

## ANNUAL ACTION PLAN 2023

KVK Shahdol

Year of sanction:1994-95

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

Name	Telephone / Contact		
	Office	Mobile	Email
Dr. Mrigendra Singh	07652-241790	9425183232	kvkshahdol@rediffmail.com, mrigendra1968@gmail.com

### 1.2 Staff Position on (31<sup>st</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. Mrigendra Singh	Senior Scientist & Head	Multidisciplinary	37400-69000 Level 14 (177400)	01-02-2007	01-02-2007	9425183232	mrigendra1968@gmail.com	
2	Subject Matter Specialist	Smt. Alpana Sharma	Scientist	Home Science	15600-39100 Level12 (107200)	13-07-2007	19-07-2010	9301111646	alpanasanu@rediffmail.com	
3	Subject Matter Specialist	Dr. Braj kishor Prajapati	Scientist	Agronomy	15600-39100 Level10 (66800)	12-09-2017	20-09-2021	9012012068	Brajkishorprajapati1@gmail.com	
4	Subject Matter Specialist	Sh. Deepak Chouhan	Scientist	Agricultural Engineering	15600-39100 Level10 (66800)	10-10-2017	10-10-2017	9424023760	deepakchouhan22@gmail.com	
5	Subject Matter Specialist	Vacant								
6	Subject Matter Specialist	Vacant								
7	Subject Matter Specialist	Vacant								
8	Programme Assistant	Shri Bhagwat Prasad Pandre	P A Agroforestry	Agro forestry	9300-34800 Level 10 (46700)	28-01-2019	28-01-2019	7697024787	29bhagwatpandre@gmail.com	
9	Computer Programmer/ Programme Assistant	Shri Rishiraj Negi	Tech Officer Computer	Computer	9300-34800 Level 10 (68000)	04-04-2008	04-04-2008	9424335040	rishirajnegi@gmail.com	
10	Farm Manager	Vacant								
11	Assistant	Smt. Asha Shrivatava	Asstt. Grade II	Asstt. Grade II	9300-34800 Level 8 (52500)	12-08-1996	12-08-1996	9977170453	kvkshahdol@rediffmail.com	
12	Jr. Stenographer / Comp. Operator	Smt. Abha Shyam	Lab Technician	Lab Technician	9300-34800 Level 8 (34100)	31-07-2003	26-08-2021	9981694669	kvkshahdol@rediffmail.com	
13	Driver	Shri Badri Prasad Yadav	Driver cum Mechanic	Driver	5200-20200 Level 6 (31200)	02-02-1999	07-07-2008	9424931288	kvkshahdol@rediffmail.com	
14	Driver	Shri Biran Prasad Pradhan	Driver cum Mechanic	Driver	5200-20200 Level 4 (21900)	12-07-2018	12-07-2018	9981070716	kvkshahdol@rediffmail.com	
15	Supporting staff	Shri Kamlesh Kol	Peon	Peon	4440-7440 Level 1 (21500)	26-11-2012	06-11-2019	6266836323	kvkshahdol@rediffmail.com	
16	Supporting staff	Vacant								

### 1.3 Total land with KVK (in ha): 13.28

S. No.	Item	Area (ha)
1	Under Buildings	0.3
2	Under Demonstration Units	0.7
3	Under Crops	0.005
4	Orchard/Agro-forestry	28
5	Others (specify)	-
<b>Total</b>		<b>13.28</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	2008	497.17		2006	497.17	Complete & Working but require maintenance
2	Farmers Hostel	ICAR	Not Handed over	305		2006	305	Not handed over
3	Staff Quarters (6)	ICAR	2013 Completed but boundary wall and filling requirement	400		2007	400	Complete & Working but require maintenance and filling and fencing
4	Demonstration Units (2)							
5	Fencing							
6	Rain Water harvesting system	ICAR	Dec-07	0.3		June 2007	0.3	Severely damaged and require maintenance
7	Threshing floor							
8	Farm godown							
9	Poly House	RKVY	2018	300	594720			
10	Net House	RKVY	2018	300	364500			
11	Mist Chamber	RKVY	2018	100	339000			

##### B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Tractor (Power Tiller)	2004	450000	-	Under use but needs major repair
Motor Cycle 2	2005	50000	88192	Working but require frequent repair
Bolero(Jeep)	2012	501521	246037	Working but require frequent repair
Other (Pl. specify)				

##### C) Equipment & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Projector	2007	58488	Working but require replacement
Xerox Machine	2016	177450	Working
Generator	2011	48473	Working
Video Camera	2012	20000	Working
Computer, Laser Printer	2007, 2013	40500, 28499	Working but require frequent repair
UPS 600 VA	2006	6300	Not working
Stabilizer 2 KVA	2016	8175	Working
Stabilizer	2017	3650	Working
Inverter 600 VA (2)	2006	23100	Working
Inverter Battery (2)	2020	28780	Working

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

Sl. No.	Tentative Date
1	15 June 2023
2	15 November 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 Agriculture	Paddy-wheat in cereal, Pigeonpea and Chickpea in pulses and sesame – mustard in oilseed are major crops of Kharif & Rabi
2	AES – 2Ag. +Dairy	Indigenous breeds of dairy animals are rearing with agriculture
3	AES – 3 NTFS (Collection of forest produce)	Mahua, jamun and Aonla are the major NTFS collected.
4	AES – 4 Vegetable	Growing vegetables mostly in backyard
5	AES – 5 Backyard Poultry	Indigenous breeds
6	AES – 6 Livestock	Indigenous breeds

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

S. No.	Agro-climatic Zone	Characteristics
1	AES – 1 Zone – XI (Northern hilly zones of Chhattisgarh Region)	District is characterized by red and yellow, medium, black and skeletal soil and undulating topography. It is a rainfed area, the average precipitation vary from 1000 to 1200 mm.

#### SWOT Analysis of each Agro-Ecological Situations of district

##### AES-1 (name)

Strength	Weakness	Opportunities	Threats
<ul style="list-style-type: none"> <li>Use of natural / organic inputs with low inorganic inputs</li> <li>Ample amount of forest and NTFS</li> <li>Bio diversity present in the district</li> <li>Most of the crops are organically produced</li> </ul>	<ul style="list-style-type: none"> <li>Low organic content in soil resulting in poor soil fertility</li> <li>Low irrigation facility</li> <li>Poor water holding capacity of soil with severe to moderate soil erosio</li> <li>Most of the cattle breed is indigenous</li> </ul>	<ul style="list-style-type: none"> <li>Suitable for natural farming/ organic farming</li> <li>Suitable for forest products</li> <li>Suitable for medicinal and aromatic crops</li> <li>Production of diversified crops may be taken including tuber crops</li> </ul>	<ul style="list-style-type: none"> <li>Open grazing</li> <li>Severe problem of wild animals</li> </ul>

### Land Use Pattern

Particulars	Area "000 ha"
Total Geographical area	561.006
Forest	227.698
Waste Land	60.358
Other than cultivated area	
Cultivable waste and alkaline land	25.863
Pastures	
Bushes	
Current Fallow	25.863
Other Fallow	
Agricultural Land	
Area Sown	211.419
Kharif	187.268
Rabi	84.000
Zaid	
Cropping Intensity	145 %

### Irrigated Area with Different Sources:

S. No.	Description	Area (ha)
1	Canal	10195
2	Well	4545
3	Tube well	6030
4	Ponds	14273
5	Others	2712

### Soil types

S. No.	Soil type	Characteristics	Area "000 ha"
1	Light Soils	<ul style="list-style-type: none"> <li>✓ Soils are sandy loam to silty clay loam in texture.</li> <li>✓ Soils are poor in AWC which does not permit post rainy season cropping under rainy season</li> <li>✓ PH ranges 6-7.4,</li> <li>✓ CEC – low</li> </ul> Soils are low to medium in Nitrogen and Phosphorus and medium to high in Potassium	125.960 ( 75%)
2	Medium Soils/Heavy Soils	<ul style="list-style-type: none"> <li>✓ Soils are sandy loam to silty clay loam in texture.</li> <li>✓ Soils are poor in AWC which does not permit post rainy season cropping under rainy season</li> <li>✓ PH ranges 6-7.4,</li> <li>✓ CEC – low</li> </ul> Soils are low to medium in Nitrogen and Phosphorus and medium to high in Potassium	41.98675 ( 25%)

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.)	Productivity (Q /ha)
1	Paddy	149900	6325.8	42.2
2	Kodo- Kutki	7900	67.2	8.5
3	Pigeonpea	10800	139.3	12.90
4	Wheat	68000	2468.4	36.3
5	Gram	9000	126.9	14.1
6	Fruits	4410	797	191.19
7	Vegetables	10820	2293.1	220.1
8	Spices	2481	198.71	81.21

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

Month /Year	Rainfall (m.m.)	Temperature ( ° C)	
		Maximum	Minimum
Jan, 22	21.3	28	11
Feb, 22	7.5	30	8
Mar, 22	0	33	13
Apr, 22	0	43	20
May, 22	6	44	23
Jun, 22	95.7	45	23
July, 2022	160.3	36	24
Aug., 2022	156.8	36	25
Sept., 2022	117	35	23
Oct. 2022	42.6	31	21
Nov. 2022	0	32	13
Dec. 2022	0	28	7

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

Category	Population	Production	Productivity	
<b>Cattle</b>				
Crossbred/ Indigenous	334618	122.49. MT.	0.987 kg	
<b>Buffalo</b>	82654		Kg	
<b>Sheep</b>				
Crossbred/ Indigenous		MT wool	Kg	Sheep
<b>Goats</b>	991618	0.71 MT	Kg	
<b>Pigs Crossbred/ Indigenous</b>	3948			
<b>Rabbits</b>	-			
<b>Poultry</b>				

Hens	48679	49.50 Lakh eggs	35eggs/ bird/yr
Turkey and others	-	-	-
<b>Category</b>	<b>Area</b>	<b>Production</b>	<b>Productivity</b>
Fish		Q/ year	Q/ year
		Q/ year	Q/ year

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

Sl. No.	Tehsil	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Shahdol	Sohagpur	Rohaniya	Paddy, Kodo-kutki, Pigeon pea, Wheat, Chick pea, Livestock Poultry Goatry Vegetables	Low yield due to old variety seed, improper pest and disease management, Inadequate use of fertilizers, high seed rate, untimely use of weed control measures etc. Low milk yield due to Rearing of indigenous cattle breed	<ul style="list-style-type: none"> <li>• Crop diversification,</li> <li>• Varietal Diversification-</li> <li>• Integrated farming system</li> <li>• INM</li> <li>• IPM</li> <li>• Promotion of Natural farming</li> <li>• Strengthen of linkage between farmer's and extension system</li> <li>• Farm mechanization and drudgery reduction</li> <li>• Integrated livestock management,</li> <li>• Promotion of agriculture based enterprises for farm women</li> <li>• Development of rural entrepreneurship for income and employment generation</li> </ul>
2	Shahdol	Burhar	Marjat			
3	Shahdol	Jaisinghnagar	Meethi			
4	Shahdol	Burhar	Bahgarh			
5	Shahdol	Sohagpur	Sinduri Bharri			

#### Priority / Thrust areas

S. No.	Particulars
1.	Crop improvement and diversification
2.	Seed replacement
3	Pest management through
4	Integrated plant nutrient management
5	Water and soil conservation
6	Promotion of rural entrepreneurship for additional income generation and employment generation
7	Livestock Production & Management
8	Annual house hold nutritional security
9	Agro forestry

### 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
17	100	10+12	85+525

  

Training		Extension Activities	
3		4	
Number of Courses	Number of Participants	Number of activities	Number of participants
92	3155	520	54456+ Mass

  

Seed Production (Qtl.)	Planting material (Nos.)
Sunhemp 5 Q	Fruit sapling – 10,000, Vegetable seedling – 1,00,000

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

S. No.	Thrust 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	Crop Production	Kutki	Low yield of Kutki due to less seed replacement and use of old variety like JK 36	Assessment of HYV of Kutki JK4 and CG-1 under Kutki-Mustard/ Chickpea cropping sequence					Seed
		Kodo	Low yield of Kodo due to less seed replacement and use of old variety		Demonstration of HYV variety JK 137 of kodo under Kodo -mustard cropping sequence				Seed
		Paddy	Low yield of paddy due to less seed replacement and use of old variety		Demonstration of HYV variety (JR 81/JR 206) under Rice-Chickpea cropping sequence				Seed
		Chickpea	Low Yield		Demonstration of Seed treatment (Biofertilizers) and line sowing of HYV of chickpea (JG 36) through seed cum fertilizers drill under Paddy-chickpea cropping system				Seed & Biofertilizers
		Linseed	Low yield		Demonstration of Seed treatment (Biofertilizers) and line sowing of HYV of linseed (JLS 73/79) through seed cum fertilizer drill under paddy-linseed cropping system				Seed & Biofertilizers
		Mustard	Low yield of Mustard due to less seed replacement, use of old variety JMM 99 and broadcasting of seed without seed treatment with biofertilizers	Assessment of use of biofertilizers with HYV of Mustard (NRCHB 101 and Pusa Mustard 30 under Kutki-Mustard cropping sequence					Seed & Biofertilizers
2	ITK	Paddy	Low yield of old Paddy varieties like kansari, barhai, surmatiya due to BLB infestation	Assessment of cow dung spray to control BLB in paddy crop					
		Brinjal	Yield and economic loss due to shoot and fruit borer	Assessment of tobacco (Nicotiana tobaccum) soaked water to control shoot and fruit borer in brinjal ( <i>Solanum melongena</i> )					Tobacco
		Resource conservation (ITK)	Lower survival of plantation crop in rainfed area due to erratic rainfall	Assessment of Rain water management for teak, mango and neem plantation in rainfed area					
		Tomato	Low income of tomato farmers due to insect pest attack	Assessment of Pest management in tomato by using leaf extract of <i>Cynodon dactylon</i>					
3	IFS	Crops+ Poultry birds (Narmada nidhi)+vegetables+compost	Low income of farm family due to less diversification of farm	Assessment on diversification of farm through poultry based integrated farming system for small and marginal farmers					Poultry chicks
		Paddy, wheat, duck, fish	Low income of farm family due to less diversification of farm	Assessment on diversification of farm through Duck-fish based integrated farming system for small and marginal farmers					Duck chicks & Fingerlings
4	Natural Farming	Kodo Variety JK 137	Higher cost of production		Demonstration of natural farming in Kodo-Pigeon pea cropping sequence				Seed
5	Organic Farming	Onion	Yield and economic loss due to thrips	Assessment of neem oil for effective management of thrips in organically cultivated onion					Neem Oil

6	Agroforestry.	Paddy	Low yield due to old variety MTU 1010 under agro forestry system	Assessment of HYV of Paddy (JR 81) under <i>Acacia nilotica</i> traditional tree based Agri-silviculture system.					Seed
		Brinjal	No crop grown between spacing of mango tree	Assessment of Brinjal under two year old mango tree based Agri-Olericulture system.					Seed
		Mustard	No crop grown between spacing of Munga tree.	Evaluation of Mustard variety (PM 30/NRC HB-101) under Drumstick based Agri-horticulture system.					Seed
		Wheat	No crop grown between spacing of aonla/eucalyptus tree	Assessment of wheat variety JW 3382 under Aonla/Eucalyptus tree based Agri-silviculture system.					Seed
7	Nutritional Security	Paddy – CR Dhan 310	High magnitude of malnutrition and low immunity among farm families	Assessment of bio-fortified variety of Paddy – CR Dhan 310	Demonstration on kitchen gardening	Establishment of kitchen gardening	Kitchen gardening		Seed, Planting material
		Drumstick (Moringa oleifera) dry leaf powder	Malnutrition due to high anemia in rural adolescent girls	Assessment of drumstick (Moringa oleifera) dry leaf powder as daily dietary supplement for anemic adolescent girls	Demonstration on nutritional enhancement of preschool children through incorporation of paushtik chapatti (fortification of Kodo flour, drumstick leaf powder to wheat flour) in their diet	Preparation of low cost diet	Preparation of low cost diet	Method demonstration	Drumstick leaf powder
		Value added mushroom pickle and mushroom badi	High magnitude of malnutrition among farm families	Assessment of acceptability of value added products by oyster mushroom to improve the malnutrition status of the farm family	Oyster mushroom production on wheat straw	Value addition of mushroom			Mushroom spanand other inputs
		Sprouted chickpea - 15 gm,+ sprouted wheat- 15 gm + Jaggery 10 gm @ 40 gm/day/child for 3 months	Prevalence of malnutrition in children of age -3-5 years	Assessment of malted sattu (Sprouted chick pea+ sprouted wheat) for Malnourished Children					
8	Integrated livestock management	Poultry	Low egg and meat production due to improper feeding		Demonstration of Azolla for poultry birds under backyard poultry system				Azolla culture
			Low egg and meat production due to rearing of indigenous breed		Demonstration on income enhancement of FW through Backyard Poultry Farming				Chicks
9	Agricultural Engineering	Paddy / Riding type paddy transplanter	Manually transplanting - zigzag transplanting, resulting in problems during intercultural operation ultimately leading to loss of time and energy.	Assessment of Riding type paddy transplanter					Seed and Hiring machinery
		Soybean / Ridge & furrow sowing, Ridge bed sowing	Low yield of Soybean due to poor plant population, moisture stress and / or water stagnation due to heavy down pour.	Assessment of different sowing method for soybean sowing					Seed and Hiring machinery
		Linseed/Seed Cum Fertilizer drill	Low yield and problem in intercultural operation in linseed crop due to broadcasting sowing (Farmers practice) and uneven flood irrigation in field.	Assessment of seed cum fertilizer drill for linseed sowing					Seed and Hiring machinery
		Onion/perforated pipe irrigation	Low yield in Onion crop due to flood irrigation in field and uneven irrigation due to excess water requirement for irrigation.	Assessment of perforated pipe irrigation in onion crop.					Seed and Provide Irrigation system
		Summer greengram/ Inclined plate planter	Low yield and problem in intercultural operation in Summer Greengram crop due to broadcasting sowing (Farmers practice) and uneven flood irrigation in field.	Assessment of inclined plate planter for summer greengram sowing with water saving irrigation system.					Seed and Hiring machinery

	Paddy/ Direct sowing of paddy by seed drill	Unavailability of field for timely wheat sowing and More time loss for field preparation, transplanting and water loss in puddling		Demonstration of direct sowing of paddy by seed drill for timely sowing in upland rice leading to subsequent timely sowing of wheat				Seed and Hiring machinery
	Maize/ Broad bed planter	Low yield of Maize due to poor plant population, moisture stress and / or water stagnation during heavy down pour.		Demonstration of Maize sowing by Broad bed planter				Seed and Hiring machinery
	Paddy/ Cono weeder	For weeding operation More time loss in conventional method and shortage of availability of labour and plant growth is less		Demonstration of cono weeder in SRI paddy crop				Seed and Provide Machine
	Wheat/ Zero tillage seed drill	Field preparation requires 2- 3 times tractor drawn cultivator resulting in time and money loss		Demonstration of Zero tillage in wheat sowing				Seed and Hiring machinery
	Tomato/ Manually operated single row vegetable transplanter	More labour required for transplanting of vegetable seedling. Also, in case of mulch it is very tedious and requires more time for transplanting.		Demonstration of manually operated single row vegetable transplanter for vegetable seedling in Hi-Tech horticulture				Seed and Provide Machine
	Chickpea/ Ridge furrow seed cum fertilizer drill	Low yield of chickpea due to non- uniform plant population		Demonstration of ridge furrow seed cum fertilizer drill for sowing chickpea				Seed and Hiring machinery

## Technologies to be assessed

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Varietal assessment	1	1								2
ITK	1				2			1		4
Organic Farming					1					1
Agroforestry	2	1			1					4
Nutritional security	1									1
Nutritional security(Other)	2									2
<b>TOTAL</b>	<b>7</b>	<b>2</b>			<b>4</b>			<b>1</b>		<b>14</b>

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

Thematic areas	Cattle	Poultry	Sheep	Goat	Piggery	Rabbitary	Fisheries	TOTAL
IFS		2					1	3
<b>TOTAL</b>		<b>2</b>					<b>1</b>	<b>3</b>

## Details of On Farm Trial (OFT)

### OFT-1

Crop / Enterprise	Kutki	
Title of on farm trial	Assessment of HYV of Kutki JK4 and CG-1 under Kutki-Mustard/ Chickpea cropping sequence	
Problem diagnosed	Low yield of Kutki due to less seed replacement and use of old variety like JK 36	
Farmers' Practices	Growing of old variety JK 36 (2008)	
Details of technologies selected for assessment	T1	Growing of old variety JK 36 (2008)
	T2	Growing of old variety JK 36 (2008)
	T3	Growing of old variety JK 36 (2008)
Source of technology	JNKVV (2016)	
Plot size	0.4 ha	
No. of farmers	5	
Total cost	Rs150 /kg	
Critical input	Rs 3000	
Performance indicators: (i) Technical- <b>yield (q/ ha)</b> (ii) Economic (iii) Social – <b>Employment generation</b>		

**Detailed Information about OFT:**

<b>Name of Discipline</b> (like Agronomy/Horticulture/ Soil Science/ Plant Protection/Plant Breeding/ Agroforestry/Agri Engineering/Animal Science/ Fisheries etc)	Agronomy
<b>Title of on-farm trial:</b>	Assessment of HYV of Kutki JK4 and CG-1 under Kutki-Mustard/ Chickpea cropping sequence
<b>Year/Season:</b>	2023
<b>Farming situation:</b>	Rainfed
<b>Problem diagnosis:</b>	Low yield of Kutki due to less seed replacement and use of old variety like JK 36
<b>Thematic area:</b>	Crop production
<b>No of trials:</b>	5
<b>No. of farmers involved</b>	5
<b>Type of OFT (Assessment/ Refinement):</b>	<b>Assessment</b>
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice-	Growing of old variety JK 36 (2008)
T2 –Recommended Practice-	HYV of Kutki JK4
T3- Recommended Practice-	HYV of Kutki CG-1
<b>Date of sowing:</b>	25/07/23
<b>Date of harvesting:</b>	20/11/23
<b>Source of technology:</b>	JNKVV (2016)
<b>Characteristics of technology:</b>	Suitable for sole as well as inter/mixed cropping, responsive to NPK, resistant to drought, lodging, and key pest Shoot fly and moderately resistant to head smut
<b>Name of Crop/Enterprises:</b>	Kutki (Little millet)
<b>Recommendations for Farmers</b>	
<b>Recommendations for Deptt. Personnel</b>	
<b>Feedback</b>	

**OFT-2**

Crop / Enterprise	Paddy
Title of on farm trial	Assessment of cow dung spray to control BLB in paddy crop
Problem diagnosed	Low yield of old Paddy varieties like kansari, barhai, surmatiya due to BLB infestation
Farmers' Practices	Chemical application (plantomycine or streptomycin 25-30gml/acre)
Details of technologies selectedfor assessment	T1   Improper management
	T2   Chemical application (plantomycine or streptomycin 25-30gml/acre)
	T3   Spray of Cow dung (Spray at 7-10 days interval) 2kg/10 litre water
Source of technology	TNAU, Coimbatore (2014)
Plot size	0.4 ha
No. of farmers	5
Total cost	Rs 180
Critical input	Rs 900
Performance indicators: (i) Technical- <b>yield (q/ ha)</b> (ii) Economic (iii) Social – <b>Employment generation</b>	

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

<b>Name of Discipline</b>	Agronomy
<b>Title of on-farm trial:</b>	Assessment of cow dung spray to control BLB in paddy crop
<b>Year/Season:</b>	2023
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	Low yield of old Paddy varieties like kansari, barhai, surmatiya due to BLB infestation
<b>Thematic area:</b>	ITK(Crop production)
<b>No of trials:</b>	5
<b>No. of farmers involved</b>	5
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice-	Improper management
T2 –Recommended Practice-	Chemical application (plantomycine or streptomycin 25-30gml/acre)
T3- Recommended Practice-	Spray of Cow dung (Spray at 7-10 days interval) 2kg/10 litre water
<b>Date of sowing:</b>	22/07/23
<b>Date of harvesting:</b>	20/11/23
<b>Source of technology:</b>	TNAU, Coimbatore (2014)
<b>Characteristics of technology:</b>	Low cost involve and ITK
<b>Name of Crop/Enterprises:</b>	Paddy
<b>Recommendations for Farmers</b>	
<b>Recommendations for Deptt. Personnel</b>	
<b>Feedback</b>	

**OFT-3**

Crop / Enterprise	Crops+ Poultry birds (Narmada nidhi)+vegetables+ compost	
Title of on farm trial	Assessment on diversification of farm through poultry based integrated farming system for small and marginal farmers	
Problem diagnosed	Low income of farm family due to less diversification of farm	
Farmers' Practices	Cultivation of crop (Rice-wheat system)	
Details of technologies selectedfor assessment	T1	Cultivation of crop (Rice-wheat system)
	T2	Rice-wheat/chickpea +Poultry birds (Narmada nidhi)
	T3	T2 + compost
Source of technology	ICAR-IIFSR, Modipuram (2016)	
Plot size	0.4 ha	
No. of farmers	5	
Total cost	Rs 40/Bird	
Critical input	Rs 9000	
Performance indicators: (i) Technical- <b>yield (q/ ha)</b> (ii) Economic (iii) Social – <b>Employment generation</b>		

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

<b>Name of Discipline</b>	Agronomy
<b>Title of on-farm trial:</b>	Assessment on diversification of farm through poultry based integrated farming system for small and marginal farmers
<b>Year/Season:</b>	2023
<b>Farming situation:</b>	Irrigated/Rainfed
<b>Problem diagnosis:</b>	Low income of farm family due to less diversification of farm
<b>Thematic area:</b>	IFS
<b>No of trials:</b>	5
<b>No. of farmers involved</b>	5
<b>Type of OFT (Assessment/ Refinement):</b>	<b>Assessment</b>
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice-	Cultivation of crop (Rice-wheat system)
T2 –Recommended Practice-	Rice-wheat/chickpea +Poultry birds (Narmada nidhi)
T3- Recommended Practice-	T2 + compost
<b>Date of sowing:</b>	22/07/23
<b>Date of harvesting:</b>	20/11/23
<b>Source of technology:</b>	ICAR-IIFSR, Modipuram (2016)
<b>Characteristics of technology:</b>	Faster growth rate male attained 1 kg body weight in 9-10 weeks of age. The female matured on an average 161 days of age (intensive) and produces 181 eggs in backyard 4 times higher than the local native (45 eggs) and 195 under semi intensive system of management.
<b>Name of Crop/Enterprises:</b>	Crops+ Poultry birds (Narmada nidhi)+ compost
<b>Recommendations for Farmers</b>	
<b>Recommendations for Deptt. Personnel</b>	
<b>Feedback</b>	

**OFT-4**

Crop / Enterprise	Paddy , wheat, duck, fish	
Title of on farm trial	Assessment on diversification of farm through Duck-fish based integrated farming system for small and marginal farmers	
Problem diagnosed	Low income of farm family due to less diversification of farm	
Farmers' Practices	Cultivation of crop (Paddy-wheat system)+Pond	
Details of technologies selectedfor assessment	T1	Cultivation of crop (Paddy-wheat system)+Pond
	T2	Paddy variety Bisni-wheat system+Pond+Duck (White Pekin/Khaki campell)
	T3	Paddy variety improve Jeerashankar/Kalikamod wheat system+Pond+Duck (White Pekin/Khaki campell)
Source of technology	ICAR-IIFSR, Modipuram (2016)	
Plot size	0.4 ha	
No. of farmers	5	
Total cost	Rs 55/Bird	
Critical input	Rs 8500	
Performance indicators: (i) Technical- <b>yield (q/ ha)</b> (ii) Economic (iii) Social – <b>Employment generation</b>		

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

<b>Name of Discipline</b>	Agronomy
<b>Title of on-farm trial:</b>	Assessment on diversification of farm through Duck-fish based integrated farming system for small and marginal farmers
<b>Year/Season:</b>	2023
<b>Farming situation:</b>	Irrigated/Low land
<b>Problem diagnosis:</b>	Low income of farm family due to less diversification of farm
<b>Thematic area:</b>	Crop production
<b>No of trials:</b>	5
<b>No. of farmers involved</b>	5
<b>Type of OFT (Assessment/ Refinement):</b>	<b>Assessment</b>
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice-	Cultivation of crop (Paddy-wheat system)+Pond
T2 –Recommended Practice-	Paddy variety Bisni-wheat system+Pond+Duck (White Pekin/Khaki campell)
T3- Recommended Practice-	Paddy variety improve Jeerashankar/Kalikamod+wheat system+Pond+Duck (White Pekin/Khaki campell)
<b>Date of sowing:</b>	22/07/23
<b>Date of harvesting:</b>	25/11/23
<b>Source of technology:</b>	ICAR-IIFSR, Modipuram (2016)
<b>Characteristics of technology:</b>	Khaki Campbell ducks are an excellent pick as an egg producer. A healthy Khaki Campbell hen should lay between 300 and 320 large, white duck eggs in a single year
<b>Name of Crop/Enterprises:</b>	Paddy , wheat, duck, fish
<b>Recommendations for Farmers</b>	
<b>Recommendations for Deptt. Personnel</b>	
<b>Feedback</b>	

**OFT-5**

Crop / Enterprise	Mustard
Title of on farm trial	Assessment of use of biofertilizers with HYV of Mustard (NRCHB 101 and Pusa Mustard 30 under Kutki-Mustard cropping sequence
Problem diagnosed	Low yield of Mustard due to less seed replacement, use of old variety JMM 99 and broadcasting of seed without seed treatment with biofertilizers
Farmers' Practices	old variety JMM 99 and broadcasting of seed without seed treatment with biofertilizers
Details of technologies selectedfor assessment	T1 Old variety JMM 99 (2008) without use of biofertilizers
	T2 HYV of Mustard NRCHB 101 with biofertilizers
	T3 HYV of Mustard Pusa Mustard 30 with biofertilizers
Source of technology	ICAR-DRMR (2019)
Plot size	0.4 ha
No. of farmers	5
Total cost	Rs. 750
Critical input	Rs 3750
Performance indicators: (i) Technical- <b>yield (q/ ha)</b> (ii) Economic (iii) Social – <b>Employment generation</b>	

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

<b>Name of Discipline</b>	Agronomy
<b>Title of on-farm trial:</b>	Assessment of use of biofertilizers with HYV of Mustard (NRCHB 101 and Pusa Mustard 30 under Kutki-Mustard cropping sequence
<b>Year/Season:</b>	2023 -24
<b>Farming situation:</b>	Irrigated/rainfed
<b>Problem diagnosis:</b>	Low yield of Mustard due to less seed replacement, use of old variety JMM 99 and broadcasting of seed without seed treatment with biofertilizers
<b>Thematic area:</b>	Crop production
<b>No of trials:</b>	5
<b>No. of farmers involved</b>	5
<b>Type of OFT (Assessment/ Refinement):</b>	<b>Assessment</b>
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice-	Old variety JMM 99 (2008) without use of biofertilizers
T2 –Recommended Practice-	HYV of Mustard NRCHB 101 with biofertilizers
T3- Recommended Practice-	HYV of Mustard Pusa Mustard 30 with biofertilizers
<b>Date of sowing:</b>	22/10/23
<b>Date of harvesting:</b>	25/02/24
<b>Source of technology:</b>	ICAR-DRMR (2019)
<b>Characteristics of technology:</b>	Suitable for rainfed and irrigated. Potential Yield 17-20 q/ha, Days to maturity: 105-135 day, Oil Content: 34.6- 42.1 %,Plant height: 170- 200 cm,Average seed yield: 1382-1491 kg/ha
<b>Name of Crop/Enterprises:</b>	Mustard
<b>Recommendations for Farmers</b>	
<b>Recommendations for Deptt. Personnel</b>	
<b>Feedback</b>	

**OFT-6**

Crop / Enterprise	Brinjal	
Title of on farm trial	Assessment of tobacco ( <i>Nicotiana tobaccum</i> ) soaked water to control shoot and fruit borer in brinjal ( <i>Solanum melongena</i> )	
Problem diagnosed	Yield and economic loss due to shoot and fruit borer	
Farmers' Practices	Improper management	
Details of technologies selected for assessment	T1	Improper management
	T2	Spray of Chlorpyrifos 20 EC (1000 ml/ha) or Indoxacarb 14.5 % SC (350 ml/ha)
	T3	Tobacco ( <i>Nicotiana tobaccum</i> ) soaked water (1:10)
Source of technology	Cross Sectoral Validation of Indigenous Technical Knowledge (2004) ICAR, New Delhi	
Plot size	0.4 ha	
No. of farmers	5	
Total cost	Rs. 980	
Critical input	Rs 4900	
Performance indicators: (i) Technical- <b>yield (q/ ha)</b> (ii) Economic (iii) Social – <b>Employment generation</b>		

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

<b>Name of Discipline</b>	Horticulture
<b>Title of on-farm trial:</b>	Assessment of tobacco ( <i>Nicotiana tobaccum</i> ) soaked water to control shoot and fruit borer in brinjal ( <i>Solanum melongena</i> )
<b>Year/Season:</b>	2023 -24
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	Yield and economic loss due to shoot and fruit borer
<b>Thematic area:</b>	Crop production
<b>No of trials:</b>	5
<b>No. of farmers involved</b>	5
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
Details of technology selected for assessment/ refinement:	
T1 – Farmers Practice-	Improper management
T2 –Recommended Practice-	Spray of Chlorpyrifos 20 EC (1000 ml/ha) or Indoxacarb 14.5 % SC (350 ml/ha)
T3- Recommended Practice-	Tobacco ( <i>Nicotiana tobaccum</i> ) soaked water (1:10)
<b>Date of sowing:</b>	22/10/23
<b>Date of harvesting:</b>	25/02/24
<b>Source of technology:</b>	Cross Sectoral Validation of Indigenous Technical Knowledge (2004) ICAR, New Delhi
<b>Characteristics of technology:</b>	
<b>Name of Crop/Enterprises:</b>	Brinjal
<b>Recommendations for Farmers</b>	
<b>Recommendations for Deptt. Personnel</b>	
<b>Feedback</b>	

**OFT-7**

Crop / Enterprise	Onion	
Title of on farm trial	Assessment of neem oil for effective management of thrips in organically cultivated onion	
Problem diagnosed	Yield and economic loss due to thrips	
Farmers' Practices	Improper management	
Details of technologies selected for assessment	T1	Improper management
	T2	Imidachoprid 17.8 % SL (125 ml/ha) or Propenophos 800 ml/ha
	T3	Cow urine (30 %)+Neem oil (4%)
Source of technology	ICAR-DOGR, Pune or Das et. al. (2017)	
Plot size	0.4 ha	
No. of farmers	5	
Total cost	Rs 600	
Critical input	Rs 3000	
Performance indicators: (i) Technical- <b>yield (q/ ha)</b> (ii) Economic (iii) Social – <b>Employment generation</b>		

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

<b>Name of Discipline</b>	Horticulture
<b>Title of on-farm trial:</b>	Assessment of neem oil for effective management of thrips in organically cultivated onion
<b>Year/Season:</b>	2023 -24
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	Yield and economic loss due to thrips
<b>Thematic area:</b>	Crop production
<b>No of trials:</b>	5

<b>No. of farmers involved</b>	5
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
Details of technology selected for assessment/ refinement:	
T1 – Farmers Practice-	Improper management
T2 –Recommended Practice-	Imidachoprid 17.8 % SL (125 ml/ha) or Propenophos 800 ml/ha
T3- Recommended Practice-	Cow urine (30 %)+Neem oil (4%)
<b>Date of sowing:</b>	22/10/23
<b>Date of harvesting:</b>	25/02/24
<b>Source of technology:</b>	ICAR-DOGR, Pune or Das et. al. (2017)
<b>Characteristics of technology:</b>	Low cost involve
<b>Name of Crop/Enterprises:</b>	Onion
<b>Recommendations for Farmers</b>	
<b>Recommendations for Deptt. Personnel</b>	
<b>Feedback</b>	

#### OFT-8

Crop / Enterprise	Paddy	
Title of on farm trial	Assessment of HYV of Paddy JR 81 under <i>Acacia nilotica</i> traditional tree based Agri-silviculture system.	
Problem diagnosed	Low yield due to old variety MTU 1010 under agro forestry system.	
Farmers' Practices	Old variety MTU 1010	
Details of technologies selected for assessment	T <sub>1</sub>	Old variety MTU 1010
	T <sub>2</sub>	HYV of paddy (JR 81) under <i>Acacia nilotica</i>
Source of technology	Annual report of CAFRI, Jhansi (2019) JNKVV 2018	
Plot size	1 hac.	
No. of farmers	05	
Total cost	Rs 28000	
Critical input	Paddy seed.	
Performance indicators:	-	
(i) Technical- yield (q/ ha)	-	
(ii) Economic	-	
(iii) Social – Employment generation	-	

#### Detailed Information about OFT:

<b>Name of Discipline</b>	Agro forestry
<b>Title of on-farm trial:</b>	Assessment of HYV of Paddy (JR 81) under <i>Acacia nilotica</i> traditional tree based Agri-silviculture system.
<b>Year/Season:</b>	2023/Kharif
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	Low yield due to old variety MTU 1010 under agro forestry system
<b>Thematic area:</b>	AGF
<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-	Old variety MTU 1010
T2 –Recommended Practice-	HYV of paddy (JR 81) under <i>Acacia nilotica</i>
T3- Recommended Practice-	-
<b>Date of sowing:</b>	-
<b>Date of harvesting:</b>	-
<b>Source of technology:</b>	Annual report of CAFRI, Jhansi, 2019
<b>Characteristics of technology:</b>	Short structure of plant, 120 day duration, biotic stress tolerant
<b>Name of Crop/Enterprises:</b>	Paddy
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

#### OFT-9

Crop / Enterprise	Brinjal	
Title of on farm trial	Assessment of Brinjal under two year old mango tree based Agri-Olericulture system.	
Problem diagnosed	No crop grown between spacing of mango tree	
Farmers' Practices	No crop	
Details of technologies selectedfor assessment	T <sub>1</sub>	No crop
	T <sub>2</sub>	Mango+Brinjal
Source of technology	Annual report of CAFRI, Jhansi, 2020	
Plot size	1 hac	
No. of farmers	05	
Total cost	3300 Rs	
Critical input	220 gm	
Performance indicators:	-	
(i) Technical- yield (q/ ha)	-	
(ii) Economic	-	
(iii) Social – Employment generation	-	

**Detailed Information about OFT:**

<b>Name of Discipline</b>	Agro forestry
<b>Title of on-farm trial:</b>	Assessment of Brinjal/Tomato under two year old mango tree based agri-olericulture system.
<b>Year/Season:</b>	2023/Kharif.
<b>Farming situation:</b>	Irrigated.
<b>Problem diagnosis:</b>	No crop grown between spacing of mango tree.
<b>Thematic area:</b>	AGF
<b>No of trials:</b>	1
<b>No. of farmers involved</b>	5
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice-	No crop.
T2 –Recommended Practice-	Mango+brinjal/tomato.
T3- Recommended Practice-	-
<b>Date of sowing:</b>	-
<b>Date of harvesting:</b>	-
<b>Source of technology:</b>	Annual report of CAFRI, Jhansi, 2020.
<b>Characteristics of technology:</b>	Higher monetary return, Nutritional security.
<b>Name of Crop/Enterprises:</b>	Brinjal/Tomato
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

**OFT-10**

Crop / Enterprise	Mustard
Title of on farm trial	Evaluation of Mustard variety (PM 30/NRC HB-101) under Drumstick based Agri-horticulture system.
Problem diagnosed	No crop grown between spacing of Munga tree.
Farmers' Practices	No crop
Details of technologies selectedfor assessment	T <sub>1</sub> No crop
	T <sub>2</sub> Munga+Mustard
Source of technology	Annual report of CAFRI, Jhansi, 2019
Plot size	1 hac
No. of farmers	05
Total cost	4000 Rs.
Critical input	Seed
Performance indicators:	-
(i) Technical- <b>yield (q/ ha)</b>	-
(ii) Economic	-
(iii) Social – <b>Employment generation</b>	-

**Detailed Information about OFT:**

<b>Name of Discipline</b>	Agro forestry
<b>Title of on-farm trial:</b>	Evaluation of Mustard variety (PUSA Bold/Varuna) under Drumstick based Agri-horticulture system.
<b>Year/Season:</b>	2023/Rabi
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	No crop grown between spacing of Munga tree.
<b>Thematic area:</b>	AGF
<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-	No crop
T2 –Recommended Practice-	Munga+Mustard
T3- Recommended Practice-	-
<b>Date of sowing:</b>	
<b>Date of harvesting:</b>	
<b>Source of technology:</b>	Annual report of CAFRI, Jhansi, 2019
<b>Characteristics of technology:</b>	Higher monetary return, Nutritional security
<b>Name of Crop/Enterprises:</b>	Mustard
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

**OFT-11**

Crop / Enterprise	Wheat
Title of on farm trial	Assessment of wheat variety JW 3382 under Aonla/Eucalyptus tree based Agri-silviculture system.
Problem diagnosed	No crop grown between spacing of aonla/eucalyptus tree
Farmers' Practices	No crop grown between the Plants
Details of technologies selectedfor assessment	T <sub>1</sub> No crop grown between the Plants
	T <sub>2</sub> Aonla/Eucalyptus+wheat
Source of technology	Annual report of CAFRI, Jhansi, 2019
Plot size	01 hac
No. of farmers	05
Total cost	28500
Critical input	Seed

Performance indicators:	-
(i) Technical- <b>yield (q/ ha)</b>	-
(ii) Economic	-
(iii) Social – <b>Employment generation</b>	-

**Detailed Information about OFT:**

<b>Name of Discipline</b>	Agro forestry
<b>Title of on-farm trial:</b>	Assessment of wheat variety JW 3382 under Aonla/Eucalyptus tree based Agri-silviculture system.
<b>Year/Season:</b>	2022/Rabi
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	No crop grown between spacing of aonla/eucalyptus tree
<b>Thematic area:</b>	AGF
<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-	No crop
T2 –Recommended Practice-	Aonla/Eucalyptus+wheat
T3- Recommended Practice-	-
<b>Date of sowing:</b>	
<b>Date of harvesting:</b>	
<b>Source of technology:</b>	Annual report of CAFRI, Jhansi, 2019
<b>Characteristics of technology:</b>	Higher monetary return, higher yield, tolerant to diseases
<b>Name of Crop/Enterprises:</b>	Wheat
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

**OFT-12**

Crop / Enterprise	Making of micro-depressions around the basin of the plant
Title of on farm trial	Assessment of Rain water management for teak, mango and neem plantation in rainfed area
Problem diagnosed	Lower survival of plantation crop in rainfed area due to erratic rainfall
Farmers' Practices	No such water conservation measures
Details of technologies selected for assessment	T <sub>1</sub>   No such water conservation measures
	T <sub>2</sub>   : Soil moisture-conservation making micro-depressions around the basin of the plant
Source of technology	Forest Research College, Mettupalayam (Tamil Nadu), <i>Traditional Knowledge in Agriculture (2020)</i> . Division of Agricultural Extension, ICAR, New Delhi. pp-2
Plot size	0.4 hac.
No. of farmers	05
Total cost	Rs10000/-
Critical input	Planting Material
Performance indicators:	-
(i) Technical- <b>yield (q/ ha)</b>	-
(ii) Economic	-
(iii) Social – <b>Employment generation</b>	-

**Detailed Information about OFT:**

<b>Name of Discipline</b>	Agro forestry
<b>Title of on-farm trial:</b>	Assessment of Rain water management for teak, mango and neem in arid and semi-arid regions
<b>Year/Season:</b>	Kharif 2022
<b>Farming situation:</b>	Rainfed
<b>Problem diagnosis:</b>	Lower survival of plantation crop in rain fed area due to erratic rainfall
<b>Thematic area:</b>	Resource conservation.
<b>No of trials:</b>	05
<b>No. of farmers involved</b>	20
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment/ refinement:</b>	
T1 – Farmers Practice-	No such water conservation measures
T2 –Recommended Practice-	Soil moisture-conservation making micro-depressions around the basin of the plant
T3- Recommended Practice-	-
<b>Date of sowing:</b>	-
<b>Date of harvesting:</b>	-
<b>Source of technology:</b>	Forest Research College, Mettupalayam (Tamil Nadu), <i>Traditional Knowledge in Agriculture (2020)</i> . Division of Agricultural Extension, ICAR, New Delhi. pp-2
<b>Characteristics of technology:</b>	Soil moisture-conservation practices by making micro-depressions around the basin of the plant
<b>Name of Crop/Enterprises:</b>	Plantation / Barren Land
<b>Recommendations for Farmers</b>	-
<b>Recommendations for Deptt. Personnel</b>	-
<b>Feedback</b>	-

**OFT- 13**

Crop / Enterprise	Tomato	
Title of on farm trial	Assessment of Pest management in tomato by using leaf extract of <i>Cynodon dactylon</i>	
Problem diagnosed	Yield and economic loss due to thrips	
Farmers' Practices	Improper management	
Details of technologies selected for assessment	T1	Improper management
	T2	Chemical application - Indoxacarb 14.5 % SC (350 ml/ha)
	T3	IPM in tomato by using leaf extract of <i>Cynodon dactylon</i>
Source of technology	TNAU, Coimbatore (Tamil Nadu), Traditional Knowledge in Agriculture (2020). Division of Agricultural Extension, ICAR, New Delhi. pp-14	
Plot size	1 acre	
No. of farmers	5	
Total cost	Rs 1300	
Critical input	Rs 6500	
Performance indicators: (i) Technical- <b>yield (q/ ha)</b> (ii) Economic (iii) Social – <b>Employment generation</b>		

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

<b>Name of Discipline</b>	Horticulture
<b>Title of on-farm trial:</b>	Assessment of Pest management in tomato by using leaf extract of <i>Cynodon dactylon</i>
<b>Year/Season:</b>	2023
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	Low income of tomato farmers due to insect pest attack
<b>Thematic area:</b>	ITK
<b>No of trials:</b>	5
<b>No. of farmers involved</b>	5
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
Details of technology selected for assessment/ refinement:	
T1 – Farmers Practice-	Improper management
T2 –Recommended Practice-	Chemical application - Indoxacarb 14.5 % SC (350 ml/ha)
T3- Recommended Practice-	IPM in tomato by using leaf extract of <i>Cynodon dactylon</i>
<b>Date of sowing:</b>	22/10/23
<b>Date of harvesting:</b>	25/02/24
<b>Source of technology:</b>	TNAU, Coimbatore (Tamil Nadu), Traditional Knowledge in Agriculture (2020). Division of Agricultural Extension, ICAR, New Delhi. pp-14
<b>Characteristics of technology:</b>	IPM in tomato by using leaf extract of <i>Cynodon dactylon</i>
<b>Name of Crop/Enterprises:</b>	Tomato
<b>Recommendations for Farmers</b>	
<b>Recommendations for Deptt. Personnel</b>	
<b>Feedback</b>	

Information about Extension OFT:

<b>Title</b>	
<b>Season &amp; Year</b>	
<b>Problem identified</b>	
<b>Thematic Area</b>	
<b>Farming situation</b>	
<b>Name of Technology Intervention under study</b>	
<b>Farmers Practice</b>	
<b>No. of replication (Farmers)</b>	

Results / findings

Performance indicators/ parameters	Unit/ details

**Information about Home Science OFT: OFT: 1**

<b>Title of on-farm trial:</b>	Assessment of bio-fortified variety of Paddy – CR Dhan 310
<b>Year/Season:</b>	Kharif , 2023
<b>Problem diagnosis:</b>	High magnitude of malnutrition and low immunity among farm families
<b>Thematic area:</b>	Nutritional security
<b>No of trials:</b>	05
<b>No. of farmers/farm women involved</b>	05
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment:</b>	
T1 – Farmers Practice-	Use of variety MTU1010/IR 64
T2 –Recommended Practice-	Use of variety- CR Dhan 310
<b>Source of technology:</b>	CRRRI, Cuttack
<b>Characteristics of technology:</b>	Rich in various nutrients like protein and zinc
<b>Name of Crop/Enterprises:</b>	Paddy
<b>Farming situation:</b>	Rainfed
<b>Date of sowing:</b>	Ist week of July 2023
<b>Date of harvesting:</b>	Last week of November 2023
<b>Recommendations for Farmers</b>	
<b>Recommendations for Deptt. Personnel</b>	
<b>Feedback</b>	

**OFT: 2**

<b>Title of on-farm trial:</b>	Assessment of drumstick (Moringa oleifera) dry leaf powder as daily dietary supplement for anemic adolescent girls
<b>Year/Season:</b>	Kharif , 2023
<b>Problem diagnosis:</b>	Malnutrition due to high anemia in rural adolescent girls
<b>Thematic area:</b>	Nutritional Security
<b>No of trials:</b>	10
<b>No. of farmers/farm women involved</b>	10
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment:</b>	
T1 – Farmers Practice-	Imbalance diet
T2 –Recommended Practice-	Dry drumstick leaf powder @ 10g/day/head mean daily intake (MDI)
<b>Source of technology:</b>	PAU, Ludhiana (2012)
<b>Characteristics of technology:</b>	Dry drumstick leaf powder @ 10g/day/head mean daily intake (MDI)
<b>Name of Crop/Enterprises:</b>	Dry drumstick leaf powder
<b>Farming situation:</b>	
<b>Date of sowing:</b>	
<b>Date of harvesting:</b>	
<b>Recommendations for Farmers</b>	
<b>Recommendations for Deptt. Personnel</b>	
<b>Feedback</b>	

**OFT: 3**

<b>Title of on-farm trial:</b>	Assessment of acceptability of value added products by oyster mushroom to improve the malnutrition status of the farm family
<b>Year/Season:</b>	Rabi , 2023
<b>Problem diagnosis:</b>	High magnitude of malnutrition among farm families
<b>Thematic area:</b>	Nutritional Security
<b>No of trials:</b>	10
<b>No. of farmers/farm women involved</b>	10
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment:</b>	
T1 – Farmers Practice-	Use of fresh mushroom seasonally
T2 –Recommended Practice-	Use of value added mushroom pickle and mushroom badi
<b>Source of technology:</b>	National Research Centre for Mushroom –ICAR, Solan (2008 )
<b>Characteristics of technology:</b>	Value added mushroom pickle and mushroom badi
<b>Name of Crop/Enterprises:</b>	Value added mushroom pickle and mushroom badi
<b>Farming situation:</b>	
<b>Date of sowing:</b>	
<b>Date of harvesting:</b>	
<b>Recommendations for Farmers</b>	
<b>Recommendations for Deptt. Personnel</b>	
<b>Feedback</b>	

**OFT: 4**

<b>Title of on-farm trial:</b>	Assessment of malted sattu (Sprouted chick pea+ sprouted wheat) for Malnourished Children
<b>Year/Season:</b>	Rabi , 2023
<b>Problem diagnosis:</b>	Prevalence of malnutrition in children of age -3-5 years
<b>Thematic area:</b>	Nutritional Security
<b>No of trials:</b>	10
<b>No. of farmers/farm women involved</b>	10
<b>Type of OFT (Assessment/ Refinement):</b>	Assessment
<b>Details of technology selected for assessment:</b>	
T1 – Farmers Practice-	Imbalance diet
T2 –Recommended Practice-	Sprouted chickpea -15 gm,+ sprouted wheat- 15 gm + Jaggery 10 gm @ 40 gm/day/child for 3 months (Fulfilling the 29% requirement of RDA)
<b>Source of technology:</b>	PAU, Ludhiana (2012)
<b>Characteristics of technology:</b>	Sprouted chickpea -15 gm,+ sprouted wheat- 15 gm + Jaggery 10 gm @ 40 gm/day/child for 3 months (Fulfilling the 29% requirement of RDA)
<b>Name of Crop/Enterprises:</b>	Malted sattu
<b>Farming situation:</b>	
<b>Date of sowing:</b>	
<b>Date of harvesting:</b>	
<b>Recommendations for Farmers</b>	
<b>Recommendations for Deptt. Personnel</b>	
<b>Feedback</b>	

**Information about Agriculture Engineering OFT  
OFT-1**

Crop / Enterprise	Paddy / Riding type paddy transplanter
Title of on farm trial	<b>Assessment of Riding type paddy transplanter</b>
Problem diagnosed	Manually transplanting - zigzag transplanting, resulting in problems during intercultural operation ultimately leading to loss of time and energy
Farmers' Practices	Manually Transplanting
Details of technologies selectedfor assessment	T1 Broadcasting
	T2 Manually Transplanting
	T3 Riding type paddy transplanter
Source of technology	CIAE Bhopal, 2019
Plot size	0.4 ha
No. of farmers	5
Total cost	Rs 3300
Critical input	Rs 16500
Performance indicators: (i) Technical- (ii) Economic (iii) Social –	Labour Requirement(No./ha), Field capacity(ha/hr), Plant Population (No/m2), Operational Cost(Rs./ha or Rs./hr), Yield(q), B:C Ratio

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

<b>Name of Discipline</b>	<i>Agricultural Engineering</i>
<b>Title of on-farm trial:</b>	<b>Assessment of Riding type paddy transplanter</b>
<b>Year/Season:</b>	Kharif – 2023
<b>Farming situation:</b>	Semi- irrigated
<b>Problem diagnosis:</b>	Manually transplanting - zigzag transplanting, resulting in problems during intercultural operation ultimately leading to loss of time and energy
<b>Thematic area:</b>	Farm Mechanization
<b>No of trials:</b>	5
<b>No. of farmers involved</b>	10
<b>Type of OFT (Assessment/ Refinement):</b>	<i>Assessment</i>
<i>Details of technology selected for assessment/ refinement:</i>	
T1 – Farmers Practice-	Broadcasting
T2 –Recommended Practice-	Manually Transplanting
T3- Recommended Practice-	Riding type paddy transplanter
<b>Date of sowing:</b>	<i>22/07/23</i>
<b>Date of harvesting:</b>	20/11/23
<b>Source of technology:</b>	CIAE Bhopal, 2019
<b>Characteristics of technology:</b>	Riding type paddy transplanter
<b>Name of Crop/Enterprises:</b>	Paddy / Riding type paddy transplanter
<b>Recommendations for Farmers</b>	
<b>Recommendations for Deptt. Personnel</b>	
<b>Feedback</b>	

**OFT-2**

Crop / Enterprise	Soybean / Ridge & furrow sowing, Ridge bed sowing
Title of on farm trial	<b>Assessment of different sowing method for soybean sowing</b>
Problem diagnosed	Low yield of Soybean due to poor plant population, moisture stress and / or water stagnation due to heavy down pour
Farmers' Practices	Flat- bed sowing
Details of technologies selectedfor assessment	T1 Flat- bed sowing
	T2 Ridge & furrow sowing
	T3 Ridge bed sowing
Source of technology	CIAE Bhopal, 2018
Plot size	0.4 ha
No. of farmers	5
Total cost	3800
Critical input	19000

Performance indicators: (i) Technical- (ii) Economic (iii) Social –	Field capacity (ha/hr), Operational Cost(Rs./ha or Rs./hr), Plant population (No./m <sup>2</sup> ), Plant height at harvest (cm), Root length at 60 DAS (cm), Number of root nodules per plant at 60 DAS (No./plant), No. of branches at harvest (No./plant), Yield(q), B:C Ratio
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#### Details of On Farm Trial (OFT)

<b>Name of Discipline</b>	<i>Agricultural Engineering</i>
<b>Title of on-farm trial:</b>	<b>Assessment of different sowing method for soybean sowing</b>
<b>Year/Season:</b>	Kharif – 2023
<b>Farming situation:</b>	Semi- irrigated
<b>Problem diagnosis:</b>	Low yield of Soybean due to poor plant population, moisture stress and / or water stagnation due to heavy down pour
<b>Thematic area:</b>	Farm Mechanization
<b>No of trials:</b>	5
<b>No. of farmers involved</b>	10
<b>Type of OFT (Assessment/ Refinement):</b>	<i>Assessment</i>
<i>Details of technology selected for assessment/ refinement:</i>	
T1 – Farmers Practice-	Flat- bed sowing
T2 –Recommended Practice-	Ridge & furrow sowing
T3- Recommended Practice-	Ridge bed sowing
<b>Date of sowing:</b>	<i>15/07/2023</i>
<b>Date of harvesting:</b>	10/11/2023
<b>Source of technology:</b>	CIAE Bhopal, 2018
<b>Characteristics of technology:</b>	Ridge & furrow method of soybean sowing , Ridge bed method of sowing of soybean
<b>Name of Crop/Enterprises:</b>	Soybean / Ridge & furrow sowing, Ridge bed sowing
<b>Recommendations for Farmers</b>	
<b>Recommendations for Deptt. Personnel</b>	
<b>Feedback</b>	

#### OFT-3

Crop / Enterprise	Linseed/Seed Cum Fertilizer drill
Title of on farm trial	<b>Assessment of Seed cum fertilizer drill for Linseed sowing with water saving irrigation system.</b>
Problem diagnosed	Low yield and problem in intercultural operation in linseed crop due to broadcasting sowing (Farmers practice) and uneven flood irrigation in field.
Farmers' Practices	Broadcasting
Details of technologies selected for assessment	T1 Broadcasting and flood irrigation
	T2 Seed Cum Fertilizer drill and flood irrigation
	T3 Seed Cum Fertilizer drill and sprinkler irrigation
Source of technology	CIAE, Bhopal (2000)
Plot size	0.4 ha
No. of farmers	5
Total cost	2200
Critical input	11000
Performance indicators: (i) Technical- (ii) Economic (iii) Social –	Field capacity(ha/hr), Operational Cost (Rs./ha or Rs./hr), Water productivity (Kg/m <sup>3</sup> ), Yield(q), B:C Ratio

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

<b>Name of Discipline</b>	<i>Agricultural Engineering</i>
<b>Title of on-farm trial:</b>	<b>Assessment of Seed cum fertilizer drill for Linseed sowing with water saving irrigation system.</b>
<b>Year/Season:</b>	Rabi – 2023 – 24
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	Low yield and problem in intercultural operation in linseed crop due to broadcasting sowing (Farmers practice) and uneven flood irrigation in field.
<b>Thematic area:</b>	Resource Conservation
<b>No of trials:</b>	5
<b>No. of farmers involved</b>	10
<b>Type of OFT (Assessment/ Refinement):</b>	<i>Assessment</i>
<i>Details of technology selected for assessment/ refinement:</i>	
T1 – Farmers Practice-	Broadcasting and flood irrigation
T2 –Recommended Practice-	Seed Cum Fertilizer drill and flood irrigation
T3- Recommended Practice-	Seed Cum Fertilizer drill and sprinkler irrigation
<b>Date of sowing:</b>	<i>20/11/2023</i>
<b>Date of harvesting:</b>	10/03/2024
<b>Source of technology:</b>	CIAE, Bhopal (2000)
<b>Characteristics of technology:</b>	Line sowing and Water saving, Resource conservation technology
<b>Name of Crop/Enterprises:</b>	Linseed/Seed Cum Fertilizer drill
<b>Recommendations for Farmers</b>	
<b>Recommendations for Deptt. Personnel</b>	
<b>Feedback</b>	

**OFT-4**

Crop / Enterprise	Onion / perforated pipe irrigation
Title of on farm trial	<b>Assessment of perforated pipe irrigation in onion crop.</b>
Problem diagnosed	Low yield in Onion crop due to flood irrigation in field and uneven irrigation due to excess water requirement for irrigation.
Farmers' Practices	Zigzag sowing and flood irrigation
Details of technologies selected for assessment	T1 Flood irrigation
	T2 Perforated pipe irrigation
	T3
Source of technology	CIAE, Bhopal (2019)
Plot size	<b>0.1 ha</b>
No. of farmers	5
Total cost	6000
Critical input	30000
Performance indicators: (i) Technical- (ii) Economic (iii) Social –	Operational Cost (Rs./ha or Rs./hr), Water productivity (Kg/m <sup>3</sup> ), Yield(q), B:C Ratio

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

<b>Name of Discipline</b>	<i>Agricultural Engineering</i>
<b>Title of on-farm trial:</b>	<b>Assessment of perforated pipe irrigation in onion crop.</b>
<b>Year/Season:</b>	Rabi 2023 – 24
<b>Farming situation:</b>	<i>Irrigated</i>
<b>Problem diagnosis:</b>	Low yield in Onion crop due to flood irrigation in field and uneven irrigation due to excess water requirement for irrigation.
<b>Thematic area:</b>	Resource Conservation
<b>No of trials:</b>	<i>5</i>
<b>No. of farmers involved</b>	<i>10</i>
<b>Type of OFT(Assessment/ Refinement):</b>	<i>Assessment</i>
<i>Details of technology selected for assessment/ refinement:</i>	
T1 – Farmers Practice-	Flood irrigation
T2 –Recommended Practice-	Perforated pipe irrigation
T3- Recommended Practice-	
<b>Date of sowing:</b>	<i>12/11/2023</i>
<b>Date of harvesting:</b>	15/03/2024
<b>Source of technology:</b>	CIAE, Bhopal (2019)
<b>Characteristics of technology:</b>	Line sowing and Water saving
<b>Name of Crop/Enterprises:</b>	Onion / perforated pipe irrigation
<b>Recommendations for Farmers</b>	
<b>Recommendations for Deptt. Personnel</b>	
<b>Feedback</b>	

**OFT-5**

Crop / Enterprise	Summer greengram/Seed Cum Fertilizer drill
Title of on farm trial	<b>Assessment of inclined plate planter for summer greengram sowing with water saving irrigation system.</b>
Problem diagnosed	Low yield and problem in intercultural operation in Summer Greengram crop due to broadcasting sowing (Farmers practice) and uneven flood irrigation in field.
Farmers' Practices	Broadcasting and flood irrigation
Details of technologies selected for assessment	T1 Broadcasting and flood irrigation
	T2 Inclined plate planter and flood irrigation
	T3 Inclined plate planter and sprinkler irrigation
Source of technology	CIAE, Bhopal (2000)
Plot size	0.4 ha
No. of farmers	5
Total cost	2600
Critical input	13000
Performance indicators: (i) Technical- (ii) Economic (iii) Social –	Field capacity (ha/hr), Operational Cost (Rs./ha or Rs./hr), Water productivity (Kg/m <sup>3</sup> ), Yield (q), B:C Ratio

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

<b>Name of Discipline</b>	<i>Agricultural Engineering</i>
<b>Title of on-farm trial:</b>	<b>Assessment of inclined plate planter for summer greengram sowing with water saving irrigation system.</b>
<b>Year/Season:</b>	Summer – 2024
<b>Farming situation:</b>	Irrigated
<b>Problem diagnosis:</b>	Low yield and problem in intercultural operation in Summer Greengram crop due to broadcasting sowing (Farmers practice) and uneven flood irrigation in field.
<b>Thematic area:</b>	Resource Conservation
<b>No of trials:</b>	<i>5</i>
<b>No. of farmers involved</b>	<i>10</i>
<b>Type of OFT(Assessment/ Refinement):</b>	<i>Assessment</i>
<i>Details of technology selected for assessment/ refinement:</i>	
T1 – Farmers Practice-	Broadcasting and flood irrigation
T2 –Recommended Practice-	Inclined plate planter and flood irrigation
T3- Recommended Practice-	Inclined plate planter and sprinkler irrigation
<b>Date of sowing:</b>	<i>25/03/2024</i>
<b>Date of harvesting:</b>	10/05/2024
<b>Source of technology:</b>	CIAE, Bhopal (2000)
<b>Characteristics of technology:</b>	Line sowing and Water saving, Resource conservation technology
<b>Name of Crop/Enterprises:</b>	Summer greengram/ Inclined plate planter
<b>Recommendations for Farmers</b>	
<b>Recommendations for Deptt. Personnel</b>	
<b>Feedback</b>	

## Frontline Demonstrations

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

Sl. No.	Crop	Thematic area	Technology for demonstration	Critical inputs	Season and year	Area (ha)	No. of farmers/ demonstration	Parameters identified for performance evaluation
1	Kodo	Crop production	Demonstration of HYV variety JK 137 of kodo under Kodo -mustard cropping sequence	Seed	Kharif, 2023	2	5	Plant height (cm) , No of tillers, Yield(q/ha), B:C Ratio
2	Paddy	Crop production	Demonstration of HYV variety (JR 81/JR 206) under Rice-Chickpea cropping sequence	Seed	Kharif, 2023	2	5	Plant height (cm) , No of tillers, No. of plants), Yield(q/ha), B:C Ratio
3	Azolla	Crop production	Demonstration of Azolla for poultry birds under backyard poultry system	Azolla	Round the year,2023-24	-	10	No of egg production after 6 month, B: C Ratio
4	Chickpea	Crop production	Demonstration of Seed treatment (Biofertilizers) and line sowing of HYV of chickpea (JG 36) through seed cum fertilizers drill under Paddy-chickpea cropping system	Seed	Rabi, 2023	2	5	Plant height (cm) , Pods /plant ( No./plant) , Yield (q/ha), B: C Ratio
5	Linseed	Crop production	Demonstration of Seed treatment (Biofertilizers) and line sowing of HYV of linseed (JLS 73/79) through seed cum fertilizer drill under paddy-linseed cropping system	Seed	Rabi, 2023	2	5	Plant height (cm) , Capsule /plant ( No) , Yield (q/ha), B: C Ratio
6	Vegetables	Demonstration on kitchen gardening (Nutritional security)	Nutritional garden	Seed and seedlings	Round the year 2023	01	20	Per capita availability
7	Paushtik chapatti	Demonstration on nutritional enhancement of preschool children through incorporation of paushtik chapatti (fortification of Kodo flour, drumstick leaf powder to wheat flour) in their diet	Paushtik chapatti	fortification of Kodo flour, drumstick leaf powder to wheat flour	Kharif 2023	01	20	Nutrient Intake, Biometric measurements, sensory parameters
8	Mushroom production	Demonstration on income enhancement of FW through Mushroom production	Oyster mushroom production on wheat straw	Oyster mushroom production on wheat straw	Rabi 2023	01	5	Yield(Kg/bag), Cost of input, Incremental income, Net Return, Saving in Rs., B:C ratio
9	Backyard Poultry Farming	Demonstration on income enhancement of FW through Backyard Poultry Farming	Backyard Poultry Farming	Backyard Poultry Farming	Rabi 2023	01	5	Body wt (Kg), Egg Production (No/year), Increase in income (Rs.), B:C ratio

### Demonstration of natural farming in Kodo–Pigeon pea cropping sequence

Crop	Kodo
Thematic area	Integrated Crop Management under natural Farming
Technology for demonstration	Kodo Variety JK 137 (8-10 kg/ha) Seed Treatment with Beejamrut @ 20 ml / kg seed Soil application of Jeevamrut @ 500kg /ha or 200 li/acre before sowing Soil application of Ghanjeevamrit @ 500kg /ha in 2 equal splits during sowing and 30 DAS Live mulching: Intercropping (2:1) or mixed cropping of Red gram Foliar application of Jeevamrit @ 5-10 % at 20, 40, 60 and 80 DAS Foliar Application of Birmahstra @ 6 liter/500 liter water/ha for controlling shoot fly
Critical inputs	Seed, Drum, Jaggary (15 kg), Pulses flour (15 kg), sprayer pump
Season and year	Kharif/ 2023
Area( ha)	0.4 ha
No. of farmers/ demonstration	05
Data on parameter in relation to technology demonstrated	Demonstration: Pre & post Soil analysis, Plant height (cm), No. of tillers/plant, yield (q/ha), Local Check/ Farmer Practice: Pre & post Soil analysis, Plant height (cm), No. of tillers/plant, yield (q/ha),
Parameters identified	Pre & post Soil analysis, Plant height (cm) , yield ( q/ha), Net Return (Rs./ ha), B: C Ratio, Feedback and Farmer's reaction
Cost of input	8500/-
Total cost	42500/-
Extension and Training	Training, Field day, method demonstration of beejamrut etc and Media coverage

**Extension and Training activities under FLDs**

S. No.	Activity	No. of activities	Month	Number of participants
1	Field days	5	August, Sep, Jan, Feb	100
2	Farmers Training	5	June, July, Oct, Nov.	100
3	Media coverage	5	June, July, Oct, Nov.	100
4	Training for extension functionaries	2	June, July, Oct, Nov.	40

**Details of FLD on Enterprises**

**Farm Implements**

Name of the implement	crop	Season and year	No. of farmers	Area (ha)	Critical inputs	Performance parameters / indicators	* Data on parameter in relation to technology demonstrated	
							Demon.	Local check
Seed cum ferti drill	Paddy	Kharif – 2023	5	2	Seed and Hiring machinery	Labour Requirement (Man-hr/ha), Field capacity (ha/hr), Operational Cost (Rs./ha or Rs./hr), Energy Requirement (MJ/ha), Yield (q/ha), B:C Ratio		
Broad bed planter	Maize	Kharif – 2023	5	2	Seed and Hiring machinery	Labour Requirement (Man-hr/ha), Field capacity (ha/hr), Operational Cost (Rs./ha or Rs./hr), Yield (q/ha), B:C Ratio		
Cono Weeder	Paddy	Kharif - 2023	5	2	Seed and Provide Machine	Labour Requirement (Man-hr/ha), Field capacity (ha/hr), Operational Cost (Rs./ha or Rs./hr), Plant height (cm), Number of tillers (No.) Yield (q/ha), B:C Ratio		
Zero till seed drill	Wheat	Rabi – 2023 – 24	5	2	Seed and Hiring machinery	Labour Requirement(No./ha), Field capacity(ha/hr), Time requirement (hr/ha), Operational Cost (Rs./ha or Rs./hr), Energy Requirement(MJ/ha), Yield(q), B:C Ratio		
Singal row Vegetable transplanter	Tomato	Rabi – 2023 – 24	5	2	Seed and Provide Machine	Labour Requirement(No./ha), Field capacity(ha/hr), Field Efficiency(%), Time requirement (hr/ha), Operational Cost (Rs./ha or Rs./hr), Percentage of mortality (%), Yield(q), B:C Ratio		
Seed cum ferti drill	Chickpea	Rabi – 2023 – 24	5	2	Seed and Hiring machinery	Field capacity(ha/hr), Plant population (No/m <sup>2</sup> ), Plant height (cm), Number of pod (No/plant), Yield(q), B:C Ratio		

\*Field efficiency, labour saving etc.

**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

\*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	CP	ICM in soybean	Biofertilizer, herbicides, pesticides	Kharif, 2023	20	50	Plant height, Yield, BC
2	Sesame	CP	ICM in sesame	Seed, Biofertilizer, herbicides, pesticides	Kharif, 2023	20	50	Plant height, Yield, BC
3	Pigeon pea	CP	ICM	Seed, Biofertilizer, herbicides, pesticides	Kharif, 2023	20	50	Plant height, Yield, BC
4	Black gram	CP	ICM	Seed, Biofertilizer, herbicides, pesticides	Kharif, 2023	10	25	Plant height, Yield, BC
5	Green gram	CP	ICM	Seed, Biofertilizer, herbicides, pesticides	Kharif, 2023	10	25	Plant height, Yield, BC
6	Mustard	CP	ICM	Seed, Biofertilizer, herbicides, pesticides	Rabi, 2023	20	50	Plant height, Yield, BC
7	Linseed	CP	ICM	Seed, Biofertilizer, herbicides, pesticides	Rabi, 2023	20	50	Plant height, Yield, BC
8	Chickpea	CP	ICM	Seed, Biofertilizer, herbicides, pesticides	Rabi, 2023	20	50	Plant height, Yield, BC
9	Lentil	CP	ICM	Seed, Biofertilizer, herbicides, pesticides	Rabi, 2023	20	50	Plant height, Yield, BC
10	Field pea	CP	ICM	Seed, Biofertilizer, herbicides, pesticides	Rabi, 2023	10	25	Plant height, Yield, BC
11	Black gram	CP	ICM	Seed, Biofertilizer, herbicides, pesticides	Summer, 2023-24	20	50	Plant height, Yield, BC
12	Green gram	CP	ICM	Seed, Biofertilizer, herbicides, pesticides	Summer, 2023-24	20	50	Plant height, Yield, BC

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

S. No.	Activity	No. of activities	Month	Number of participants
1	Field days	12	Round the year as per CFLDs crops	240
2	Farmers Training	12	Round the year as per CFLDs crops	270
3	Media coverage	12	Round the year as per CFLDs crops	Mass
4	Training for extension functionaries	12	Round the year as per CFLDs crops	180

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

Thematic Area	No. of Courses	Duration (Days)	No. of Participants							
			Others			SC/ST			Grand Total	
			Male	Female	Total	Male	Female	Total		
<b>(A) Farmers &amp; Farm Women</b>										
<b>I Crop Production</b>										
Weed Management	5	1	9	7	15	13	5	18	33	
Resource Conservation Technologies	3	1	7	5	12	11	5	16	28	
Integrated Farming	3	1	7	3	10	9	7	16	26	
Water management	3	1	7	5	12	11	5	16	28	
Seed production	1	1	7	3	10	9	7	16	26	
Integrated Crop Management	3	1	9	7	15	13	5	18	33	
<b>Total</b>	<b>18</b>	<b>6</b>	<b>36</b>	<b>30</b>	<b>74</b>	<b>66</b>	<b>34</b>	<b>100</b>	<b>174</b>	
<b>II Horticulture</b>										
<b>a) Vegetable &amp; fruit Crops</b>										
Off-season vegetables										
Protective cultivation (Green Houses, Shade Net etc.)										
<b>Total</b>										
<b>b) Fruits</b>										
Management of young plants/orchards										
<b>Total</b>										
<b>c) Ornamental Plants</b>										
<b>Total</b>										
<b>d) Plantation crops</b>										
<b>Total</b>										
<b>e) Tuber crops</b>										
<b>Total</b>										
<b>f) Spices</b>										
Production and Management technology										
<b>Total</b>										
<b>g) Medicinal and Aromatic Plants</b>										
Production and management technology										
<b>Total</b>										
<b>Grand total (Horticulture)</b>										
<b>III Soil Health and Fertility Management</b>										
Soil fertility management										
Soil and Water Conservation										
Integrated Nutrient Management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Soil and Water Testing										
<b>Total</b>										
<b>IV Livestock Production and Management</b>										
Dairy Management										
Poultry Management										
Disease Management										
Feed management										
Production of quality animal products										
<b>Total</b>										
<b>V Home Science/Women empowerment</b>										
Household food security by kitchen gardening and nutrition gardening	05	05	-	50	50	-	50	50	100	
Design and development of low/minimum cost diet	01	01	-	10	10	-	10	10	20	
Designing and development for high nutrient efficiency diet	01	01	-	10	10	-	10	10	20	
Minimization of nutrient loss in processing	01	01	-	10	10	-	10	10	20	
Gender mainstreaming through SHGs										
Value addition	01	01	-	10	10	-	10	10	20	
Income generation activities for empowerment of rural Women	01	01	-	10	10	-	20	20	30	
Location specific drudgery reduction technologies										
Women and child care	03	03	-	30	30	-	30	30	60	
<b>Total</b>	<b>13</b>	<b>13</b>		<b>130</b>	<b>130</b>		<b>140</b>	<b>140</b>	<b>140</b>	
<b>VI Agril. Engineering</b>										
<b>Total</b>	<b>9</b>	<b>9</b>	<b>35</b>	<b>29</b>	<b>64</b>	<b>66</b>	<b>34</b>	<b>100</b>	<b>164</b>	
<b>VII Plant Protection</b>										
Integrated Pest Management										
Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
<b>Total</b>										
<b>VIII Fisheries</b>										

Thematic Area	No. of Courses	Duration (Days)	No. of Participants						Grand Total
			Others			SC/ST			
			Male	Female	Total	Male	Female	Total	
Integrated fish farming									
<b>Total</b>									
<b>IX Production of Inputs at site</b>									
Vermi-compost production									
Organic manures production									
<b>Total</b>									
<b>X Capacity Building and Group Dynamics</b>									
Leadership development									
Group dynamics									
Formation and Management of SHGs									
Mobilization of social capital									
Entrepreneurial development of farmers/youths									
WTO and IPR issues									
<b>Total</b>									
<b>XI Agro-forestry</b>	<b>13</b>	<b>13</b>	<b>49</b>	<b>26</b>	<b>65</b>	<b>104</b>	<b>81</b>	<b>195</b>	<b>260</b>
<b>Total</b>									
<b>XII Others (Pl. Specify)</b>									
<b>Grand Total</b>									
<b>(B) RURAL YOUTH</b>									
Mushroom Production	01	04	05	05	10	05	05	10	20
Bee-keeping									
Seed production	01	5	4	1	5	6	3	9	14
Planting material production									
Vermi-culture									
Value addition	01	04	05	05	10	05	05	10	20
Sheep and goat rearing									
Para extension workers									
Repair and maintenance of farm machinery and implements	1	7	5	3	8	8	4	12	20
Skill Development Training on Micro Irrigation Technician	1	7	5	3	8	8	4	12	20
<b>TOTAL</b>	<b>3</b>	<b>13</b>	<b>24</b>	<b>17</b>	<b>41</b>	<b>32</b>	<b>21</b>	<b>53</b>	<b>94</b>
<b>(C) Extension Personnel</b>									
Productivity enhancement in field crops									
Integrated Pest Management									
Integrated Nutrient management									
Protected cultivation technology									
Group Dynamics and farmers organization									
Capacity building for ICT application									
Livestock feed and fodder production									
Production and use of organic inputs									
Gender mainstreaming through SHGs									
Care and maintenance of farm machinery and implements	1	7	5	3	8	8	4	12	20
Any other (Pl. Specify)									
Agroforestry	03	03	15	19	24	24	12	36	60
<b>TOTAL</b>	<b>03</b>	<b>03</b>	<b>20</b>	<b>22</b>	<b>32</b>	<b>32</b>	<b>16</b>	<b>48</b>	<b>80</b>

**(B) OFF Campus**

Thematic Area	No. of Courses	Duration (days)	No. of Participants						Grand Total
			Others			SC/ST			
			Male	Female	Total	Male	Female	Total	
<b>(A) Farmers &amp; Farm Women</b>									
<b>I Crop Production</b>									
Weed Management	5	1	9	7	16	13	5	18	34
Resource Conservation Technologies	3	1	7	5	12	11	5	16	28
Cropping Systems	3	1	7	3	10	9	7	16	26
Crop Diversification	3	1	7	5	12	11	5	16	28
Integrated Farming	1	1	7	3	10	9	7	16	26
Water management	3	1	9	7	16	13	5	18	34
Seed production	1	1	7	5	12	11	5	16	28
Nursery management	1	1	7	5	12	11	5	16	28
Integrated Crop Management	1	1	4	2	6	9	7	16	22
Fodder production	1	1	7	5	12	11	5	16	28
Production of organic inputs	1	1	4	2	6	9	7	16	22
<b>Total</b>	<b>23</b>	<b>11</b>	<b>75</b>	<b>49</b>	<b>122</b>	<b>117</b>	<b>63</b>	<b>180</b>	<b>304</b>

II Horticulture									
<b>a) Vegetable Crops</b>									
Nursery raising									
Export potential vegetables									
Protective cultivation (Green Houses, Shade Net etc.)									
<b>b) Fruits</b>									
Cultivation of Fruit									
Management of young plants/orchards									
Export potential of ornamental plants									
Propagation techniques of Ornamental Plants									
<b>d) Plantation crops</b>									
<b>e) Tuber crops</b>									
<b>f) Spices</b>									
<b>g) Medicinal and Aromatic Plants</b>									
<b>III Soil Health and Fertility Management</b>									
Soil fertility management									
Soil and Water Conservation									
Integrated Nutrient Management									
Production and use of organic inputs									
Management of Problematic soils									
Micro nutrient deficiency in crops									
Nutrient Use Efficiency									
Soil and Water Testing									
<b>IV Livestock Production and Management</b>									
Dairy Management									
Poultry Management									
Disease Management									
Feed management									
Production of quality animal products									
<b>V Home Science/Women empowerment</b>									
Household food security by kitchen gardening and nutrition gardening	04	04	-	40	40	-	40	40	<b>80</b>
Design and development of low/minimum cost diet	03	03	-	30	30	-	30	30	<b>60</b>
Designing and development for high nutrient efficiency diet									
Minimization of nutrient loss in processing	01	01	-	10	10	-	10	10	<b>20</b>
Gender mainstreaming through SHGs									
Storage loss minimization techniques									
Value addition									
Income generation activities for empowerment of rural Women									
Location specific drudgery reduction technologies									
Rural Crafts									
Women and child care	02	02	-	20	20	-	20	20	<b>40</b>
<b>Total</b>	<b>10</b>	<b>10</b>	<b>-</b>	<b>100</b>	<b>100</b>	<b>-</b>	<b>100</b>	<b>100</b>	<b>200</b>
<b>VI Agril. Engineering</b>	<b>7</b>	<b>7</b>	<b>30</b>	<b>22</b>	<b>52</b>	<b>53</b>	<b>27</b>	<b>80</b>	<b>132</b>
<b>VII Plant Protection</b>									
Integrated Pest Management									
Integrated Disease Management									
Bio-control of pests and diseases									
Production of bio control agents and bio pesticides									
<b>VIII Fisheries</b>									
<b>IX Production of Inputs at site</b>									
<b>X Capacity Building and Group Dynamics</b>									
Leadership development									
Group dynamics									
Formation and Management of SHGs									
Mobilization of social capital									
Entrepreneurial development of farmers/youths									
WTO and IPR issues									
<b>XI Agro-forestry</b>	<b>14</b>	<b>14</b>	<b>42</b>	<b>28</b>	<b>70</b>	<b>140</b>	<b>70</b>	<b>210</b>	<b>280</b>
<b>XII Others (Pl. Specify)</b>									
<b>TOTAL</b>									
<b>(B) RURAL YOUTH</b>									
Production of organic inputs	1	5	4	1	5	6	3	9	14
IFS for employment generation	1	5	4	1	5	6	3	9	14
Sheep and goat rearing									
Agro forestry	01	30	07	04	11	09	05	14	25
<b>TOTAL</b>	<b>03</b>	<b>40</b>	<b>15</b>	<b>6</b>	<b>21</b>	<b>21</b>	<b>11</b>	<b>32</b>	<b>53</b>
<b>(C) Extension Personnel</b>									
Crop Production	3	3	8	10	18	20	10	30	48
Home Science	3	3	-	30	30	-	30	30	60
<b>TOTAL</b>	<b>6</b>	<b>6</b>	<b>-</b>	<b>40</b>	<b>48</b>	<b>20</b>	<b>40</b>	<b>60</b>	<b>108</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	
Crop Production										
Jan	F/FW	Soil health and fertility management -Integrated Nutrient management	1	3	3	6	7	3	10	16
Jan	F/FW	Crop production- ICM	1	4	1	5	6	3	9	14
Feb	F/FW	Crop production- Weed management	1	2	4	6	6	4	10	16
Mar	F/FW	Soil health and fertility management -Integrated Nutrient management	1	4	1	5	6	3	9	14
Mar	F/FW	Crop production- Integrated crop management	1	2	4	6	6	4	10	16
Apr	F/FW	Crop production- Water management	1	3	3	6	7	3	10	16
May	F/FW	Soil health and fertility management -Production of organic inputs	1	2	4	6	6	4	10	16
May	F/FW	Crop production- Integrated farming	1	3	3	6	7	3	10	16
Jun	F/FW	Crop production and management	1	4	1	5	6	3	9	14
Jun	F/FW	Soil health and fertility management -Integrated Nutrient management	1	2	4	6	6	4	10	16
Jul	F/FW	Crop production- Integrated farming	1	3	3	6	7	3	10	16
Jul	F/FW	Crop production and management	1	2	4	6	6	4	10	16
Jul	F/FW	Soil health and fertility management -Integrated Nutrient management	1	3	3	6	7	3	10	16
Aug	F/FW	Crop production-seed production	1	4	1	5	6	3	9	14
Sep	F/FW	Soil health and fertility management -Integrated Nutrient management	1	4	1	5	6	3	9	14
Oct	F/FW	Soil health and fertility management -Integrated Nutrient management	1	4	1	5	6	3	9	14
Oct	F/FW	Crop production-seed production	1	2	4	6	6	4	10	16
Oct	F/FW	Crop production- water management	1	3	3	6	7	3	10	16
Nov	F/FW	Soil health and fertility management -Integrated Nutrient management	1	4	1	5	6	3	9	14
Nov	F/FW	Soil health and fertility management -Production of organic inputs	1	2	4	6	6	4	10	16
Dec	F/FW	Crop production- Integrated farming	1	3	3	6	7	3	10	16
Dec	F/FW	Crop production- weed management	1	2	4	6	6	4	10	16
Horticulture										
Livestock production										
Home Science										
Jan	FW	WOE- Household food security by kitchen gardening and nutrition gardening	01	-	10	10	-	10	10	20
Feb	FW	WOE- Household food security by kitchen gardening and nutrition gardening	01	-	10	10	-	10	10	20
Mar	FW	WOE- Mushroom Production and its value addition	10	-	10	10	-	20	20	30
Mar	FW	WOE- Women and child care	01	-	10	10	-	10	10	20
April	FW	WOE- Design and development of low cost diet	01	-	10	10	-	10	10	20
May	FW	WOE- Household food security by kitchen gardening and nutrition gardening	01	-	10	10	-	10	10	20
July	FW	WOE- Household food security by kitchen gardening and nutrition gardening	01	-	10	10	-	10	10	20
July	FW	WOE- Design and development of High nutrient efficient diet	01	-	10	10	-	10	10	20
Aug	FW	WOE- Women and child care	01	-	10	10	-	10	10	20
Sep	FW	WOE- Household food security by kitchen gardening and nutrition gardening	01	-	10	10	-	10	10	20
Nov	FW	WOE- Women and child care	01	-	10	10	-	10	10	20
Dec	FW	WOE- Minimization of nutrient loss in processing	01	-	10	10	-	10	10	20
Dec	FW	WOE- Value addition	01	-	10	10	-	10	10	20
Plant Protection										
Agriculture Extension (Capacity Building and Group Dynamics)										
Soil Science										
<b>Others-</b>										
<b>Agro- forestry</b>										
June 2023	F/ FW	Scientific Cultivation of Turmeric under the Shade of tree.	01	05	03	08	08	04	12	<b>20</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>Plant Protection</b>										
<b>Agriculture Extension (Capacity Building and Group Dynamics)</b>										
<b>Soil Science</b>										
<b>Others- Agro - forestry</b>										
March 2023	F/FW	Importance of Minor Forest Product for Additional Income.	01	05	03	08	08	04	12	20
April 2023	F/FW	Biological Control measure of Insect pest in planted tree and their management.	01	05	03	08	08	04	12	20
April 2023	F/FW	Training on Apiculture and their Management.	01	05	03	08	08	04	12	20
May 2023	F/FW	Planting technique of Eucalyptus,Teak, and Shisham and their Management.	01	05	03	08	08	04	12	20
May 2023	F/FW	Training on Production of Napier grass and Makka Chari for Animal Feed.	01	05	03	08	08	04	12	20
May 2023	F/FW	Intercropping system of different tree along with Kharif Crops and their Importance.	01	05	03	08	08	04	12	20
June 2023	F/FW	Scientific Cultivation of Makka chari based on Agroforestry system.	01	05	03	08	08	04	12	20
July 2023	F/FW	Training on "Paddy + Bunds on Moringa Based Agroforestry System.	01	05	03	08	08	04	12	20
Oct 2023	F/FW	Training on "Wheat + Bunds on Mango/Eucalyptus Based AgroHorticulture System.	01	05	03	08	08	04	12	20
Oct 2023	F/FW	Training on "Gram + Bunds on Guava/Eucalyptus Based Agroforestry System.	01	05	03	08	08	04	12	20
Nov 2023	F/FW	Training on " Arhar + Eucalyptus Based Agroforestry System.	01	05	03	08	08	04	12	20
Dec 2023	F/FW	Wasteland Development through Babul, Aonla, Karanja plantation.	01	05	03	08	08	04	12	20
Jan 2024	F/FW	Important role on Jetropha & custard Apple in Human Life	01	05	03	08	08	04	12	20
Feb 2024	F/FW	Training on Method of Mahua seed /Flowers collection and their Advantage.	01	05	03	08	08	04	12	20
March 2023	F/FW	Importance of Minor Forest Product for Additional Income.	01	05	03	08	08	04	12	20
<b>Agril. Engineering</b>										
June 2023	F/FW	Different types of implements use for field preparation in kharif season	01	5	3	8	8	4	12	<b>20</b>
June 2023	F/FW	Different sowing techniques for soybean	01	5	3	8	8	4	12	<b>20</b>
June 2023	F/FW	Use of broad bed planter for maize sowing	01	5	3	8	8	4	12	<b>20</b>
July 2023	F/FW	Improved weeding implement for soybean and maize	01	2	4	6	6	4	10	<b>16</b>
September 2023	F/FW	Use of vegetable transplanter for vegetable seedling planting	01	3	3	6	7	3	10	<b>16</b>
September 2023	F/FW	Importance of boribabdhan for nalabunding	01	5	3	8	8	4	12	<b>20</b>
October 2023	F/FW	Ridge furrow method for chickpea sowing	01	5	3	8	8	4	12	<b>20</b>

**Vocational Training Programme for Rural Youth:**

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>										
Seed Production	F/FW	Seed production for cereals and pulses	<b>3</b>	4	1	<b>5</b>	6	3	<b>9</b>	<b>14</b>
Organic farming	F/FW	Importance of organic farming	<b>3</b>	4	1	<b>5</b>	6	3	<b>9</b>	<b>14</b>
IFS	F/FW	IFS for employment generation	<b>3</b>	4	1	<b>5</b>	6	3	<b>9</b>	<b>14</b>
<b>Horticulture</b>										
<b>Livestock production</b>										
<b>Home Science</b>										
March	RY	Mushroom Production	04	05	05	10	05	05	10	20
Dec	RY	Value addition of fruits and vegetables	04	05	05	10	05	05	10	20
<b>Plant Protection</b>										



**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	08			650			25			625
Kisan Mela	01			1000			50			1050
Kisan Ghosthi	05			500			60			560
Exhibition	12			840			120			960
Film Show	10			300			25			325
Method Demonstrations	04			350			50			400
Farmers Seminar										
Workshop	02			200			20			220
Group meetings										
Lectures delivered as resource persons	48			2400			96			2496
Newspaper coverage	60			Mass						Mass
Radio talks	12			Mass						Mass
TV talks	10			Mass						Mass
Popular articles	10			5000						5000
Extension Literature	08			4000						4000
Advisory Services	84			31268			450			31718
Scientific visit to farmers field	100			500			250			750
Farmers visit to KVK	100			900			100			1000
Diagnostic visits	12			180			120			300
Exposure visits	12			840			120			960
Ex-trainees Sammelan	02			100			10			110
Soil health Camp	01			300			12			312
Animal Health Camp	01			50			10			60
Agri mobile clinic										
Soil test campaigns										
Farm Science Club Conveners meet										
Self Help Group Conveners meetings	04			800			48			148
Mahila Mandals Conveners meetings	02			200			12			212
Celebration of important days (specify)	08			800			80			880
Others (pl. specify)										
<b>Total</b>	<b>520</b>			<b>52798</b>			<b>1658</b>			<b>54456+ Mass</b>

**Target for Production and supply of Technological products**
**SEED MATERIALS**

Category	Crop	Variety	Quantity (qtl.)
CEREALS			
OILSEEDS			
PULSES			
VEGETABLES			
FLOWER CROPS			
<b>OTHERS (Specify)</b>			
<b>Green manure crop</b>	Sunhemp	M-19	5

**PLANTING MATERIALS**

SI. No.	Crop	Variety	Quantity (Nos.)
FRUITS			
Saplings	Drumstick		2500
	Karonda		2500
	Papaya		2500
	Curry leaves		2500
<b>Total</b>			<b>10000</b>
SPICES			
VEGETABLES			
Seedlings	Vegetable seedling (Brinjal, Tomato, Chilli, cabbage and cauliflower )		1,00,000
FOREST SPECIES			
ORNAMENTAL CROPS			
PLANTATION CROPS			
Others (specify)			

**Bio-products**

Sl. No.	Product Name	Species	Quantity	
			No	(kg)
<b>BIOAGENTS</b>				
1	Trichoderma			
2	Rhizobium			
3				
<b>BIOFERTILIZERS</b>				
1	Vermicompost	<i>Eisinea foetida</i>	-	1000
2	NADEP			
3				
<b>BIO PESTICIDES</b>				
1	Dasparni arkl			
2	Pesticides			
3				

**LIVESTOCK**

Sl. No.	Type	Breed	Quantity	
			Nos	Kg
	Cattle			
	SHEEP AND GOAT			
	POULTRY			
	FISHERIES			
	Others (Specify)			

**Literature to be Developed/Published****KVK News Letter**

Date of start	Periodicity	Number of copies to be published
Jan 23	January to March 2023	500
Apr 23	April to June 2023	500
Jul 23	July to September 2023	500
Oct 23	October to December 2023	500

**Details of Electronic Media to be Produced**

S. No.	Type of media (CD / VCD / DVD / Audio-Cassette)	Title of the programme	Number
1			
2			
3			

**Success stories/Case studies identified for development as a case: .....(no.)**

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	PRA
2	Rural Youth	PRA
3	In-service personnel	PRA
4	methodology for identifying OFTs/FLDs	PRA, AES
5	Matrix ranking	PRA

**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	Rohaniya	Sohagpur	20
2	Marjat	Burhar	25
3	Meethi	Jaisinghnagar	70
4	Bahgarh	Burhar	35
5	Sinduri Bharri	Sohagpur	15

1. No. of farm families selected per village : 20-50
2. No. of survey/PRA to be conducted: Completed
- 3.

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

Year of establishment:2012

List of equipments purchased:

Sl. No.	Name of the Equipment	Qty.	Condition
1	Soil testing mini kit	02	Not working due to lack of Soil Scientist
2	Soil testing lab set	01	Not working due to lack of Soil Scientist
3	Pelican Equipment	01	Working
4	Microprocessor Based Digital Photometer	01	Working
5	Digital Conductivity	01	Working
6	Computerized pH meter	01	Working
7	Grinder Willey Type	01	Working
8	Hot air oven	01	Working
9	Electronic Balance	01	Working
10	Automatic voltage stabilizer	01	Working
11	Spectrophotometer	01	Working
12	Electronic Balance	01	Working
13	Hot Plate	01	Working
14	Shaker Make	01	Working
15	Usha Turbo Exhaust	02	Working

Details of samples analyzed so far:

Details	No. of Samples	No. of Farmers (SHC)	No. of Villages	Amount realized
Soil Samples				
Water Samples				
Total				

#### LINKAGES

Functional linkage with different organizations

Name of organization	Nature of linkage
Department of Agri. And farmers welfare	Technical support
ATMA	Technical support
Department of Horticulture	Technical support
Department of Veterinary Sciences	Technical support
Department of Fisheries	Technical support
M.P. Agro	Supply of agricultural input
Department of Agril. Engg.	Technical support
Soil Testing Department	Collaboration for recommendation on Soil test base nutrient application
DMO	Supply of fertilizer

Details of linkage with ATMA / NFSM

a) Is ATMA implemented in your district Yes

Name of Programme	Nature of linkage
Demonstration	Technical support, Preparation of package of practices
Training and field visit	Technical guidance

Give details of programmers implemented under National Horticultural Mission NIL

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

Month	Activity details	Targeted Beneficiaries/Area/Coverage

Planning for Crop Cafeteria

Total Area of Crop cafeteria: 200 Sq m

Crop	Season	Variety	Particulars /details	Area (Sq m)
Blackgram	Summer	Mukundra Urd-2 (KPU 405)		
Blackgram	Summer	PU-35		
Greengram	Summer	MH-421		
Greengram	Summer	IPM 205-7( Virat)		
Clusterbean	Summer	GC -I		
Cowpea	Summer	Kashi Shyamal		
Cowpea	Summer	Kashi Gauri		
Bhindi	Summer	Kashi Mohini		
Bhindi	Summer	Kashi Lila		
Brinjal	Summer	Kashi Taru		

Brinjal	Summer	Kashi Sandesh (VRBHR-1)		
Sesame	Kharif	GT-4		
Sesame	Kharif	Suprava (CUMS-17)		
Black gram	Kharif	Mukundra Urd-2 (KPU 405)		
Black gram	Kharif	PU-35		
Greengram	Kharif	MH-421		
Greengram	Kharif	IPM 205-7( Virat)		
Soybean	Kharif	Jawahar Soybean (JS 20- 98)		
Soybean	Kharif	CG-1		
Maize	Kharif	JM- 218		
Maize	Kharif	Pusa Jawahar Hybrid Maize-1		
Kodo	Kharif	JK-137		
Kodo	Kharif	JK-41		
Kutki	Kharif	JK-4		
Kutki	Kharif	JK- 36		
Chickpea	Rabi	JG-36		
Chickpea	Rabi	JG- 14		
Linseed	Rabi	Jawahar Linseed Sagar-95 (JLS-95) (SLS-95)		
Linseed	Rabi	Utera Alsi (RLC-143)		
Lentil	Rabi	RVL-31		
Lentil	Rabi	Kota Masoor- 1		
Mustard	Rabi	PM- 30		
Mustard	Rabi	NRCHB- 101		
Wheat	Rabi	HI- 8759		
Wheat	Rabi	HI- 1605		
Tomato	Rabi	Arka Rakshak		
Tomato	Rabi	H-86 (Kashi Vishesh)		

#### Details of Demonstration Unit at KVK

Demonstration Unit	Particulars /details	Area (Sq m)	Output /Production
Vermicompost Unit	Vermicompost	4.5	10 q
Azolla Unit	Azolla	4	200 kg
Polyhouse	Off season vegetables	300	Broccoli 1q, cucumber 1q
Mist Chamber	Seedlings and saplings	100	Vegetable seedlings 1,00,000 and 10,000 saplings
Green House	Off season vegetables	300	Coriander 25 Kg, strawberry
Meadow Orchard	Guava- Allahabad Safeda	500	620 Kg
High Density Orchard	Mango- Amrapali	1700	680 Kg
Poultry	Kadaknath & Narmada Nidhi	30	100 Chicks.
NADEP	Raw Material and Cow dung	20	03 -05q.