b> i) Technical. yield (q/ ha) ii) Economic Social – Employment generation	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio

#### OFT 4 (Agronomy) Kharif

<b>Crop / Enterprise</b>	Green gram
<b>Title of on farm trial</b>	Assessment of Natural Farming in Greengram
<b>Problem diagnosed</b>	Poor soil health, high cost of cultivation and poor quality produce
<b>Farmers' Practices</b>	T <sub>1</sub> Conventional farming
<b>Details of technologies selected for assessment</b>	T <sub>2</sub> Beejamrit @ 50 g/kg seed, Ghanjeevamrit at sowing @ 250 kg/ha, Jeevamrit @ 500 l/ha at sowing, 15, 30, 45 DAS (FA) Nimastra and Dashparni Ark @ 25 l/ha at 20 and 40 DAS, Mulching with plant waste material @ 10 t/ha at 20 DAS T <sub>3</sub> Beejamrit @ 50 g/kg seed, Ghanjeevamrit at sowing @ 500 kg/ha, Jeevamrit @ 750 l/ha at sowing, 15, 30, 45 DAS (S & FA), Panch Patti Kadha and Bramhastra @ 25 l/ha, at 20 and 40 DAS, Mulching with plant waste material @ 10 t/ha at 20 DAS
<b>Source of technology</b>	"Kam lagat Prakratic Kheti" Book, Acharya Devvrat, 2019
<b>Plot size</b>	0.2 ha/farmer
<b>No. of farmers</b>	10
<b>Total cost</b>	10000/-
<b>Critical input</b>	Seed and Ghanjivamrut and natural farming ingredients
<b>Performance indicators:</b> Technical. yield (q/ ha) Economic Social – Employment generation	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio

#### OFT. 5 (Horticulture) Kharif

<b>Crop / Enterprise</b>	Onion
<b>Title of on farm trial</b>	Assessment of IDM module against purple blotch of kharif onion (I <sup>st</sup> Year)
<b>Problem diagnosed</b>	Low yield of kharif onion due to heavy incidence of purple blotch disease
<b>Farmers' Practices</b>	T <sub>1</sub> Indofil M-45 @ 1000g/h at the time of infestation
<b>Details of technologies selected for assessment</b>	T <sub>2</sub> Seed treatment+ Mancozeb @ 0.25% / Hexaconazole @ 0.1% / Propiconazole @ 0.1% at I <sup>st</sup> at 30 DAT & II <sup>nd</sup> 40 DAT T <sub>3</sub> Seed treatment + COC 50% EC @ 2gm/lt of water I <sup>st</sup> at 30 DAT & II <sup>nd</sup> at 40 DAT
<b>Source of technology</b>	DOGR, Pune, Maharashtra, 2015
<b>Plot size</b>	0.2ha /farmer
<b>No. of farmers</b>	10
<b>Total cost</b>	5000/-

<b>Critical input</b>	Mancozeb @ 0.25% / Hexaconazol 0.1% & COC 50% EC
<b>Performance indicators:</b> ii) Technical. yield (q/ ha) i) Economic Social – Employment generation	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio

#### OFT. 6(Horticulture) Kharif

<b>Crop/Enterprise</b>	Chilli		
<b>Title of on-farm trial:</b>	Assessment of foliar spray of alpha naphthenic acetic acid for control of flower drop in chilli		
<b>Season/Year</b>	Kharif, 2023		
<b>Problem diagnosis:</b>	Low yield (25%) due to flower drop in chilli. Affected area 350 ha.		
<b>Farming situation:</b>	Sandy loam-Irrigated		
<b>Production system/Thematic area:</b>	Irrigated - HOV		
<b>Farmers Practice:</b>	T <sub>1</sub>	No use of plant growth regulator	
<b>Details of technology selected for assessment/ refinement:</b>	T <sub>2</sub>	Foliar spray of NAA (50 ppm) at 45DAT	
	T <sub>3</sub>	Foliar spray of NAA (50 ppm) at 45 and 60 DAT	
<b>Source of technology</b>	BCKV, Mohanpur, 2017		
<b>No of farmers</b>	10	Area of each trail : 0.1 ha	No of trials: 10
<b>Critical input</b>	Alpha naphthenic acetic acid		
<b>Performance indicators or observation to be recorded</b>	Flower drop (%), fruit setting (%), fruit size (cm), yield (q/ha), Net return (Rs./ha), B:C ratio		
<b>Cost of input</b>	Rs. 200/trial		
<b>Total cost</b>	Rs. 2000/-		

#### OFT. 7(Horticulture) Rabi

<b>Crop / Enterprise</b>	Banana		
<b>Title of on farm trial</b>	Assessment of Banana based intercropping under banana cropping system (II <sup>nd</sup> Year)		
<b>Problem diagnosed</b>	High cost of production and low income per unit area due to sole cropping in banana		
<b>Farmers' Practices</b>	T <sub>1</sub>	Banana	
<b>Details of technologies selected for assessment</b>	T <sub>2</sub>	Banana + Onion (1.6x1.6 m + 2 rows of onion)	
	T <sub>3</sub>	Banana + Coriander (1.6x1.6 m + row to row 45cm)	
<b>Source of technology</b>	NRCB, Trichy, Tamilnadu ,2015		
<b>Plot size</b>	0.2 ha /farmer		
<b>No. of farmers</b>	10		
<b>Total cost</b>	12000/-		
<b>Critical input</b>	Onion & Coriander Seeds		
<b>Performance indicators:</b> i) Technical. yield (q/ ha) ii) Economic ii) Social – Employment generation	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio		

#### OFT. 8 (Horticulture) Rabi

<b>Crop/Enterprise</b>	Onion		
<b>Title of on-farm trial</b>	Assessment of Natural Farming in Onion		
<b>Problem diagnosed</b>	High cost of production due to chemical spray against sucking pest		
<b>Farming situation</b>	Irrigated		
<b>Production system and thematic area</b>	Natural Farming		
<b>Farmers' practices</b>	Chemical Farming		
<b>Details of technologies selected for assessment/refinement Treatments</b>	T <sub>1</sub>	Chemical Farming	
	T <sub>2</sub>	IPM in Onion	

	T <sub>3</sub> Seed treatment with bijamrit while transplanting , Application of Jivamrut @21 days interval or spraying directly to the crops. Mulching (Acchadana): soil mulch I spray of Nimastra @ 5lit/pump II Sparay of Agniastra @ 5lit/pump III Spray of Dashparni ark @ 5lit/pump
Source of technology	Kam lagat Prakratic Kheti” Book, Acharya Devvrat, 2019
No. of farmers	10
Area of each trial	0.2 ha
No of trial	10
Critical input	IPM Input and Natural farming ingredient
Performance indicators Observation to be recorded	Fruit yield (kg/ha), economics (net return and B:C ratio)
Cost of input	Rs. 1,000 per demo
Total cost	Rs. 10,000

#### OFT. 9 (Plant Protection) Kharif

Crop / Enterprise	Pigeon pea
Title of on farm trial	Assessment of management practice for control of pod borer in pigeon pea (II <sup>nd</sup> Year)
Problem diagnosed	Low yield of pigeon pea due to attack of pod borer. Total acreage approx. 7000 ha & pod borer is serious problem in pigeon pea cultivation (more than 90% area is affected)
Farmers’ Practices	T <sub>1</sub> Use of pesticide at the time of infestation
Details of technologies selected for assessment	T <sub>2</sub> 1 <sup>st</sup> spray of of Emamectin benzoate 5% SG @ 2 gm./10lit. water at flowering stage and 2 <sup>nd</sup> after 20 days interval, at pod formation stage spray of chlorantraniliprole 18.5% SC (Coragen) @ 1.5 ml/10 lit. water T <sub>3</sub> 1 <sup>st</sup> spray of Brahmastra@15-20 lit/ha at the time of flowering stage and 2 <sup>nd</sup> spray of agniastra @15-20 lit/ha in time of pod formation and milking stage , interval of 15 days 3 spary
Source of technology	RVSKVV Publication No. 141/2022
Plot size	0.1 ha/farmer
No. of farmers	10
Total cost	7000
Critical input	Emamectin benzoate, chlorantraniliprole and natural farming Bramhastra & Agniastra
Performance indicators: x) Technical. yield (q/ ha) Economic Social – Employment generation	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio

#### OFT. 10 (Plant Protection) Kharif

Crop / Enterprise	Soybean
Title of on farm trial	Assessment of management practice for control of pod borer in Soybean (I Year)
Problem diagnosed	Low yield of Soybean due to infestation in soybean crop. Total acreage approx. 14000 ha & pod borer is serious problem in Soybean cultivation (more than 90% area is affected)
Farmers’ Practices	T <sub>1</sub> Spray of Prophenophos + Cypermethrein 1000ml/ha
Details of technologies selected for assessment	T <sub>2</sub> 1 <sup>st</sup> spray of of Emamectin benzoate 5% SG @ 2 gm./10lit. water at flowering stage and 2 <sup>nd</sup> after 20 days interval, at pod formation stage spray of chlorantraniliprole 18.5% SC (Coragen) @ 1.5 ml/10 lit. water T <sub>3</sub> 1 <sup>st</sup> spray of Brahmastra@15-20 lit/ha at the time of flowering stage and 2 <sup>nd</sup> spray of agniastra @15-20 lit/ha in time of pod formation and milking stage , interval of 15 days
Source of technology	DSR, Indore M.P. & RVSKVV Publication No. 141/2022
Plot size	0.1 ha/farmer
No. of farmers	10
Total cost	7000
Critical input	Emamectin benzoate, chlorantraniliprole and natural farming Bramhastra & Agniastra



<b>Performance indicators:</b> i) Technical. yield (q/ ha) ii) Economic iii) Social – Employment generation	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio
--	---

#### OFT. 11 (Plant Protection) Rabi

<b>Crop / Enterprise</b>	Watermelon	
<b>Title of on farm trial</b>	Assessment of management practices to control of sucking pest in watermelon (II <sup>nd</sup> Year)	
<b>Problem diagnosed</b>	Low yield of watermelon due to attack of sucking pest. Total acreage approx 1000ha. & pod borer is serious problem in pigeon pea cultivation (more than 75% affected area).	
<b>Farmers' Practices</b>	T <sub>1</sub>	Use of pesticide at the time of infestation
<b>Details of technologies selected for assessment</b>	T <sub>2</sub>	Use of yellow sticky trap @ 5/ acre followed by one spray during the infestation period of Spiromesifen 22.9% SC @ 1.5 ml/lit.
	T <sub>3</sub>	Use of yellow and blue sticky trap @ 3:3/acre followed by two spray during the infestation period of Spiromesifen 22.9% SC @ 1.5 ml/lit.
<b>Source of technology</b>	Dr. Satyagopal Korlapati, IAS, Director General, Department of Agriculture & Cooperation, Govt of India	
<b>Plot size</b>	0.2 ha	
<b>No. of farmers</b>	10	
<b>Total cost</b>	10000	
<b>Critical input</b>	Yellow & blue sticky traps with insecticides	
<b>Performance indicators:</b> iii) Technical. yield (q/ ha) iv) Economic v) Social – Employment generation	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio	

#### OFT. 12(Plant Protection) Rabi

<b>Crop / Enterprise</b>	Coriander	
<b>Title of on farm trial</b>	Assessment of Propiconazole 25 % E.C. for management of Powdery Mildew in Coriander	
<b>Problem diagnosed</b>	Low yield of coriander seed due to heavy infection of Powdery Mildew (Area 15000 ha. & affected area 80% )	
<b>Farmers' Practices</b>	T <sub>1</sub>	Sulphur 80 % WP @ 2 kg/ha at 45 DAS
<b>Details of technologies selected for assessment</b>	T <sub>2</sub>	Tebuconazole 25.9 EC@ 750 ml /ha at 30 & 45 DAS
	T <sub>3</sub>	Propiconazole 25 % E.C. @ 750 ml /ha at 30 & 45 DAS
<b>Source of technology</b>	Journal of Spice and Aromatic Crops Vol. 26(1) : 59-62 (2017)	
<b>Plot size</b>	0.1ha/ Farmer	
<b>No. of farmers</b>	10	
<b>Total cost</b>	7000	
<b>Critical input</b>	Fungicides	
<b>Performance indicators:</b> vi) Technical. yield (q/ ha) vii) Economic viii) Social – Employment generation	No of Plant affected/ sq m, Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio	

#### OFT. 13 (Genetic & Plant Breeding) Kharif

<b>Crop/Enterprise</b>	Pearl millets	
<b>Title of on-farm trial</b>	Assessment of Pearl millet varieties AHB-1200- and Dhanshakti for crop diversification	
<b>Problem diagnosed</b>	Less production of miner millet	
<b>Farming situation</b>	Rainfed	
<b>Production system and thematic area</b>	Income generation	
<b>Farmers' practices</b>	Sorghum production	
<b>Details of technologies selected for assessment/refinement Treatments</b>	T <sub>1</sub>	Mp- 205variety
	T <sub>2</sub>	Variety AHB 1200
	T <sub>3</sub>	Variety Dhanshakti
<b>Source of technology</b>	VNMKVV, Parbhani (2018 & 2014)	
<b>No. of farmers</b>	10	
<b>Area of each trial</b>	0.2 ha/farmer	

No of trial	10
Critical input	Pearl millet seed Variety AHB 1200 and Dhanshakti
Performance indicators Observation to be recorded	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio
Total cost	7000

#### OFT. 14(Genetic & Plant Breeding) Kharif

Crop / Enterprise	Sorghum
Title of on farm trial	Assessment of Sorghum improved Variety (I <sup>st</sup> Year)
Problem diagnosed	Low yield of Sorghum due to use of old variety
Farmers' Practices	T <sub>1</sub> PKV Ashvin
Details of technologies selected for assessment	T <sub>2</sub> Hybrid JK 22
	T <sub>3</sub> Parbhani Shakti 1
Source of technology	VNMKV ,Parbhani (2018)
Plot size	0.2ha/farmer
No. of farmers	10
Total cost	10000/-
Critical input	Sorghum Seed Variety Hybrid JK -22 and Parbhani Shakti-1
Performance indicators: (ix) Technical. yield (q/ ha) (x) Economic (i) Social – Employment generation	Yield (qtls/ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio

#### OFT. 15 (Genetic & Plant Breeding) Rabi

Crop / Enterprise	Chickpea
Title of on farm trial	Assessment of Chickpea improved Variety (II <sup>nd</sup> Year)
Problem diagnosed	Low yield of chickpea due to use of old variety JG-130
Farmers' Practices	T <sub>1</sub> JG - 130
Details of technologies selected for assessment	T <sub>2</sub> RVG – 203
	T <sub>3</sub> RVG – 204
Source of technology	RVSKVV, Gwalior ( 2021 & 2014)
Plot size	0.2ha/farmer
No. of farmers	10
Total cost	10000
Critical input	Chickpea seeds variety RVG – 203, RVG - 204
Performance indicators: (xii) Technical. yield (q/ ha) (xiii) Economic (iv) Social – Employment generation	Yield (qtls/ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio

#### OFT. 16 (Genetic & Plant Breeding) Rabi

Crop / Enterprise	Coriander
Title of on farm trial	Assessment of Coriander improved Variety (I <sup>st</sup> Year)
Problem diagnosed	Low yield of coriander due to use of old variety
Farmers' Practices	T <sub>1</sub> Local variety- Indori Coriander
Details of technologies selected for assessment	T <sub>2</sub> ACR-1 ( Stem gall resistant variety, plant height of 113.9 cm, The variety is also suitable for seed & green leaf production avg yield 14 q/ha.)
	T <sub>3</sub> ACR-2 (Suitable for seed production, seed shape is oval & suitable for export Avg yield 16 q /ha. )
Source of technology	NRCSS (Ajmer) 2015 & 2017
Plot size	0.2ha/farmer
No. of farmers	10
Total cost	10000
Critical input	Corriender Seed

<b>Performance indicators:</b> <b>(xv) Technical. yield (q/ ha)</b> <b>(xvi) Economic</b> <b>(xvii) Social – Employment generation</b>	Yield (qtls/ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio
---	---

**OFT . 17 (Animal Husbandry) Kharif**

<b>Enterprise</b>	Cow	
<b>Title of on.farm trial</b>	Assessment of Bypass fat in dairy cattle (II <sup>nd</sup> Year)	
<b>Problem diagnosed</b>	Low milk production (20%) from high lactating Dairy cattle due to low dietary energy intake	
<b>Farming situation</b>	Irrigated	
<b>Production system and thematic area</b>	Rural smallholder dairy production system Feeding management	
<b>Farmers' practices</b>	T <sub>1</sub>	Imbalance concentrate feed with wheat straw (8kg/day) and green fodder(10kg/day)
<b>Details of technologies selected for assessment/refinement Treatments</b>	T <sub>2</sub>	Recommended dose of balance concentrate feed @ 1kg / 2.5 liter of milk production + wheat straw (8kg/day) + green fodder(15kg/day) + supplement of by pass fat @ 10 gm / liter / animal / day after calving for two month..
<b>Source of technology</b>	NDRI, Karnal 2014	
<b>No. of animals</b>	10	
<b>No. of farmers</b>	10	
<b>Critical input</b>	Bypass fat	
<b>Cost of input</b>	1000/-	
<b>Total cost</b>	10000/-	
<b>Performance indicators Observation to be recorded</b> <b>Daily Milk yield (L)</b> <b>Economics : B: C ratio</b> <b>Social: Farmers reaction &amp; Feedback</b>	Milk yield (Lt./day) , fat % in milk , net return (Rs/animal), B:C ratio	

**OFT . 18 (Animal Husbandry) Kharif**

<b>Enterprise</b>	Poultry Birds	
<b>Title of on.farm trial</b>	Assessment of Improved breeds of poultry in backyard poultry (II <sup>nd</sup> Year)	
<b>Problem diagnosed</b>	Local breed, less egg laying capacity	
<b>Farming situation</b>	Rainfed	
<b>Production system and thematic area</b>	Poultry production & management	
<b>Farmers' practices</b>	T <sub>1</sub>	Rearing of Satpuda poultry bird in backyard poultry
<b>Details of technologies selected for assessment/refinement Treatments</b>	T <sub>2</sub>	Sonali Improved cross breed of RIR x Fayomi ,156 eggs/hen/year, lowest mortality
	T <sub>3</sub>	Kaveri poultry breed
<b>Source of technology</b>	Bihar Veterinary College ,Patna ,Bihar	
<b>No. of birds</b>	40	
<b>No. of farmers</b>	10	
<b>Critical input</b>	Poultry Bird Sonali and Kaveri	
<b>Cost of input</b>	2000/farmer	
<b>Total cost</b>	20000/-	
<b>Performance indicators Observation to be recorded</b> <b>Social: Farmers reaction &amp; Feedback</b>	Body Weight / Bird (kg.), Benefit Cost Ratio	

**OFT . 19 (Animal Husbandry) Rabi**

<b>Crop/Enterprise</b>	Buffalo
<b>Title of on-farm trial</b>	Assessment of by pass protein on milk production in dairy Buffalo ( I <sup>st</sup> Year)
<b>Problem diagnosed</b>	Low milk yield and income due to conventional ration feeding
<b>Farming situation</b>	Rainfed
<b>Production system and thematic area</b>	Livestock Production Management

<b>Farmers' practices</b>	<b>T<sub>1</sub></b>	Farmers Practice use of choker & cakes (conventional feed)
<b>Details of technologies selected for assessment/refinement Treatments</b>	<b>T<sub>2</sub></b>	Use of Bye- Pass protein @ 50 gm+ With concentrate feed per animal per day after calving for three month
<b>Source of technology</b>	IVRI, Izatnagar – 2009	
<b>No. of farmers</b>	10	
<b>No of trial</b>	10	
<b>No. of animals (if animals are part of OFT)</b>	10	
<b>Critical input</b>	Bye- Pass protein	
<b>Performance indicators Observation to be recorded</b>	Milk Yield (per day upto 90 days), % increases in milk production, B:C ratio	
<b>Cost of input</b>	1000/farmer	
<b>Total cost</b>	10000	

#### OFT . 20 (Animal Husbandry) Rabi

<b>Crop/Enterprise</b>	Indigenous cattle	
<b>Title of on-farm trial</b>	Assessment of chelated trace minerals supplement on fertility and milk production in Indigenous cattle	
<b>Problem diagnosed</b>	Low fertility (60%) and milk production (20%) from Indigenous cattle due to lack of trace minerals. Animal affected 70%	
<b>Farming situation</b>	Rainfed	
<b>Production system and thematic area</b>	Rural smallholder dairy production system	Feeding management
<b>Farmers' practices</b>	<b>T<sub>1</sub></b>	Traditional Practice of feeding
<b>Details of technologies selected for assessment/refinement Treatments</b>	<b>T<sub>2</sub></b>	Supplement of trace minerals @ 40 gm / animal / day after calving up to three months
<b>Source of technology</b>	NDRI, Karnal 2012	
<b>No. of farmers</b>	10	
<b>No of trial</b>	10	
<b>No. of animals (if animals are part of OFT)</b>	10	
<b>Critical input</b>	Chelated trace minerals supplement	
<b>Performance indicators Observation to be recorded</b>	Onset of heat after calving (days), conception rate (%), milk yield (Lt/day), net return (Rs/animal), B:C ratio	
<b>Cost of input</b>	Rs. 650/trial for three month	
<b>Total cost</b>	Rs. 6500	

#### OFT. 21 (Agriculture Extension) Kharif

<b>Crop / Enterprise</b>	Soybean	
<b>Title of on farm trial</b>	Study on adoption dynamics and impact of soybean variety JS-2029	
<b>Problem diagnosed</b>	Low income due to use of old variety i.e. JS-335	
<b>Farmers' Practices</b>	<b>T<sub>1</sub></b>	JS-335
<b>Details of technologies selectedfor</b>	<b>T<sub>2</sub></b>	JS-2029

assessment	T <sub>3</sub>   JS-2069
Source of technology	JNKVV, Jabalpur
Plot size	-
No. of farmers	25
Total cost	3500/-
Critical input	Training, OFT & Extension Activities
Performance indicators: xviii) Technical. yield (q/ ha) xix) Economic Social – Employment generation	Decrease in cost of cultivation, increase in production, increase in income, adoption & horizontal spread

#### OFT. 22(Agriculture Extension) Kharif

Crop / Enterprise	Soybean
Title of on farm trial	Study on different extension methods (Training & Demonstration) for dissemination of agricultural technology in CFLD Oilseed crop Soybean variety RVS 2001-4
Problem diagnosed	Low income due to use of old variety i.e. JS-335
Farmers' Practices	T <sub>1</sub>   Using informal methods of technology diffusion like Friends, Neighbors, Input dealers etc
Details of technologies selectedfor assessment	T <sub>2</sub>   Training
	T <sub>3</sub>   Demonstration
Source of technology	JNKVV, Jabalpur
Plot size	-
No. of farmers	25
Total cost	3500
Critical input	Training, CFLD & Extension Activities
Performance indicators: i) Technical. yield (q/ ha) ii) Economic iii) Social – Employment generation	Knowledge (%), Extent of Utilization (%), Extent of Dissemination (%) & Applicability (%)

#### OFT. 23(Agriculture Extension) Kharif

Crop / Enterprise	Pigeonpea
Title of on farm trial	Assessment of effective extension methods for TOT of Natural Farming in Pigeonpea
Problem diagnosed	Poor soil health, high cost of cultivation and poor quality produce
Farmers' Practices	T <sub>1</sub>   Using informal methods of technology diffusion like Friends, Neighbors, Input dealers etc
Details of technologies selectedfor assessment	T <sub>2</sub>   Training
	T <sub>3</sub>   Demonstration
Source of technology	JNKVV, Jabalpur
Plot size	-
No. of farmers	25
Total cost	2500/-
Critical input	Training, OFT & Extension Activities
Performance indicators: iv) Technical. yield (q/ ha) v) Economic vi) Social – Employment generation	Knowledge (%), Extent of Utilization (%), Extent of Dissemination (%) & Applicability (%)

#### OFT. 24(Agriculture Extension) Rabi

Crop / Enterprise	Chickpea
Title of on farm trial	Assessment of effective extension methods for TOT of Natural Farming in Chickpea
Problem diagnosed	Poor soil health, high cost of cultivation and poor quality produce
Farmers' Practices	T <sub>1</sub>   Using informal methods of technology diffusion like Friends, Neighbors, Input dealers etc
Details of technologies selectedfor assessment	T <sub>2</sub>   Training
	T <sub>3</sub>   OFT
Source of technology	JNKVV, Jabalpur
Plot size	-
No. of farmers	25

<b>Total cost</b>	2500/-
<b>Critical input</b>	Training, OFT & Extension Activities
<b>Performance indicators:</b> vii) Technical. yield (q/ ha) /iii) Economic k) Social – Employment generation	Knowledge (%), Extent of Utilization (%), Extent of Dissemination (%) & Applicability (%)

**Detailed Information about OFT:**

<b>1. Name of Discipline</b>	Agronomy
<b>Title of on.farm trial:</b>	Assessment of High yielding varieties of soybean (II <sup>nd</sup> Year)
<b>Year/Season:</b>	2023/ Kharif
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	Low yield of soybean due to use of old variety JS-335
<b>Thematic area:</b>	Varietal Evaluation
<b>No of trials:</b>	10
<b>No. of farmers involved</b>	10
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice.	JS-335 (1994)
T2 –Recommended Practice.	JS-2029 (2014)
T3. Recommended Practice.	JS-2069 (2016)
<b>Date of sowing:</b>	June, 2023
<b>Date of harvesting:</b>	October, 2023
<b>Source of technology:</b>	JNKVV, Jabalpur
<b>Characteristics of technology:</b>	JS-2029 :Maturity 90-95 days, Yield 25-30qt/ha, Resistant to YMV, pest and charcoal rot JS-2069 :Maturity 93-95 days, Yield 25-28qt/ha, Multiple Resistant to disease
<b>Name of Crop/Enterprises:</b>	Soybean
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

<b>2. Name of Discipline</b>	Agronomy
<b>Title of on.farm trial:</b>	Assessment of post emergence weedicide in wheat (I <sup>st</sup> Year)
<b>Year/Season:</b>	2023-24/ Rabi
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	Low yield and increase in cost of cultivation
<b>Thematic area:</b>	Weed Management
<b>No of trials:</b>	10
<b>No. of farmers involved</b>	10
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice.	Hand weeding
T2 –Recommended Practice.	Spray of clodinafop 60g, ai/ha + metsulfuron methyl @ 4 gm ai/ha at 25-30 DAS
T3. Recommended Practice.	Spray of sulfosulfuron 25gm ai/ha + metsulfuron methyl @ 4 gm ai/ha at 25-30 DAS
<b>Date of sowing:</b>	November, 2023
<b>Date of harvesting:</b>	March, 2024
<b>Source of technology:</b>	IARI, Indore, 2015 july extension bulletin I <sup>st</sup>
<b>Characteristics of technology:</b>	Spray of clodinafop 60g, ai/ha + metsulfuron methyl @ 4 gm ai/ha at 25-30 DAS

	Spray of sulfosulfuron 25gm ai/ha + metsulfuron methyl @ 4 gm ai/ha at 25-30 DAS
<b>Name of Crop/Enterprises:</b>	Wheat
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

<b>3 .Name of Discipline</b>	Agronomy
<b>Title of on.farm trial:</b>	Assessment of natural farming component in chickpea crop
<b>Year/Season:</b>	2023-24/ Rabi
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	Soil health deterioration due to non-judicious use of chemical fertilizer
<b>Thematic area:</b>	Natural Farming
<b>No of trials:</b>	10
<b>No. of farmers involved</b>	10
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice.	Use of chemical fertilizers
T2 –Recommended Practice.	N:P:K:S::20:50:20:20 kg/ha
T3. Recommended Practice.	Natural farming ingredients from sowing with bijamrut and 4 application of Jivamrit after 21 days interval and application of 1 <sup>st</sup> spray of Nimastra and 2 <sup>nd</sup> spray of Bramhastra a week interval of flowering stage and Dashparni ark at pod filling stage
<b>Date of sowing:</b>	November, 2023
<b>Date of harvesting:</b>	March, 2024
<b>Source of technology:</b>	“Kam lagat Prakratic Kheti” Book, Acharya Devvrat, 2019
<b>Characteristics of technology:</b>	N:P:K:S::20:50:20:20 kg/ha Natural farming ingredients from sowing with bijamrut and 4 application of Jivamrit after 21 days interval and application of 1 <sup>st</sup> spray of Nimastra and 2 <sup>nd</sup> spray of Bramhastra a week interval of flowering stage and Dashparni ark at pod filling stage
<b>Name of Crop/Enterprises:</b>	Chickpea
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

<b>4. Name of Discipline</b>	Agronomy
<b>Title of on.farm trial:</b>	Assessment of Natural Farming in Greengram
<b>Year/Season:</b>	2023-24/ Rabi
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	Poor soil health, high cost of cultivation and poor quality produce
<b>Thematic area:</b>	Natural Farming
<b>No of trials:</b>	10
<b>No. of farmers involved</b>	10
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice.	Conventional farming
T2 –Recommended Practice.	Beejamrit @ 50 g/kg seed, Ghanjeevamrit at sowing @ 250 kg/ha, Jeevamrit @ 500 l/ha at sowing, 15: 30:45 DAS (FA), Nimastra and Dashparni Ark @ 25 l/ha at 20 and 40 DAS, Mulching with plant waste material @ 10 t/ha at 20 DAS
T3. Recommended Practice.	Beejamrit @ 50 g/kg seed, Ghanjeevamrit at sowing @ 500 kg/ha, Jeevamrit @ 750 l/ha at sowing, 15:30:45 DAS (S & FA), Panch Patti Kadha and Bramhastra @ 25 l/ha, at 20

	and 40 DAS, Mulching with plant waste material @ 10 t/ha at 20 DAS
<b>Date of sowing:</b>	November, 2023
<b>Date of harvesting:</b>	March, 2024
<b>Source of technology:</b>	“Kam lagat Prakratic Kheti” Book, Acharya Devvrat, 2019
<b>Characteristics of technology:</b>	Beejamrit @ 50 g/kg seed, Ghanjeevamrit at sowing @ 250 kg/ha, Jeevamrit @ 500 l/ha at sowing, 15: 30:45 DAS (FA), Nimastra and Dashparni Ark @ 25 l/ha at 20 and 40 DAS, Mulching with plant waste material @ 10 t/ha at 20 DAS
	Beejamrit @ 50 g/kg seed, Ghanjeevamrit at sowing @ 500 kg/ha, Jeevamrit @ 750 l/ha at sowing, 15:30:45 DAS (S & FA), Panch Patti Kadha and Bramhaastra @ 25 l/ha, at 20 and 40 DAS, Mulching with plant waste material @ 10 t/ha at 20 DAS
<b>Name of Crop/Enterprises:</b>	Greengram
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

<b>5.Name of Discipline</b>	Horticulture
<b>Title of on.farm trial:</b>	Assessment of IDM module against purple blotch of kharif onion (I <sup>st</sup> Year)
<b>Year/Season:</b>	2023/ Kharif
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	Low yield of kharif onion due to heavy incidence of purple blotch disease
<b>Thematic area:</b>	IDM
<b>No of trials:</b>	05
<b>No. of farmers involved</b>	05
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice.	Indofil M-45 @ 1000g/h at the time of infestation
T2 –Recommended Practice.	Seed treatment + COC 50% EC @ 2gm/lt of water Ist at 30 DAT & IInd at 40 DAT
T3. Recommended Practice.	Seed treatment + hexaconazol 5% + Captan 70% WP @ 750gm/ha. Ist at 30 DAT & IInd at 40 DAT
<b>Date of sowing:</b>	June 2023
<b>Date of harvesting:</b>	October 2023
<b>Source of technology:</b>	DOGR, Pune, Maharashtra 2015
<b>Characteristics of technology:</b>	Seed treatment + COC 50% EC @ 2gm/lt of water Ist at 30 DAT & IInd at 40 DAT
	Seed treatment + hexaconazol 5% + Captan 70% WP @ 750gm/ha. Ist at 30 DAT & IInd at 40 DAT
<b>Name of Crop/Enterprises:</b>	Onion
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

<b>6.Name of Discipline</b>	Horticulture
<b>Title of on.farm trial:</b>	Assessment of foliar spray of alpha naphthenic acetic acid for control of flower drop in chilli
<b>Year/Season:</b>	2023/ Kharif
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	Low yield (25%) due to flower drop in chilli. Affected area 350 ha.
<b>Thematic area:</b>	Nutrient Management
<b>No of trials:</b>	10
<b>No. of farmers involved</b>	10



<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice.	No use of plant growth regulator
T2 –Recommended Practice.	Foliar spray of NAA (50 ppm) at 45DAT
T3. Recommended Practice.	Foliar spray of NAA (50 ppm) at 45 and 60 DAT
<b>Date of sowing:</b>	June 2023
<b>Date of harvesting:</b>	October 2023
<b>Source of technology:</b>	BCKV, Mohanpur, 2017
<b>Characteristics of technology:</b>	Foliar spray of NAA (50 ppm) at 45DAT
	Foliar spray of NAA (50 ppm) at 45 and 60 DAT
<b>Name of Crop/Enterprises:</b>	Chilli
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

<b>7.Name of Discipline</b>	Horticulture
<b>Title of on.farm trial:</b>	Assessment of Banana based intercropping under banana cropping system (II <sup>nd</sup> Year)
<b>Year/Season:</b>	2023-24/ Rabi
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	High cost of production and low income per unit area due to sole cropping in banana
<b>Thematic area:</b>	Intercropping
<b>No of trials:</b>	10
<b>No. of farmers involved</b>	10
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice.	Banana
T2 –Recommended Practice.	Banana + Onion (1.6*1.6 m and 2 rows of onion)
T3. Recommended Practice.	Banana + Coriander
<b>Date of sowing:</b>	November, 2023
<b>Date of harvesting:</b>	March, 2024
<b>Source of technology:</b>	NRCB, Trichy, Tamilnadu, 2015
<b>Characteristics of technology:</b>	Banana + Onion (1.6*1.6 m and 2 rows of onion)
	Banana + Coriander
<b>Name of Crop/Enterprises:</b>	Banana
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

<b>8.Name of Discipline</b>	Horticulture
<b>Title of on.farm trial:</b>	Assessment of Natural Farming in Onion
<b>Year/Season:</b>	2023-24/ Rabi
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	High cost of production due to chemical spray against sucking pest
<b>Thematic area:</b>	Natural Farming
<b>No of trials:</b>	10
<b>No. of farmers involved</b>	10
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment

<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice.	Chemical Farming
T2 –Recommended Practice.	IPM in Onion
T3. Recommended Practice.	seed treatment with bijamrit while transplanting , Application of Jivamrut @21 days interval or spraying directly to the crops. Mulching (Acchadana): soil mulch I spray of Nimastra @ 5lit/pump, II Spray of Agniastra @ 5lit/pump & III Spray of Dashparni ark @ 5lit/pump
<b>Date of sowing:</b>	December, 2023
<b>Date of harvesting:</b>	March, 2024
<b>Source of technology:</b>	Kam lagat Prakratic Kheti” Book, Acharya Devvrat, 2019
<b>Characteristics of technology:</b>	IPM seed treatment with bijamrit while transplanting , Application of Jivamrut @21 days interval or spraying directly to the crops. Mulching (Acchadana): soil mulch I spray of Nimastra @ 5lit/pump, II Spray of Agniastra @ 5lit/pump & III Spray of Dashparni ark @ 5lit/pump
<b>Name of Crop/Enterprises:</b>	Onion
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

<b>9. Name of Discipline</b>	Plant Protection
<b>Title of on.farm trial:</b>	Assessment of management practice for control of pod borer in pigeon pea (II <sup>nd</sup> Year)
<b>Year/Season:</b>	2023/ Kharif
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	Low yield of pigeon pea due to attack of pod borer. Total acreage approx. 5000 ha & pod borer is serious problem in pigeon pea cultivation (more than 90% area is affected)
<b>Thematic area:</b>	IPM
<b>No of trials:</b>	10
<b>No. of farmers involved</b>	10
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice.	Use of pesticide at the time of infestation
T2 –Recommended Practice.	I <sup>st</sup> spray of of Emamectin benzoate 5% SG @ 2 gm,/10lit. water at flowering stage and 2 <sup>nd</sup> after 20 days interval, at pod formation stage spray of chlorantraniliprole 18.5% SC (Coragen) @ 1.5 ml/10 lit. water
T3. Recommended Practice.	I <sup>st</sup> spray of Brahmastra@15-20 lit/ha at the time of flowering stage and 2 <sup>nd</sup> spray of agniastra @15-20 lit/ha in time of pod formation and miliking stage , interval of 15 days
<b>Date of sowing:</b>	July, 2023
<b>Date of harvesting:</b>	January, 2024
<b>Source of technology:</b>	RVSKVV Publication No. 141/2022
<b>Characteristics of technology:</b>	I <sup>st</sup> spray of of Emamectin benzoate 5% SG @ 2 gm,/10lit. water at flowering stage and 2 <sup>nd</sup> after 20 days interval, at pod formation stage spray of chlorantraniliprole 18.5% SC (Coragen) @ 1.5 ml/10 lit. water I <sup>st</sup> spray of Brahmastra@15-20 lit/ha at the time of flowering stage and 2 <sup>nd</sup> spray of agniastra @15-20 lit/ha in time of pod formation and miliking stage , interval of 15 days
<b>Name of Crop/Enterprises:</b>	Pigeon pea
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

<b>10.Name of Discipline</b>	Plant Protection
------------------------------	------------------

<b>Title of on.farm trial:</b>	Assessment of management practice for control of pod borer in Soybean
<b>Year/Season:</b>	2023/ Kharif
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	Low yield of pigeon pea due to attack of pod borer. Total acreage approx. 5000 ha & pod borer is serious problem in Soybean cultivation (more than 90% area is affected)
<b>Thematic area:</b>	IPM
<b>No of trials:</b>	10
<b>No. of farmers involved</b>	10
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice.	Use of pesticide at the time of infestation
T2 –Recommended Practice.	1 <sup>st</sup> spray of of Emamectin benzoate 5% SG @ 2 gm./10lit. water at flowering stage and 2 <sup>nd</sup> after 20 days interval, at pod formation stage spray of chlorantraniliprole 18.5% SC (Coragen) @ 1.5 ml/10 lit. water
T3. Recommended Practice.	1 <sup>st</sup> spray of Brahmastra@ 15-20 lit/ha at the time of flowering stage and 2 <sup>nd</sup> spray of agniastra @ 15-20 lit/ha in time of pod formation and milking stage , interval of 15 days
<b>Date of sowing:</b>	July, 2023
<b>Date of harvesting:</b>	January, 2024
<b>Source of technology:</b>	RVSKVV Publication No. 141/2022
<b>Characteristics of technology:</b>	1 <sup>st</sup> spray of of Emamectin benzoate 5% SG @ 2 gm./10lit. water at flowering stage and 2 <sup>nd</sup> after 20 days interval, at pod formation stage spray of chlorantraniliprole 18.5% SC (Coragen) @ 1.5 ml/10 lit. water
	1 <sup>st</sup> spray of Brahmastra@ 15-20 lit/ha at the time of flowering stage and 2 <sup>nd</sup> spray of agniastra @ 15-20 lit/ha in time of pod formation and milking stage , interval of 15 days
<b>Name of Crop/Enterprises:</b>	Soybean
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

<b>11.Name of Discipline</b>	Plant Protection
<b>Title of on.farm trial:</b>	Assessment of management practices to control of sucking pest in watermelon (II <sup>nd</sup> Year)
<b>Year/Season:</b>	2023-24/ Rabi
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	Low yield of watermelon due to attack of sucking pest. Total acreage approx 1000ha. & pod borer is serious problem in pigeon pea cultivation (more than 75% affected area).
<b>Thematic area:</b>	IPM
<b>No of trials:</b>	10
<b>No. of farmers involved</b>	10
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice.	Use of pesticide at the time of infestation
T2 –Recommended Practice.	Use of yellow sticky trap @ 5/ acre followed by one spray during the infestation period of Spiromesifen 22.9% SC @ 1.5 ml/lit.
T3. Recommended Practice.	Use of yellow and blue sticky trap @ 3:3/acre followed by two spray during the infestation period of Spiromesifen 22.9% SC @ 1.5 ml/lit.
<b>Date of sowing:</b>	November, 2023
<b>Date of harvesting:</b>	March, 2024
<b>Source of technology:</b>	Dr. Satyagopal Korlapati, IAS, Director General, Department of Agriculture & Cooperation ,Govt of India
<b>Characteristics of technology:</b>	Use of yellow sticky trap @ 5/ acre followed by one spray during the infestation period of Spiromesifen 22.9% SC @ 1.5 ml/lit.

	Use of yellow and blue sticky trap @ 3:3/acre followed by two spray during the infestation period of Spiromesifen 22.9% SC @ 1.5 ml/lit.
<b>Name of Crop/Enterprises:</b>	Watermelon
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

<b>12.Name of Discipline</b>	Plant Protection
<b>Title of on.farm trial:</b>	Assessment of Propiconazole 25 % E.C. for management of Powdery Mildew in Coriander
<b>Year/Season:</b>	Rabi 2023-24
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	Low yield of coriander seed due to heavy infection of Powdery Mildew (Area 15000 ha. & affected area 80% )
<b>Thematic area:</b>	IDM
<b>No of trials:</b>	10
<b>No. of farmers involved</b>	10
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice.	Sulphur 80 % WP @ 2 kg/ha at 45 DAS
T2 –Recommended Practice.	Tebuconazole 25.9 EC@ 750 ml /ha at 30 & 45 DAS
T3. Recommended Practice.	Propiconazole 25 % E.C. @ 750 ml /ha at 30 & 45 DAS
<b>Date of sowing:</b>	November, 2023
<b>Date of harvesting:</b>	February2023
<b>Source of technology:</b>	Journal of Spice and Aromatic Crops Vol. 26(1) : 59-62 (2017)
<b>Characteristics of technology:</b>	Tebuconazole 25.9 EC@ 750 ml /ha at 30 & 45 DAS
	Propiconazole 25 % E.C. @ 750 ml /ha at 30 & 45 DAS
<b>Name of Crop/Enterprises:</b>	Coriander
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

<b>13.Name of Discipline</b>	Genetics & Plant Breeding
<b>Title of on.farm trial:</b>	Assesment of sorghum improved variety of Sorghum
<b>Year/Season:</b>	2023
<b>Farming situation:</b>	Rainfed
<b>Problem diagnosis:</b>	Low yield of sorghum due to use of old variety
<b>Thematic area:</b>	Varietal evaluation
<b>No of trials:</b>	10
<b>No. of farmers involved</b>	10
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice.	PKV – Ashvin
T2 –Recommended Practice.	Hybrid JK -22
T3. Recommended Practice.	Parbhani Shakti -1
<b>Date of sowing:</b>	July 2023
<b>Date of harvesting:</b>	October 2023
<b>Source of technology:</b>	VNMKV Parbhani 2014

<b>Characteristics of technology:</b>	Hybrid JK -22 : High Grain and Fodder Yield with Resistance to Lodging Parbhani Shakti -1 : “Parbhani Shakti”, India’s first biofortified sorghum variety with enhanced zinc and iron, offers hope in tackling undernutrition and preserving food value in the face of climate change
<b>Name of Crop/Enterprises:</b>	Sorghum
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

<b>14.Name of Discipline</b>	Genetics & Plant Breeding
<b>Title of on.farm trial:</b>	Assesment pf pearl millet variety AHB -1200 and Dhanshakti for crop diversification
<b>Year/Season:</b>	2023
<b>Farming situation:</b>	Rainfed
<b>Problem diagnosis:</b>	Less production of minor millets
<b>Thematic area:</b>	Varietal Evaluation
<b>No of trials:</b>	10
<b>No. of farmers involved</b>	10
<b>Type of OFT (Assessment/ Refinement):</b>	Assesment
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice.	MP-205
T2 –Recommended Practice.	AHB-1200
T3. Recommended Practice.	Dhanshakti
<b>Date of sowing:</b>	July 2023
<b>Date of harvesting:</b>	October 2023
<b>Source of technology:</b>	VNMKV, Parbhani (2014 & 2018)
<b>Characteristics of technology:</b>	AHB-1200 Fe- first biofortified variety having high iron content Dhanshakti - bred for high iron content, is an early maturing open-pollinated variety that has the highest level of iron .
<b>Name of Crop/Enterprises:</b>	Pearl Millet
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

<b>15.Name of Discipline</b>	Genetics & Plant Breeding
<b>Title of on.farm trial:</b>	Assessment of Chickpea improved variety (1 <sup>st</sup> Year)
<b>Year/Season:</b>	2023-24/ Rabi
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	Low yield of chickpea due to use of old variety JG-130
<b>Thematic area:</b>	Varietal Evaluation
<b>No of trials:</b>	10
<b>No. of farmers involved</b>	10
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice.	JG-130
T2 –Recommended Practice.	RVG-203- 2014
T3. Recommended Practice.	RVG-204 -2021
<b>Date of sowing:</b>	October, 2022
<b>Date of harvesting:</b>	March 2023

<b>Source of technology:</b>	RVSKVV Gwalior 2014 & 2021
<b>Characteristics of technology:</b>	RVG-203- 2012 ( moderately resistant to wilt, dry root rot maturity 100 days Yield 19-20 qntrs /ha) RVG-204 -2021( Tolerant to wilt, Amenable to machine harvesting (desi type variety)
<b>Name of Crop/Enterprises:</b>	Chickpea
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

<b>16.Name of Discipline</b>	Genetics & Plant Breeding
<b>Title of on.farm trial:</b>	Assessment of HYV of Coriander
<b>Year/Season:</b>	2023-24/ Rabi
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	Low yield of coriander due to use of local variety
<b>Thematic area:</b>	Varietal Evaluation
<b>No of trials:</b>	10
<b>No. of farmers involved</b>	10
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice.	Local variety
T2 –Recommended Practice.	ACR-1
T3. Recommended Practice.	ACR-2
<b>Date of sowing:</b>	November, 2023
<b>Date of harvesting:</b>	February2023
<b>Source of technology:</b>	NRCSS Ajmer 2015 & 2017
<b>Characteristics of technology:</b>	ACR-1 – Stem gall resistant variety. Plant height of 113.9 cm The variety is also suitable for seed & green leaf production. Av. Yield 14 q/ hac ACR-2 –Suitable for seed production, seed shape is ovule suitable for export Avg yield 169 q/ ha resistant to powdery mildew
<b>Name of Crop/Enterprises:</b>	Coriander
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

<b>17.Name of Discipline</b>	Animal Husbandry
<b>Title of on.farm trial:</b>	Assessment of Bypass fat in dairy cattle (II <sup>nd</sup> Year)
<b>Year/Season:</b>	2023/ Kharif
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	Low milk production (20%) from high lactating Dairy cattle due to low dietary energy intake
<b>Thematic area:</b>	Rural smallholder dairy production system Feeding management
<b>No of trials:</b>	10
<b>No. of farmers involved</b>	10
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice.	Imbalance concentrate feed with wheat straw (8kg/day) and green fodder(18kg/day)
T2 –Recommended Practice.	Recommended dose of balance concentrate feed @ 1kg / 2.5 liter of milk production + wheat straw (8kg/day) + green fodder(15kg/day) + supplement of by pass fat @ 10 gm / liter / animal / day after calving for two month.

<b>Date of sowing:</b>	July 2023
<b>Date of harvesting:</b>	September 2023
<b>Source of technology:</b>	NDRI, Karnal 2014
<b>Characteristics of technology:</b>	Bypass fat supplementation : Recommended dose of balance concentrate feed @ 1kg / 2.5 liter of milk production + wheat straw (8kg/day) + green fodder(15kg/day) + supplement of by pass fat @ 10 gm / liter / animal / day after calving for two month.
<b>Name of Crop/Enterprises:</b>	Cow
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

<b>18.Name of Discipline</b>	Animal Husbandry
<b>Title of on.farm trial:</b>	Assessment of Sonali poultry breed in backyard poultry (II <sup>nd</sup> Year)
<b>Year/Season:</b>	2023-24/ Kharif
<b>Farming situation:</b>	Rainfed
<b>Problem diagnosis:</b>	Local breed, less egg laying capacity
<b>Thematic area:</b>	Poultry production and management
<b>No of trials:</b>	10
<b>No. of farmers involved</b>	10
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice.	Rearing of Satpuda Desi poultry bird in backyard poultry
T2 –Recommended Practice.	Rearing of Improved backyard breed Sonali (RIR x Fayomi) in backyard poultry
T3- Recommended Practice.	Rearing of Kaveri Poultry breed
<b>Date of sowing:</b>	September 2023
<b>Date of harvesting:</b>	December 2023
<b>Source of technology:</b>	Bihar Veterinary College ,Patna ,Bihar
<b>Characteristics of technology:</b>	Sonali Improved cross breed of RIR x Fayomi ,156 eggs/hen/year, lowest mortality and Kaveri poultry breed
<b>Name of Crop/Enterprises:</b>	Poultry
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

<b>19.Name of Discipline</b>	Animal Husbandry
<b>Title of on.farm trial:</b>	Assessment of bypass protein on milk production in dairy Buffalo
<b>Year/Season:</b>	2023/ Rabi
<b>Farming situation:</b>	Rainfed
<b>Problem diagnosis:</b>	Low milk yield and income due to conventional ration feeding
<b>Thematic area:</b>	Rural smallholder dairy production system Feeding management
<b>No of trials:</b>	10
<b>No. of farmers involved</b>	10
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice.	T1- Farmers Practice use of choker & cakes (conventional feed)
T2 –Recommended Practice.	T2- Use of By- Pass protein @ 50 gm per animal per day after calving for three month
<b>Date of sowing:</b>	July 2023

<b>Date of harvesting:</b>	September 2023
<b>Source of technology:</b>	IVRI, Izatnagar – 2009
<b>Characteristics of technology:</b>	Bypass Protein supplementation : By- Pass protein @ 50 gm per animal per day after calving for three month
<b>Name of Crop/Enterprises:</b>	Buffalo
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

<b>20.Name of Discipline</b>	Animal Husbandry
<b>Title of on.farm trial:</b>	Assessment of chelated trace minerals supplement on fertility and milk production in Indigenous cattle
<b>Year/Season:</b>	2023/ Rabi
<b>Farming situation:</b>	Rainfed
<b>Problem diagnosis:</b>	Low fertility (60%) and milk production (20%) from Indigenous cattle due to lack of trace minerals. Animal affected 70%
<b>Thematic area:</b>	Rural smallholder dairy production system Feeding management
<b>No of trials:</b>	10
<b>No. of farmers involved</b>	10
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment/ refinement:</b>	
<b>T1 – Farmers Practice.</b>	Traditional Practice of feeding
<b>T2 –Recommended Practice.</b>	Supplement of trace minerals @ 40 gm / animal / day after calving up to three months
<b>Date of sowing:</b>	August 2023
<b>Date of harvesting:</b>	October 2023
<b>Source of technology:</b>	NDRI, Karnal 2012
<b>Characteristics of technology:</b>	Chelated trace minerals supplementation : Supplement of trace minerals @ 40 gm / animal / day after calving up to three months
<b>Name of Crop/Enterprises:</b>	Indigenous Dairy cattle
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

<b>21.Name of Discipline</b>	Agri. Extension
<b>Title of on.farm trial:</b>	Study on adoption dynamics and impact of soybean variety JS-2029
<b>Year/Season:</b>	Kharif/ 2023
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	Low income due to high use of old variety i.e.JS-335
<b>Thematic area:</b>	EXT & TOT
<b>No of trials:</b>	-
<b>No. of farmers involved</b>	25
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment/ refinement:</b>	
<b>T1 – Farmers Practice.</b>	JS-335
<b>T2 –Recommended Practice.</b>	JS-2029
<b>T3 –Recommended Practice.</b>	JS-2069
<b>Date of sowing:</b>	July 2023
<b>Date of harvesting:</b>	October 2023
<b>Source of technology:</b>	JNKVV, Jabalpur



<b>Characteristics of technology:</b>	<b>JS-2029</b> Maturity 90-95 days Yield 25-30qt/ha Resistant to YMV, pest and charcoal rot	<b>JS-2069</b> Maturity 93-95 days Yield 25-28qt/ha Multiple Resistant to disease
<b>Name of Crop/Enterprises:</b>	Soybean	
<b>Recommendations for Farmers</b>	-	
<b>Recommendations for Deptt. Personnel</b>	-	
<b>Feedback</b>	-	

<b>22.Name of Discipline</b>	Agri. Extension
<b>Title of on.farm trial:</b>	Study on different extension methods (Training & Demonstration) for dissemination of agricultural technology in CFLD Oilseed crop Soybean variety RVS 2001-4
<b>Year/Season:</b>	Kharif/ 2023
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	Low income due to use of old variety i.e. JS-335
<b>Thematic area:</b>	EXT & TOT
<b>No of trials:</b>	25
<b>No. of farmers involved</b>	25
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice.	Using informal methods of technology diffusion like Friends, Neighbors, Input dealers etc
T2 –Recommended Practice.	Training
T3 –Recommended Practice.	Demonstration
<b>Date of sowing:</b>	July 2023
<b>Date of harvesting:</b>	October 2023
<b>Source of technology:</b>	JNKVV Jabalpur
<b>Characteristics of technology:</b>	RVS 2001-4 : Maturity - 93 days, Yield – 25 qtl./ha. & resistant to YMV
<b>Name of Crop/Enterprises:</b>	Soybean
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

<b>23.Name of Discipline</b>	Agri. Extension
<b>Title of on.farm trial:</b>	Assessment of effective extension methods for TOT of Natural Farming in Pigeonpea
<b>Year/Season:</b>	Kharif/ 2023-24
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	Poor soil health, high cost of cultivation and poor quality produce
<b>Thematic area:</b>	TOT & EXT
<b>No of trials:</b>	25
<b>No. of farmers involved</b>	25
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice.	Using informal methods of technology diffusion like Friends, Neighbors, Input dealers etc
T2 –Recommended Practice.	Training
T3 –Recommended Practice.	Demonstration
<b>Date of sowing:</b>	July 2023
<b>Date of harvesting:</b>	February 2024

<b>Source of technology:</b>	JNKVV Jabalpur
<b>Characteristics of technology:</b>	Natural Farming Components: Neemastra, Brahmastra & Dasparni Ark
<b>Name of Crop/Enterprises:</b>	Pigeonpea
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

<b>24.Name of Discipline</b>	Agri. Extension
<b>Title of on.farm trial:</b>	Assessment of effective extension methods for TOT of Natural Farming in Chickpea
<b>Year/Season:</b>	Rabi/ 2023-24
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	Poor soil health, high cost of cultivation and poor quality produce
<b>Thematic area:</b>	TOT
<b>No of trials:</b>	25
<b>No. of farmers involved</b>	25
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice.	Using informal methods of technology diffusion like Friends, Neighbors, Input dealers etc
T2 –Recommended Practice.	Training
T3 –Recommended Practice.	Demonstration
<b>Date of sowing:</b>	November 2023
<b>Date of harvesting:</b>	March 2024
<b>Source of technology:</b>	JNKVV Jabalpur
<b>Characteristics of technology:</b>	Natural Farming Components: Neemastra, Brahmastra & Dasparni Ark
<b>Name of Crop/Enterprises:</b>	Chickpea
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

#### Information about Extension OFT:

##### 21. Information about Extension OFT: Kharif

<b>Title</b>	Study on adoption dynamics and impact of soybean variety JS-2029	
<b>Season &amp; Year</b>	Kharif/ 2023	
<b>Problem identified</b>	Low income due to high use of old variety i.e.JS-335	
<b>Thematic Area</b>	EXT & TOT	
<b>Farming situation</b>	Irrigated	
<b>Name of Technology Intervention under study</b>	<b>T<sub>2</sub></b>	JS-2029
	<b>T<sub>3</sub></b>	JS-2069
<b>Farmers Practice (T<sub>1</sub>)</b>	JS-335	
<b>No. of replication (Farmers)</b>	25 , increase in income, adoption & horizontal spread	

#### Results / findings

Performance indicators/ parameters	Frequency	Unit/ details (Response)								
		High	%	Rank	Medium	%	Rank	Low	%	Rank
Decrease in cost of cultivation	25	-	-	-	-	-	-	-	-	-
Increase in production	25	-	-	-	-	-	-	-	-	-
Increase in income	25	-	-	-	-	-	-	-	-	-
Adoption	25	-	-	-	-	-	-	-	-	-
Horizontal Spread	25									

## 22. Information about Extension OFT: Kharif

<b>Title</b>	Study on different extension methods (Training & Demonstration) for dissemination of agricultural technology in CFLD Oilseed crop Soybean variety RVS 2001-4									
<b>Season &amp; Year</b>	Kharif/ 2023									
<b>Problem identified</b>	Low income due to high use of old variety i.e.JS-335									
<b>Thematic Area</b>	EXT & TOT									
<b>Farming situation</b>	Irrigated									
<b>Name of Technology Intervention under study</b>	<b>T<sub>2</sub></b>	Training								
	<b>T<sub>3</sub></b>	Demonstration								
<b>Farmers Practice (T<sub>1</sub>)</b>	Using informal methods of technology diffusion like Friends, Neighbors, Input dealers etc									
<b>No. of replication (Farmers)</b>	25 &									

### Results / findings

Performance indicators/ parameters	Frequency	Unit/ details (Response)								
		High	%	Rank	Medium	%	Rank	Low	%	Rank
Knowledge (%)	25	-	-	-	-	-	-	-	-	-
Extent of Utilization (%)	25	-	-	-	-	-	-	-	-	-
Extent of Dissemination (%)	25	-	-	-	-	-	-	-	-	-
Applicability (%)	25	-	-	-	-	-	-	-	-	-

## 23. Information about Extension OFT: Kharif

<b>Title</b>	Assessment of effective extension methods for TOT of Natural Farming in Pigeonpea									
<b>Season &amp; Year</b>	Kharif/ 2023-24									
<b>Problem identified</b>	Poor soil health, high cost of cultivation and poor quality produce									
<b>Thematic Area</b>	EXT & TOT									
<b>Farming situation</b>	Irrigated									
<b>Name of Technology Intervention under study</b>	<b>T<sub>2</sub></b>	Training								
	<b>T<sub>3</sub></b>	Demonstration								
<b>Farmers Practice (T<sub>1</sub>)</b>	Using informal methods of technology diffusion like Friends, Neighbors, Input dealers etc									
<b>No. of replication (Farmers)</b>	25 &									

### Results / findings

Performance indicators/ parameters	Frequency	Unit/ details (Response)								
		High	%	Rank	Medium	%	Rank	Low	%	Rank
Knowledge (%)	25	-	-	-	-	-	-	-	-	-
Extent of Utilization (%)	25	-	-	-	-	-	-	-	-	-
Extent of Dissemination (%)	25	-	-	-	-	-	-	-	-	-
Applicability (%)	25	-	-	-	-	-	-	-	-	-

## 24. Information about Extension OFT: Kharif

<b>Title</b>	Assessment of effective extension methods for TOT of Natural Farming in Chickpea									
<b>Season &amp; Year</b>	Rabi/ 2023-24									
<b>Problem identified</b>	Poor soil health, high cost of cultivation and poor quality produce									
<b>Thematic Area</b>	EXT & TOT									
<b>Farming situation</b>	Irrigated									
<b>Name of Technology Intervention under study</b>	<b>T<sub>2</sub></b>	Training								
	<b>T<sub>3</sub></b>	Demonstration								
<b>Farmers Practice (T<sub>1</sub>)</b>	Using informal methods of technology diffusion like Friends, Neighbors, Input dealers etc									
<b>No. of replication (Farmers)</b>	25									

### Results / findings

Performance indicators/ parameters	Frequency	Unit/ details (Response)								
		High	%	Rank	Medium	%	Rank	Low	%	Rank
Knowledge (%)	25	-	-	-	-	-	-	-	-	-
Extent of Utilization (%)	25	-	-	-	-	-	-	-	-	-

Extent of Dissemination (%)	25	-	-	-	-	-	-	-	-	-
Applicability (%)	25	-	-	-	-	-	-	-	-	-

## Frontline Demonstrations

### Details of FLDs to be organized (Based on soil test analysis)

S. No.	Crop	Thematic area	Technology for demonstration	Critical inputs	Season and year	Area (ha)	No. of farmers/demonstration	Parameters identified for performance evaluation
1	Soybean	Weed Management	Demonstration of diclosulam as pre emergence weedicide in soybean	Diclosulam	Kharif 2023	4	20	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio
2	Sweet corn	Crop Diversification	Demonstration of Hi- Brix 39/Hi-Brix 53 Sweet Corn variety	Sweet Corn Seed	Kharif 2023	2	10	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio
3	Wheat	Varietal Evaluation	Demonstration of high yielding wheat variety HI-1544	Wheat Seed	Rabi 2023	2	10	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio
4	Pearl millet	Varietal Evaluation	Demonstration of High yielding Variety of pearl millet	(As per availability of research variety of Institute)	Kharif 2023	2	10	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio
5	Vegetables & Fruits	Nutritional security & Income Generation	Demonstration of nutritional kitchen garden	Kitchen Garden Kit & Nutritional plants	Kharif 2023	2	10	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio
6	Banana	Quality Production	Demonstration on skirting bag to control biotic and abiotic stress for quality production banana	Skirting bag	Kharif 2023	2	10	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio
7	Onion	Varietal Evaluation	Demonstration on onion variety Bhima Shakti/ Red	Onion Seed	Rabi 2023	2	10	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio
8	Okra	Varietal Evaluation	Demonstration of Okra variety Kashi Lalima	Okra seed	Kharif 2023	2	10	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio
9	Sugarcane	Waste Decomposer	Demonstration of waste decomposer in Sugarcane	Waste decomposer	Kharif 2023	2	10	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio
10	Pigeon Pea	IDM	Demonstration for management of Fusarium wilt disease in Pigeon	Trichoderma	Kharif 2023	4	20	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio

			Pea					
11	Chickpea	IDM	Demonstration for management of Fusarium wilt disease in chickpea	Trichoderma	Rabi 2023	4	20	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio
12	Maize	IPM	Demonstration for management of Fall army worm in Rabi Maize	Insecticide	Rabi 2023	4	20	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio
13	Wheat	Varietal Evaluation	Demonstration bio fortified variety DBW-187(karan vandana) introduction of wheat rabi season	wheat Seed	Rabi 2023-24	2	10	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio
14	KODO	Varietal Evaluation	Demonstration of minor millets KODO JK-137	Seed	Kharif 2023	2	10	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio
15	Gram	Varietal Evaluation	Demonstration of Gram improved Variety Phule Vikaram	Gram	Rabi 2023	2	10	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio
16	Kutki	Varietal Evaluation	Demonstration of minor millets KUTKI JK-4	Seed	Kharif 2023	2	10	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio
17	Buffalo	Disease management	Demonstration of control of Mastitis in Buffalo	Vitamin E and Selenium	Kharif 2023	10 animal	10	% reduction in Mastitis and Milk Yield(Lit/day/Bufalo)
18	Cow	Feed management	Demonstration of Probiotics in Dairy Cattle	Probiotics	Kharif 2023	10 animal	10	Milk Yield (lit/cow/day)
19	Quail	Production Management	Demonstration of Japanese Quail	Japanese Quail	Rabi 2023	30 birds/farmer	10	BW/bird, B:C Ratio
20	Green Fodder	Fodder Management	Demonstration of Berseem green fodder feeding in dairy cattle	Berseem	Rabi 2023	0.2 ha	10	Milk yield/day /lit, B:C Ratio
21	Vegetables & Fruits	Nutritional security & income generation	Demonstration on nutritional kitchen garden	Kitchen Garden Kit	Rabi 2023-24	10	10	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio
22	Jowar	ITK	Demonstration of ITK in Green Chilli	Cow dung 25 kg/acre, Desi Cow Urine 20lt/acre & Rice Starch 15lt/acre	Kharif 2023	20	20	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio

23	Pearl Millet	Varietal Evaluation	Demonstration on Bio fortified Pearl millet variety RHB-234	Pearl millet s Seed	Kharif 2023	10	10	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio
24	Banana	Waste Decomposer	Demonstration of waste decomposer in banana	Waste Decomposer	Rabi 2023-24	25	25	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio

#### Extension and Training activities under FLDs

S. No.	Activity	No. of activities	Month	Number of participants
1	Field days	24	Crop Harvesting Period	200
2	Farmers Training	24	Crop Harvesting Period	250
3	Media coverage	As per need	-	-
4	Training for extension functionaries	As per need	-	-

#### Livestock Enterprises

Enterprise	Breed	No. of farmers	No. of animals, poultry birds etc.	Critical inputs	Performance parameters / indicators	* Data on parameter in relation to technology demonstrated	
						Demo.	Local check
Buffalo (Disease Management)	-	10	10	Vitamin E and Seleniom	% reduction in Mastitis and Milk Yield(Lit/day/ Buffalo)	-	-
Cow (Feeding Management)	-	10	10	Probiotics	Milk Yield (lit/cow/day) , B:C Ratio	-	-
Quail	Japanese Quail	10	30	Japanese Quail	BW/bird, B:C Ratio	-	-
Cow (Fodder Management)	-	10	10	Berseem	Milk Yield (lit/cow/day) , B:C Ratio	-	-

\*Milk production, meat production, egg production, reduction in disease incidence etc.

#### Other Enterprises

Enterprise	Variety/ breed/Species /others	No. of farmers	No. of Units/ area	Critical inputs	Performance parameters/ indicators	Data on parameter in relation to technology demonstrated	
						Demo.	Local check
-	-	-	-	-	-	-	-

#### Cluster Demonstration of Oilseed and Pulses under NFSM (2023-24)

Sl. No.	Crop	Thematic area	Technology for demonstration	Critical inputs	Season and year	Area (ha)	No. of farmers/ demonstration	Parameters identified
1	Soybean	Oilseed	RVS 2001-04	Seed (As per Fund availability)	Kharif 2023	20	50	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio
2	Pigeon pea	Pulses	Rajeshwari	Seed (As per Fund availability)	Kharif 2023-24	20	50	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio
3	Chickpea	Pulses	RVG 203	Seed (As per Fund availability)	Rabi 2023-24	20	50	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.),

								Net Return (Rs./ha.) & Benefit Cost Ratio
4	Green gram	Pulses	Virat	Seed (As per Fund availability)	Zaid 2024	20	50	Yield (qtl./ha.), Cultivation Cost (Rs./ha.), Gross Return (Rs./ha.), Net Return (Rs./ha.) & Benefit Cost Ratio

**Extension and Training activities under CFLDs Oilseed and Pulses**

S. No.	Activity	No. of activities	Month	Number of participants
1	Field days	04	Crop Harvesting Period	100
2	Farmers Training	04	Crop Sowing Period	100
3	Media coverage	08	-	-
4	Training for extension functionaries	-	-	-

**Training (Including the sponsored and FLD training programmes):**

**A) ON CAMPUS**

Thematic Area	No. of Courses	Duration (Days)	No. of Participants			SC/ST			Grand Total	
			Others			Male	Female	Total		
			Male	Female	Total					
<b>(A) FARMERS &amp; FARM WOMEN</b>										
<b>I Crop Production</b>										
Weed Management	01	01	10	-	10	10	05	15	<b>25</b>	
Resource Conservation Technologies	01	01	10	-	10	10	05	15	<b>25</b>	
Integrated Farming	01	01	10	-	10	10	05	15	<b>25</b>	
Water management	01	01	10	-	10	10	05	15	<b>25</b>	
Seed production	05	05	50	-	50	50	25	75	<b>125</b>	
Integrated Crop Management	01	01	10	-	10	10	05	15	<b>25</b>	
<b>Total</b>	<b>10</b>	<b>10</b>	<b>100</b>	<b>-</b>	<b>100</b>	<b>100</b>	<b>50</b>	<b>150</b>	<b>250</b>	
<b>II Horticulture</b>										
<b>a) Vegetable &amp; fruit Crops</b>										
Protective cultivation (Green Houses, Shade Net etc.)	01	01	10	-	10	10	05	15	<b>25</b>	
<b>b) Fruits</b>										
-	-	-	-	-	-	-	-	-	-	
<b>c) Ornamental Plants</b>										
-	-	-	-	-	-	-	-	-	-	
<b>d) Plantation crops</b>										
-	-	-	-	-	-	-	-	-	-	
<b>e) Tuber crops</b>										
-	-	-	-	-	-	-	-	-	-	
<b>f) Spices</b>										
Production and Management technology	01	01	10	-	10	10	05	15	<b>25</b>	
<b>g) Medicinal and Aromatic Plants</b>										
-	-	-	-	-	-	-	-	-	-	

Thematic Area	No. of Courses	Duration (Days)	No. of Participants							Grand Total
			Others			SC/ST				
			Male	Female	Total	Male	Female	Total		
<b>Total</b>	<b>02</b>	<b>02</b>	<b>20</b>	<b>-</b>	<b>20</b>	<b>20</b>	<b>10</b>	<b>30</b>	<b>50</b>	
<b>III Soil Health and Fertility Management</b>										
Soil fertility management	02	02	50	-	-	50	-	-	100	
Production and use of organic inputs	01	01	25	-	-	25	-	-	25	
Soil and Water Testing	02	02	50	-	-	50	-	-	100	
<b>Total</b>	<b>05</b>	<b>05</b>	<b>125</b>	<b>-</b>	<b>-</b>	<b>125</b>	<b>-</b>	<b>-</b>	<b>225</b>	
<b>IV Livestock Production and Management</b>										
Poultry Management	02	02	05	20	25	05	20	25	50	
Disease Management	02	02	05	20	25	05	20	25	50	
Feed management	01	01	05	20	25	-	-	-	25	
<b>Total</b>	<b>05</b>	<b>05</b>	<b>15</b>	<b>60</b>	<b>75</b>	<b>10</b>	<b>40</b>	<b>50</b>	<b>125</b>	
<b>V Home Science/Women empowerment</b>										
Household food security by kitchen gardening and nutrition gardening	02	02	-	20	20	20	10	30	50	
<b>Total</b>	<b>02</b>	<b>02</b>	<b>-</b>	<b>20</b>	<b>20</b>	<b>20</b>	<b>10</b>	<b>30</b>	<b>50</b>	
<b>VI Agril. Engineering</b>										
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	
<b>VII Plant Protection</b>										
Integrated Pest Management	04	04	30	10	40	40	20	60	100	
Integrated Disease Management	02	02	10	10	20	20	10	50	50	
<b>Total</b>	<b>06</b>	<b>06</b>	<b>40</b>	<b>20</b>	<b>60</b>	<b>60</b>	<b>30</b>	<b>110</b>	<b>150</b>	
<b>VIII Fisheries</b>										
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	
<b>IX Production of Inputs at site</b>										
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	
<b>X Capacity Building and Group Dynamics</b>										
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	
<b>XI Agro.forestry</b>										
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	
<b>XII Others (Pl. Specify)</b>										
<b>Grand Total</b>	<b>30</b>	<b>30</b>	<b>300</b>	<b>100</b>	<b>275</b>	<b>335</b>	<b>140</b>	<b>370</b>	<b>850</b>	
<b>(B) RURAL YOUTH</b>										
Seed production	02	06	30	-	30	-	-	-	30	
Vermi.culture	01	03	15	-	15	-	-	-	15	
<b>TOTAL</b>	<b>03</b>	<b>09</b>	<b>45</b>	<b>-</b>	<b>45</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>45</b>	
<b>(C) EXTENSION PERSONNEL</b>										



Thematic Area	No. of Courses	Duration (Days)	No. of Participants							Grand Total
			Others			SC/ST			Total	
			Male	Female	Total	Male	Female	Total		
Productivity enhancement in field crops	02	02	20	04	24	16	-	16	40	
Integrated Pest Management	01	01	10	02	12	08	-	08	20	
<b>TOTAL</b>	<b>03</b>	<b>03</b>	<b>30</b>	<b>06</b>	<b>36</b>	<b>24</b>	<b>-</b>	<b>24</b>	<b>60</b>	

B)

**OFF CAMPUS**

Thematic Area	No. of Courses	Duration (days)	No. of Participants							Grand Total
			Others			SC/ST			Total	
			Male	Female	Total	Male	Female	Total		
<b>(A) FARMERS &amp; FARM WOMEN</b>										
<b>I Crop Production</b>										
Weed Management	01	01	10	-	10	10	05	15	25	
Resource Conservation Technologies	01	01	10	-	10	10	05	15	25	
Cropping Systems	01	01	10	-	10	10	05	15	25	
Crop Diversification	01	01	10	-	10	10	05	15	25	
Integrated Farming	01	01	10	-	10	10	05	15	25	
Seed production	05	05	50	-	50	50	25	75	125	
<b>Total</b>	<b>10</b>	<b>10</b>	<b>100</b>	<b>-</b>	<b>100</b>	<b>100</b>	<b>50</b>	<b>150</b>	<b>250</b>	
<b>II Horticulture</b>										
<b>a) Vegetable Crops</b>										
-	-	-	-	-	-	-	-	-	-	
<b>b) Fruits</b>										
Management of young plants/orchards	01	01	10	-	10	10	05	15	25	
<b>d) Plantation crops</b>										
-	-	-	-	-	-	-	-	-	-	
<b>e) Tuber crops</b>										
-	-	-	-	-	-	-	-	-	-	
<b>f) Spices</b>										
-	-	-	-	-	-	-	-	-	-	
<b>g) Medicinal and Aromatic Plants</b>										
-	-	-	-	-	-	-	-	-	-	
<b>Total</b>	<b>01</b>	<b>01</b>	<b>10</b>	<b>-</b>	<b>10</b>	<b>10</b>	<b>05</b>	<b>15</b>	<b>25</b>	
<b>III Soil Health and Fertility Management</b>										
Soil fertility management	02	02	50	-	50	-	-	-	50	
Integrated Nutrient Management	01	01	20	05	25	-	-	-	25	
Production and use of organic inputs	01	01	20	05	25	-	-	-	25	
Soil and Water Testing	01	01	20	05	25	-	-	-	25	
<b>Total</b>	<b>05</b>	<b>05</b>	<b>110</b>	<b>15</b>	<b>125</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>125</b>	
<b>IV Livestock Production and Management</b>										
Dairy Management	01	01	20	05	25	-	-	-	25	
Poultry Management	01	01	20	05	25	-	-	-	25	

Disease Management	01	01	20	05	25	-	-	-	25
Feed management	01	01	20	05	25	-	-	-	25
<b>Total</b>	<b>04</b>	<b>04</b>	<b>80</b>	<b>20</b>	<b>100</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>100</b>
<b>V Home Science/Women empowerment</b>									
Household food security by kitchen gardening and nutrition gardening	02	02	-	-	-	25	25	50	50
<b>Total</b>	<b>02</b>	<b>02</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>25</b>	<b>25</b>	<b>50</b>	<b>50</b>
<b>VI Agril. Engineering</b>	-	-	-	-	-	-	-	-	-
<b>VII Plant Protection</b>									
Integrated Pest Management	04	04	40	10	50	40	10	50	<b>100</b>
Integrated Disease Management	04	04	40	10	50	40	10	50	<b>100</b>
<b>Total</b>	<b>08</b>	<b>08</b>	<b>80</b>	<b>20</b>	<b>100</b>	<b>80</b>	<b>20</b>	<b>100</b>	<b>200</b>
<b>VIII Fisheries</b>	-	-	-	-	-	-	-	-	-
<b>IX Production of Inputs at site</b>	-	-	-	-	-	-	-	-	-
<b>X Capacity Building and Group Dynamics</b>									
-	-	-	-	-	-	-	-	-	-
<b>XI Agro.forestry</b>	-	-	-	-	-	-	-	-	-
<b>XII Others (Pl. Specify)</b>									
<b>Total</b>	-	-	-	-	-	-	-	-	-
<b>(B) RURAL YOUTH</b>									
Nursery Management of Horticulture Crops	01	03	15	-	15	-	-	-	15
Poultry Production Management	01	03	-	-	-	15	-	15	15
Natural Farming	01	03	15	-	15	-	-	-	15
<b>Total</b>	<b>03</b>	<b>09</b>	<b>30</b>	<b>-</b>	<b>30</b>	<b>15</b>	<b>-</b>	<b>15</b>	<b>45</b>
<b>(C) Extension Personnel</b>									
Value Addition	01	01	20	-	20	-	-	-	20
Natural Farming	01	01	20	-	20	-	-	-	20
Raising Additional Income through Intercropping in Banana	01	01	20	-	20	-	-	-	20
<b>Total</b>	<b>03</b>	<b>03</b>	<b>60</b>	<b>-</b>	<b>60</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>60</b>

#### Annexure – I: Experts discipline wise Training Programme

##### i) Farmers & Farm women

##### 1. On Campus

Month/ Tentative Date	Clientele	Title of the training programme	Duration in days	Number of participants						Grand Total
				Others			Number of SC/ST			
				Male	Female	Total	Male	Female	Total	
<b>1. Crop Production</b>										
June	FFW	Resource Conservation Technology	01	13	02	15	08	02	10	25
August	FFW	Water Management	01	13	02	15	08	02	10	25

October	FFW	Weed management	01	13	02	15	08	02	10	25
December	FFW	Cropping System	01	13	02	15	08	02	10	25
February	FFW	Integrated Farming System	01	13	02	15	08	02	10	25
<b>2. Plant Protection</b>										
June	FFW	Sucking pest management in water melon	01	13	02	15	08	02	10	25
August	FFW	Sucking pest management in cotton	01	13	02	15	08	02	10	25
October	FFW	Pest management technology in kharif crops	01	13	02	15	08	02	10	25
December	FFW	Wilt disease management in chickpea	01	13	02	15	08	02	10	25
February	FFW	IPM in rabi crops	01	13	02	15	08	02	10	25
<b>3. Horticulture</b>										
June	FFW	Nutritional kitchen garden	01	13	02	15	08	02	10	25
August	FFW	Nutritional kitchen garden	01	13	02	15	08	02	10	25
October	FFW	CMV disease management in banana	01	13	02	15	08	02	10	25
December	FFW	Production technology of spices	01	13	02	15	08	02	10	25
February	FFW	IPM in Banana	01	13	02	15	08	02	10	25
<b>4. Agriculture Extension (Capacity Building and Group Dynamics)</b>										
May	FFW	Soil Testing	01	13	02	15	08	02	10	25
July	FFW	ITK Technology	01	13	02	15	08	02	10	25
September	FFW	Soil Testing	01	13	02	15	08	02	10	25
November	FFW	ITK Technology	01	13	02	15	08	02	10	25
January	FFW	Post harvest management technology	01	13	02	15	08	02	10	25
<b>5. Genetics &amp; Plant Breeding</b>										
April	FFW	Seed germination testing	01	13	02	15	08	02	10	25
July	FFW	Seed production of spices	01	13	02	15	08	02	10	25
September	FFW	Seed production of wheat	01	13	02	15	08	02	10	25
November	FFW	FIR in rabi crops	01	13	02	15	08	02	10	25
January	FFW	Post harvest	01	13	02	15	08	02	10	25

		management of rabi crops								
<b>6. Livestock production</b>										
May	FFW	Backyard poultry management	01	13	02	15	08	02	10	25
July	FFW	Azolla production management	01	13	02	15	08	02	10	25
September	FFW	Disease management in poultry & goatery	01	13	02	15	08	02	10	25
November	FFW	Vaccination & their importance in small ruminants	01	13	02	15	08	02	10	25
January	FFW	Improved poultry breeds	01	13	02	15	08	02	10	25

## 2. Off Campus

Month/ Tentative Date	Clientele	Title of the training programme	Duration in days	Number of participants						Grand Total
				Others			Number of SC/ST			
				Male	Female	Total	Male	Female	Total	
<b>1. Crop Production</b>										
May	FFW	Weed Management	01	13	02	15	08	02	10	25
July	FFW	Integrated Farming	01	13	02	15	08	02	10	25
September	FFW	Integrated Crop Management	01	13	02	15	08	02	10	25
November	FFW	Resource Conservation Technology	01	13	02	15	08	02	10	25
January	FFW	Crop Diversification	01	13	02	15	08	02	10	25
<b>2. Plant Protection</b>										
May	FFW	Sigatoka disease Management in banana	01	13	02	15	08	02	10	25
July	FFW	YMV management in soybean	01	13	02	15	08	02	10	25
September	FFW	Pod borer management in pigeon pea & soybean	01	13	02	15	08	02	10	25
November	FFW	Soil & seed borne disease management	01	13	02	15	08	02	10	25
January	FFW	Fall worm army management in maize	01	13	02	15	08	02	10	25
<b>3. Horticulture</b>										
May	FFW	Rejuvenation	01	13	02	15	08	02	10	25

		of old orchards								
July	FFW	Nutritional kitchen garden	01	13	02	15	08	02	10	25
September	FFW	CMV disease management in banana	01	13	02	15	08	02	10	25
November	FFW	Fertigation technology in banana	01	13	02	15	08	02	10	25
December	FFW	Production technology of spices	01	13	02	15	08	02	10	25
January	FFW	Protected cultivation of vegetable crops	01	13	02	15	08	02	10	25
<b>4. Agriculture Extension (Capacity Building and Group Dynamics)</b>										
June	FFW	Natural Farming	01	13	02	15	08	02	10	25
August	FFW	Nutritional Kitchen Garden	01	13	02	15	08	02	10	25
October	FFW	Natural Farming	01	13	02	15	08	02	10	25
December	FFW	Nutritional Kitchen Garden	01	13	02	15	08	02	10	25
February	FFW	Use of drone technology in agriculture	01	13	02	15	08	02	10	25
<b>5. Genetics &amp; Plant Breeding</b>										
May	FFW	Seed production of soybean	01	13	02	15	08	02	10	25
June	FFW	FIR in kharif crops	01	13	02	15	08	02	10	25
August	FFW	Post harvest management of kharif crops	01	13	02	15	08	02	10	25
October	FFW	Seed production of chickpea	01	13	02	15	08	02	10	25
December	FFW	Seed production of sugarcane	01	13	02	15	08	02	10	25
<b>6. Livestock production</b>										
June	FFW	Feed & nutrition management	01	13	02	15	08	02	10	25
August	FFW	Green fodder production management	01	13	02	15	08	02	10	25
October	FFW	Goatery production management	01	13	02	15	08	02	10	25
December	FFW	Disease management in poultry	01	13	02	15	08	02	10	25

February	FFW	Silage making	01	13	02	15	08	02	10	25
<b>Vocational Training Programme for Rural Youth:</b>										
Month/ Tentative Date	Clientele	Title of the training programme	Duration in days	Number of participants						Grand Total
				Others			Number of SC/ST			
				Male	Female	Total	Male	Female	Total	
<b>Crop Production</b>										
April	RY	Quality seed production of kharif crops	03	10	02	13	02	00	02	15
<b>Horticulture</b>										
August	RY	Nursery management of horticulture crops	03	10	02	13	02	00	02	15
<b>Livestock production</b>										
January	RY	Poultry Production Management	03	10	02	13	02	00	02	15
<b>Genetics &amp; Plant Breeding</b>										
September	RY	Quality seed production of rabi crops	03	10	02	13	02	00	02	15
<b>Plant Protection</b>										
June	RY	Vermicompost Production Management	03	10	02	13	02	00	02	15
<b>Agriculture Extension (Capacity Building and Group Dynamics)</b>										
October	RY	Natural Farming	03	10	02	13	02	00	02	15

**Training Programme for Extension Functionaries:**

Month/ Tentative Date	Clientele	Title of the training programme	Duration in days	Number of participants						Grand Total
				Others			Number of SC/ST			
				Male	Female	Total	Male	Female	Total	
<b>Crop Production</b>										
September	EF	Seed production technology of rabi crops	01	05	05	10	05	05	10	20
<b>Horticulture</b>										
December	EF	Raising additional income through banana intercropping	01	05	05	10	05	05	10	20
<b>Livestock production</b>										
June	EF	Natural farming	01	05	05	10	05	05	10	20
<b>Genetics &amp; Plant Breeding</b>										
May	EF	Seed production technology of kharif crops	01	05	05	10	05	05	10	20
<b>Plant Protection</b>										
July	EF	Pest & Disease Management	01	05	05	10	05	05	10	20

Month/ Tentative Date	Clientele	Title of the training programme	Duration in days	Number of participants						Grand Total
				Others			Number of SC/ST			
				Male	Female	Total	Male	Female	Total	
<b>Agriculture Extension (Capacity Building and Group Dynamics)</b>										
August	EF	Value Addition & Food Processing	01	05	05	10	05	05	10	20

#### Sponsored Training Programmes

S. No.	Title	Thematic area	Duration n	Client PF/ RY/ EF	No. of courses	No. of participants						Sponsor ing agen cy
						Male		Female		Total		
						Other	SC/ST	Other	SC/ST	Other	SC/ST	
-	-	-	-	-	-	-	-	-	-	-	-	-

#### 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	28	-	-	600	-	-	12	-	-	612
Kisan Mela	01	-	-	200	-	-	20	-	-	220
Kisan Ghosthi	01	-	-	50	-	-	-	-	-	50
Exhibition	02	-	-	300	-	-	20	-	-	320
Film Show	24	-	-	500	-	-	10	-	-	510
Group meetings	As per need	-	-	-	-	-	-	-	-	-
Lectures delivered as resource persons	As per need	-	-	-	-	-	-	-	-	-
Newspaper coverage	As per need	-	-	-	-	-	-	-	-	-
Radio talks	30	-	-	-	-	-	-	-	-	-
TV talks	07	-	-	-	-	-	-	-	-	-
Popular articles	As per need	-	-	-	-	-	-	-	-	-
Extension Literature	As per need	-	-	-	-	-	-	-	-	-
Advisory Services	As per need	-	-	-	-	-	-	-	-	-
Scientific visit to farmers field	As per need	-	-	-	-	-	-	-	-	-
Farmers visit to KVK	As per need	-	-	-	-	-	-	-	-	-
Diagnostic visits	As per need	-	-	-	-	-	-	-	-	-
Exposure visits	10	-	-	180	-	-	12	-	-	192
Animal Health Camp	01	-	-	100	-	-	-	-	-	-
Self Help Group Conveners meetings	02	-	-	50	-	-	04	-	-	54
Celebration of important days (specify)	06	-	-	250	-	-	20	-	-	270
Others (Awariness Programme)	05	-	-	200	-	-	20	-	-	220
<b>Total</b>	<b>102</b>	-	-	<b>2100</b>	-	-	<b>118</b>	-	-	<b>2218</b>

#### Target for Production and supply of Technological products

##### Seed Materials

Category	Crop	Variety	Quantity (qtl.)
Cereals	Wheat	HI-1544/DBW-187	125
Oilseeds	Soybean	JS-2098 & JS-2069	50
Pulses	Pigeonpea	Rajeshwari	25
<b>Others (Spices)</b>	Turmeric	Selam	05

##### Planting Materials

Category	Crop	Variety	Quantity (Nos.)
Fruits	Lemon	-	500
Fruits	Jamun	-	500
Fruits	Jack Fruit	-	1000
Fruits	Custard Apple	-	2000
Fruits	Mango	-	2000
Vegetables	Chilli	Hybrid	5000
Vegetables	Tomato	Hybrid	2000
Vegetables	Brinjal	Hybrid	2000
Flowers	Marigold	Hybrid	500

#### Bio.products

Sl. No.	Product Name	Species	Quantity	
			No	(kg)/ (Its)
<b>Bioagents</b>				
-	-	-	-	-
<b>Biofertilizers</b>				
1	Vermicompost	-	-	10000
2	Vermis	Eisenia fetida	-	100
3	Ghanjivamrut	-	-	1000
<b>Bio Pesticides</b>				
1	Dasparni ark	-	-	10000
2	Brahmastra	-	-	10000

#### Livestock

S. No.	Type	Breed	Quantity	
			Nos	Kg
Cattle	Cow	Desi	2000	-
Sheep and Goat	Osmanabadi	Buck	10	-
Poultry	Poultry Bird	Kadaknath	300	-
	Poultry Bird	Desi	500	-
Fisheries	-	-	-	-
Others (Specify)	-	-	-	-

#### Literature to be Developed/Published

##### KVK News Letter

Date of start	Periodicity	Number of copies to be published
April	Quarterly	-
July	Quarterly	-
October	Quarterly	-
January	Quarterly	-

##### Details of Electronic Media to be Produced

S. No.	Type of media (CD / VCD / DVD / Audio.Cassette)	Title of the programme	Number
1	-	-	-

#### Success stories/Case studies identified for development as a case: CFLD (no.- 02)

Indicate the specific training need analysis tools/methodology followed for(Viz PRA, AES, line dept, ex trainees, interface, )

S. No.	Training	Need analysis tools/methodology followed
1	Identification of courses for farmers/farm women	Survey, line dept, ex trainees, interface
2	Rural Youth	Survey, line dept, ex trainees, interface
3	In.service personnel	Survey, line dept, ex trainees, interface
4	methodology for identifying OFTs/FLDs	Survey, line dept, ex trainees, interface



## Field activities

### Name of villages identified for adoption with block name:

S.No.	Name of Village	Name of Block	Distance of village from KVK (Km)
1	Titgaon	Khaknar	05
2	Mahalgulara	Khaknar	02
3	Sirpur	Khaknar	11
4	Hanumat Kheda	Khaknar	05
5	Sarola	Khaknar	02
6	Bhavasa	Burhanpur	31
7	Khamani	Burhanpur	32
8	Adgaon	Burhanpur	30

1. No. of farm families selected per village : 25
2. No. of survey/PRA to be conducted: 8

### 3.11. Activities of Soil and Water Testing Laboratory

Year of establishment: 2015

#### List of equipments purchased:

S. No.	Name of the Equipment	Qty.	Condition
1	Soil Testing Mini Kit	02	Not working

#### Details of samples analyzed so far: (2015-2017)

Details	No. of Samples	No. of Farmers (SHC)	No. of Villages	Amount realized
Soil Samples	2748	5775	39	604000/-
<b>Total</b>	<b>2748</b>	<b>5775</b>	<b>39</b>	<b>604000/-</b>

## LINKAGES

### Functional linkage with different organizations

Name of organization	Nature of linkage
ATARI, Jabalpur	Meetings, Reporting, Documentation, Awareness, Workshops, Seminars, Trainings & Mandatory Activities
DES, RVSKVV, Gwalior	Meetings, Reporting, Documentation, Awareness, Workshops, Seminars, Trainings & Mandatory Activities
COA, Khandwa	RAWE
DSR, Indore	TOT
NABARD	Training programme
IARI, Indore	TOT
ATMA	Capacity Building Training Programme, Package Development
District Horticulture Department	Training Programmes, Workshop
District Agriculture Department	FLD, Training Programmes, Farm School, Farmer Scientist Interface, Goshti
District Veterinary Department	FLD, Capacity Building Training Programme, Workshop
District Fishery Department	Meetings
BOI - RSETI	Exposure Visits, Trainings and Awareness Programmes
AIR Khandwa	Awareness
KVK Khandwa/ Khargone/ Indore	Exposure visits, Meetings, Telephonic Discussions

### Details of linkage with ATMA / NFSM

a) Is ATMA implemented in your district Yes

Name of Programme	Nature of linkage
Capacity Building Training Programme	Conduct training programmes

b) Give details of programmers implemented under National Horticultural Mission

Name of Programme	Nature of linkage
-	-

**Action plan for Flagship programmes implemented at KVK :** (NICRA, ARYA, Natural farming, CBBO, Seed Hub, Agri Drone etc)

**Name of Flagship programmes :** Natural Farming

Month	Activity details	Targeted Beneficiaries/Area/Coverage
January	Awareness Programme: Wall Painting, Goshti, Group Meeting, awareness of plant residual management	500
	Exposure visit of Farmers : Visits to Natural Farming plots	250
	Field Demonstration and field visit	08
	Training	50
February	Awareness Programme: Wall Painting, Goshti, Group Meeting, awareness of plant residual management	500(230 farmers and 20 Local leaders)
	Exposure visit of Farmers : Visits to Natural Farming plots	250(School students and Farmers)
	Field Demonstration and field visit	08
	Training	50
March	Awareness Programme: Wall Painting, Goshti, Group Meeting, awareness of plant residual management	500
	Exposure visit of Farmers : Visits to Natural Farming plots	250
	Field Demonstration and field visit	01
	Training	5

**Planning for Crop Cafeteria**

**Total Area of Crop cafeteria:** 8500 Sq m

Crop	Season	Variety	Particulars /details	Area (Sq m)
Soybean	Kharif	Js-2029, JS-2069, JS-2098 RVS 2001-18, 2001-4,1188, RSC-1552, AMSMB-518	Varietal	5000
Pigeon Pea	Kharif	Rajeshwari, Pusa 16	Varietal	1000
Wheat	Rabi	HI-8713, 8737, 8627, 8777, 1605, 8663, 1531, 2932, Black wheat	Varietal	5000
Chickpea	Rabi	RVG-201, RVG-202, RVG-203, JAKI-9218	Varietal	1000
Vegetable	Kharif & Rabi	Hybrid	Varietal	2500

**Details of Demonstration Unit at KVK**

Demonstration Unit	Particulars /details	Area (Sq m)	Output /Production			
Nursery	Fruit Plants- Custard Apple (Balanagar), Mango, Jamun (Konkan Bahadoli, Karonda (Pant Manohar), Neem (Desi), Jack Fruit (Kokan Gold), Lemon (Kagzi lime) Forest Plants- Karanj, Gulmohar, Tamarind, Subabool, Vilaiti Imli Vegetable Nursery- Chilli, Tomato, Brinjal	-	7987 Fruit plant sale Rs. 2,51,510 income generated			
Goatry	Goat & Kids of sirohi, osmanabadi & sujat	Size of Shed: 25x60 & 30x60 ft. Open fencing	09 nos. Goat & Kid sale Rs. 22600 income generated			
Poultry	Eggs, chicks & birds of Kadaknath & Kaveri	Size of Shed: 25x60 ft	380 eggs, 1912 chicks & 140 birds sale Rs. 1,49,503 income generated			
Organic Unit	Decomposer, Earthworms, Azolla, Vermicompost, Cow dung & Cow Urine	-	<b>Items</b>	<b>Unit</b>	<b>Qty</b>	<b>Income (Rs.)</b>
			Decomposer	Nos.	672	16800.00
			Earthworms	Kg.	100	25000.00
			Azolla	Kg.	34	6800.00
			Vermicompost	Kg.	90	450.00
			Cow Dung	Trolley	03	12000.00
Cow Urine	lit.	100	400.00			
<b>TOTAL Income generation</b>						<b>61450.00</b>

