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Annual Progress Report PERIOD – JANUARY TO DECEMBER- 2023



सी. आर. डी. ई. कृषि विज्ञान केन्द्र

CRDE KRISHI VIGYAN KENDRA

SEWANIA, TEHSIL ICHHAWAR DISTRICT -SEHORE(,M.P.)

Host Institute: Centre For Rural Development & Environment

VILLAGE- SEWANIA, TEHSIL- ICHHAWAR, DISTRICT- SEHORE,(M.P.)

PIN Co. 466115 (INDIA) E-mail: crdebpl@gmail.com Phone No: 93020–36299

(Dharmendra)

Head (I/C),

Krishi Vigyan Kendra, Sewania,

Distt- Sehore (M.P.)

ANNUAL Progress Report 2023

KVK SEHORE

Year of sanction: 1999

1.1 Name of the Programme Coordinator with phone & mobile No

Name	-	Telephone / Contact						
	Office	Mobile	Email					
Mr. Dharmendra	7000398271	8883928179	crdekvksehore@gmail.com					

1.2 Staff Position on (31th Dec.2023)

S. No	Sanctioned post	Name of the	Designatio	Discipline	Pay Scale	Date of	Date	Contact	Email ID	Photo
No ·		incumbent	n		with present basic (Rs.)	Joining	of joinin g this KVK (Year	No.		
1	Programme Coordinator	Mr. Dharmendra	Scientist	Ag. Extn.	Level-10	11/03/2019	2019	888946991 1	lalu.khandwa@gmail.com	
2	Subject Matter Specialist	Mr. Sandeep Todwal	Scientist	Soil Science	Level-10	16/12/2010	2010	989347088 2	sandeeptodwal292gmail.com	
3	Subject Matter Specialist	Mr. Devendra Patil	Scientist	Agronomy	Level-10	26/12/2017	2017	882717618 4	dpatil889@gmail.com	
4	Subject Matter Specialist	Mr. Deepak Kushwah	Scientist	Plant Protection	Level-10	01/01/2018	2018	884048501 8	deep.bhu1989@gmail.com	
5	Subject Matter Specialist (Horticulture)						Vacant			
6	Subject Matter Specialist (Animal Husbandry)						Vacant			
7	Programme Assistant	Dr. Kusum Shukhwal	Programme Assistant	Home Science	Level- 6	05/02/2019	2019	800566072 8	kusumsukhwal90@gmail.com	
8	Computer Programmer/ Programme Assistant	Mr. Akshay Kalkar	Programme Assistant	Compuer	Level- 6	01/01/2018	2018	851801855 3	akshaykalkar26@gmail.com	

10	Farm Manager	Mr. Pawan Jat	Farm Manager	Farm Manager	Level- 6	17/12/2021	2021	626359694 9	pawanjat5383@gmail.com
11	Assistant	Mr Shashikant Harde	Assitant	Accounts	Level- 6	01/08/2013	2013	810350573 4	harde.shashikant@gmail.com
12	Jr. Stenographer / Comp. Operator	Mr. Bhanu Pal Singh	Stenograph er	Stenograp her	Level- 4	25/01/2008	2008	896215635 7	bhanukvk10@gmail.com
13	Driver	Mr. Pradip Singh Rajput	Driver	Driver	Level- 3	18/08/2003	2003	942566149 7	pradeepsinghrajput979@gmail.com
14	Driver	Mr. Satish Upadhyay	Driver	Driver	Level- 3	04/03/2019	2019	911106626 2	-
15	Supporting staff	Mr. Ravishanker Raikwar	Office Attendant	Office Attendant	Level- 1	01/03/2001	2001	999342067 7	-
16	Supporting staff	Mr. Nirmal Kumar	Office Attendant	Office Attendant	Level- 1	25/08/2006	2006	982699869 3	-

1.3 Total land with KVK (in ha): 18.68

S. No.	Item	Area (ha)
1	Under Buildings	0.5
2	Under Demonstration Units	0.5
3	Under Crops	12.5
4	Orchard/Agro-forestry	3.0
5	Others (specify) Crop cafeteria,	0.40
	Waste land-Nala Pond etc	1.78
Total		18.68

1.3 Total land with KVK (in ha)

S.	Item	Area (ha)
No.		
1	Under Buildings	1.00
2.	Under Demonstration Units	0.50
3.	Under Crops	12.50
4.	Orchard/Agro-forestry	3.00
5.	Others (specify)	1.78
	Total-	18.68

1.4 Infrastructural Development:

A) Buildings

		Source of			St	age			
S.	Name of building	funding		Complete		Incomplete			
No.	Name of building		Completion	Completion Plinth area		Starting	Plinth area	Status of	
			Date	(Sq.m)	(Rs.)	Date	(Sq.m)	construction	
1.	Administrative Building	ICAR	2005-06	500.00		1	-	-	
2.	Farmers Hostel	ICAR	2007-08	305.00		-	-	-	
3.	Staff Quarters (6)	ICAR	2007-08	400.00		-	-	-	
4.	Fencing	ICAR	2007-08	3250.00		-	-	-	
5	Threshing floor	ICAR	2004-05	225.00		-	-	-	
6	Implement Shed	-	-	-	-	-	-	-	
7	Poly House	-	-	-	-	-	-	-	
8	Net House	-	-	-	-	-	-	-	
9	Azola Unit	ICAR	2016-17	16.7	40000.00	-	-	-	
10	Demonstration Units	ICAR	2007-08	160.0		-	-	-	
11	Godown	ICAR	2007-08	60		-	_	-	

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Marshal	-	-	-	-
Motor Cycle	2000	0.00	-	Condemn
Bolero	2017	7,99,945.00	151636	Good condition

C) Equipments& AV aids

Name of the equipment	No.	Year of purchase	Cost (Rs.)	Present status
Projector	02	2013-14	-	Good condition
Xerox Machine	01	2016	-	Good condition
Generator	01	2016-17	-	Good condition
Video Camera	01	2016-17	-	Good condition
Computer, Laser Printer	02	2012& 2017-18	-	Good condition
UPS 600 VA	01	2016-17	-	Good condition
Stabilizer 2 KVA	01	2016-17	-	Good condition
Stabilizer	Nil	-	-	-

Inverter 600 VA (2)	01	2016-17	-	Good condition
Inverter Battery (2)	01	2016-17	-	Replacement

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

Sl. No.	Tentative Date
1	July 2023

2. DETAILS OF DISTRICT

Location:-

The district is situated at central part of Madhya Pradesh with longitude and latitude of 22 33"49' to 23 41"02'North and 76 26"55 to 78 01"59' on East respectively. It is stands in the foothills of *Vindhyachal Range* in the middle of *Malwa* region The District is spread over an area of 6,578 square km and it is surrounded by six district viz.. Bhopal, Raisen, Hoshangabad, Dewas, Shajapur and Raigarh. Likewise the district is well connected to the Western Railway from Bhopal to Ratlam.



Demographic Profile:

District Sehore has total population **1311332** as per census 2011. The literacy level in the district is **71%**. The total SC and ST population comes in tune of **31.78%** in the district as per census 2011. Tehsil wise population details given in the table –

Name of		Popula	ation		SC	SC ST			General		Total	
the Tehsil	M	F	СН*	Total	No. of household	No. of Members						
Sehore	143539	131539	38501	275078	9646	48229	2226	11128	41227	215721	53098	275078
Ashta	131462	122000	36869	253462	13680	68399	1161	5806	35597	179257	50438	253462
Ichhawar	84198	78109	26299	162307	6801	34006	6677	33384	18628	94917	32106	162307
Nasrullaga nj	91834	84429	28487	176263	5352	26760	9726	48630	17909	100873	32987	176263
Budni	48652	43254	12768	91906	2907	14535	2659	13296	13450	64075	19016	91906
Shyampur	80246	72108	24099	152354	5802	29008	452	2262	23870	121084	30124	152354
Jawar	56142	52319	16139	108461	8022	40109	1229	6147	12953	62205	22204	108461
Rehti	47670	43831	14267	91501	2047	10235	4972	24859	10319	56407	17338	91501
Total	683743	627589	197429	1311332	54256	271281	29102	145512	173952	894539	257311	1311332

Source: Census -2011)

Topography and Agro climatic characteristic:-

The district fall in the Vindhya plateau, as the zone is characterized by black soil mostly medium in depth. The major crop are grown in the region are Soybean and Wheat crop. The district has about 60% area is under medium black soil (30 - 60 cm depth) and about 20% deep (more than 60 cm depth) and about 20 % shallow soil (30 cm depth). The average mean sea level is falls in the range of 457 to 609 meter.



Soil Status:-

The district characterized by black *vertisols* mostly medium in depth, 60% area comes under medium black soil (30 to 60 cm depth) and about 20% deep black (more than 60 cm depth) and approximately 20% shallow black soil (30 cm depth). The soils are low in nitrogen (N), medium in phosphorus (P2O5) and medium in potash (K2O). About 40 % soils of Sehore, Budani and Ashta have been reported deficient in micro nutrient especially Zink (Zn), Sulpher (S) and Boron (B), soil pH rage in the scale of 7.3 to 7.8 making the soil fit for cultivation of wide range of crops.

Climate and Meteorology:-

The district experiences the sub tropical climate. The annual rainfall of the district is about 1260 mm, which is mostly concentrated during the month of July and August some time it extends up to end September. The winter rains are also received but the frequency and timing are uncertain and they are undependable under normal rainfall situation

The summers are very hot particularly during the day time and the winters are very cold. *Rabi* cropping becomes very difficult mostly depends on available soil moisture. If the rain recedes much earlier in the *Kharif* season, the *Rabi* prospects shows down trend. Average temperature in summer varies from 250C to 450C and average temperature in winter from 100C to 250C.

Average Annual Rainfall (mm)

			111014	o minimum muni	itaii (iiiiii)		
C No	Disala		Year wise r		(2018-19 to 2022-23)		
S.No.	Blocks	2018-19	2019-20	2020-21	2021-22	2022-23	Average
1	Sehore	1075.20	1820.8	1328.70	1004.40	1036.35	1253.09
2	Ashta	789.65	1607.8	1325.30	952.00	984.50	1131.85
3	Ichhawar	931.00	1740.0	1425.00	1080.30	1135.50	1262.36
4	Budani	926.60	1729.8	1727.70	1050.00	1165.50	1319.92
5	Nasrullaganj	603.2	1937.0	1277.00	1108.00	1054.00	1195.84
	Average	864.29	1767.08	1416.74	1038.94	1075.13	1232.61

Dept. of FW&AD, Sehore)

Semi Medium Farmers

Medium FarmersLarge Farmers

Land use pattern:- The total arable land of Sehore district is 398894 ha, out of which, the irrigated area is about 68%. The major crop grown in *Kharif* season are Soybean, Rice, Maize, Jowar, Pigeon pea and Wheat, Chickpea and sugarcane are the popular crops in *Rabi* season.

Land Use Pattern:-

S. No.	Particulars	Details			
01	Total geographical area (ha)	656368			
02	Net sown area (ha)	398894			
03	Area sown more than once in the year (ha)	363044			
04	Gross cropped area (ha)	761938			
05	Forest land (ha)	164039			
06	Waste land (ha)	9605			
07	Land under other uses (ha)	83830			

83830 ha (1.46%)(12.77%)Net sown area Area sown more 398894 ha 164039 ha than once (Source: (60.77%) Forest land Land ■ Waste land record) 363044 ha (55.31%) Area under other No of Farmers (%) Marginal Farmers

Details of land holdings in the district (2017) – The size of operational holding plays an important role in understanding the prevailing farming system, dependent livelihoods, quality of rural life and corresponding farm economy of the any area. Higher

occurrence of smaller holdings, skewed land distribution among Landholders, land capabilities and its. utilization, quality of land and its current status are some of the key Farameters determines the pace of development in agriculture sector. The district >62% of the land owners posses 49.68% land belonging to small and medium category of the farmers, >18% of the marginal farmers owns only a meager 6%, while 19% of the bigger land owners posses 42% land. The skewed ownership aggravates the problems and production potential of the district.

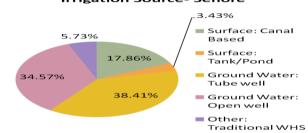
Type of Farmers	No.	Percentage	Area in (ha.)	Percentage
Marginal Farmers (Less than 1 ha.)	64684	26.0	25221	6.3
Small Farmers (1-2 ha.)	72277	34.0	82299	20.6
Semi Medium Farmers (2-4 ha.)	45397	27.0	114015	28.5
Medium Farmers (4-10 ha.)	20315	12.0	136461	34.2
Large Farmers (More than 10 ha.)	1486	0.9	40898	10.2
Total	204159	-	398894	-

Source- DPO, Sehore

Irrigation: -The district has good potential for irrigation through different sources, though there are no major or medium irrigation scheme in the district, however, minor lift irrigation schemes, dug well, water harvesting structures, seasonal rivers and other sources provides water for irrigation. The water use and its efficiency, however, remain under question

Irrigation potential of district: -

S No	Sources	Area (ha)	%
\boldsymbol{A}	Surface Irrigation		
1	Canal Based	69607	17.86
2	Tanks/Ponds/ Reservoirs	13365.7	3.43
	Total	82972.7	21.28
В	Ground Water		
1	Tube wells	124824	38.41
2	Open Wells	97755	34.57
	Total	222579	72.99
С	Other Sources- Traditional WHS	22136	5.73
	Grand Total (A+B+C)	327687.73	100



Produ

Sehore is developing district of the state & important district for agriculture point of view. Here major crops grown in the district are Soybean, Maize, Paddy in Kharif however wheat & Chickpea in Rabi season. The prominent cropping system prevails in the district are

Soybean – Wheat, Soybean – Chickpea and Paddy – Wheat. The productivity of the major crop is not better since the crops are dependent on rains. The Sharbati Wheat of the district is very popular in producing good quantum of wheat which supplying to the western part of the country. Present production and productivity of major crop in the district is given as an under:-

Present status of major crops in Sehore

Year Soybean Paddy Pigeon pea Wheat Chickpea Green Gram

	A	P	Y	A	P	Y	A	P	Y	A	P	Y	A	P	Y	A	P	Y
2018-19	290.00	390.63	1347.00	32.90	118.44	3600.00	6.60	9.11	1380.00	245.00	882.00	3600.0	107.80	199.43	1850.0	13385	13117	979
2019-20	343.44	257.58	750.0	33.79	135.16	4000.0	2.85	2.42	850.0	341.4	1604.8	4700.0	94.0	188.00	1890.0	13455	13120	985
2020-21	315.39	509.51	1450	34.10	156.86	4600	1.7	1.9	1150	333.55	1500.97	4500	52.19	9394	1800	74442	111142	1493
2021-22	282.18	372.47	1320	51.45	237.69	4620	1-80	1.4	815	335.56	1689.2	5034	47.14	87.68	1860	88510	129580	1470
2022-23	285.70	377.10	1320	47.50	219.50	4620	1.80	1.50	815	342.00	1658.00	4850	53.50	108.7	2020	80890	101597	1250
Average	303.34	381.46	1237.40	39.95	173.53	4288.00	5846.79	3.27	1002.00	319.50	1466.99	4536.80	70.93	145.95	1884.00	54136.40	73711.20	1235.40

A = Area (000ha)

P = Production (000 Ton)

Y = Productivity (kg/ha.)

Horticulture:-

Beside the area under field crops, significant area comes under the horticultural crops; the district register area under different horticulture is 40831.81 ha with an aggregate production of 617969.37 MT. The vegetable production from around 20182 ha of land under vegetable cultivation is a little more than 373560 MT. Similarly the good amount of land comes under fruit crops *i.e.* 7069 ha and production is about 156167 MT. Beside this there are sizable land comes under spices 12242 ha and production is 74325 MTs similarly 946 ha area comes under flower cultivation and 9994 MTs and medicinal plants 392 ha and 1923 MT production

Area and Production of Horticultural Crops of Sehore district

(Area in ha, production in MT)

Year	Fruit		Vegetable		Spices			Flowers	Medicinal	
	Area (ha.)	Production	Area	Production	Area	Production	Area	Production	Area	Production
2018-19	4934.00	106689.0	15518	290043.0	9555.0	58957.0	555.0	5804.0	11.30	42.13
2019-20	5149.0	114471.0	13158.0	229360.0	9582.0	59242.0	555.0	5813.0	11.30	42.13
2020-21	5205.2	118945.0	13956.0	232850.0	1062.0	60145.0	789	8410	212	1625
2021-22	7069	156167	20182	375560	12242	74325	946	9994	392	1923

(Source: Department of Horticulture, Sehore)

Details of Horticulture Nursery available in the district

S.	Name of	Location	Area	Current Status
No.	Block		(ha)	
1	Sehore	Mahuakheda	7.63	Mango, Aonla Citrus Guava
2	Asta	Asta	2.00	Guava, Citrus, Ratanjot
		Gadrakhedi	5.00	-
3	Ichhawar	Jamli	16.00	Mango, Guava, Citrus, Neem
4	Budni	Peelikarar	5.00	Mango, Guava, Citrus, Neem
5	Nasrullganj	Satrana	5.00	Mango, Guava, Citrus, Neem, Jackfruit, Neem

Source- DOH Sehore

Livestock :-

The economy of Sehore district is primarily agriculture and livestock based. There is good quantum of animal resources in the district. As the metro like Bhopal is near to Sehore district hence, the scope for the increas e the production potentiality of the animals. Simultaneously additional employments may also be generating for the community. As forest is disappeared rapidly so that there is considerable decrease in the fodder production as mostly there is the practice of the open grazing in the rural areas. With the continues deficit in rainfall the possibilities of rain water conservation above and below the ground is decreased since traditional tanks are also neglected. In the absences of effective rainfall fodder production and water for drinking to animals is very difficult in the region.



(Source: Dept. of Animal Husbandry and Veterinary Services)

loak		5	Small a	nimals			Large animals	
lock	Poultry	Ducks	Pigs	Goat	Sheep	Cow	Buffalo	Draught animal
Sehore	242585	0	326	20472	0	60245	46498	5051
Ashta	21258	0	384	31535	90	70905	59560	0
Ichawar	18650	0	276	25427	0	82479	37612	0
Nasrullaganj	15310	0	443	17908	0	59771	37211	0
Budhni	5824	0	0	9793	0	34868	14205	5023
Total	303627	0	1429	105135	90	308268	195086	10074

Production of Animal produces in the District

S.No.	Product	Production
01	Milk	155 Lakh Lit.
02	Meat	407.3 MT
03	Eggs	106.46 Lakh No.

(Source: Dept. of Animal Husbandry and Veterinary Services)

Fisheries:-

Sehore district has also got a good potential for fisheries. Fisheries can be a viable option for employment generation in various villages, if practiced technically. The district has got 92 village ponds and 3 irrigation tanks with total area 404177 ha. & Production 12.034 MT.

Water body	Area (ha.)	Production (Qtl.)	Productivity (Qtl./ha.)
Ponds (self)	4844.40	89621.4	18.5
Ponds (Irrigation Department)	3520.26	5984.442	1.7
Total	8364.66	95605.84	10.1

SWOT ANALYSIS -

SWOT Analysis is a strategic planning tool used to evaluate the Strengths, Weaknesses, Opportunities, and Threats involved in project or programme. It involves specifying the objective of the project and identifying the internal and external factors that are favorable and unfavorable to achieving that objective.

STRENGTH

There are number of strengths in the district, which need to be further strengthened and optimally harnessed to remove the existing state of poverty, backwardness and underdevelopment:

- Suitability of climate and soil (medium black) for various, Cereals, Oilseeds (soybean) Pulses & Horticultural crops.
- Excellent institutional support- Agriculture collage, Krishi Vigyan Kendra, Farm machinery training & testing centre etc.
- > 78.2 % area under irrigation.
- ➤ 60.29 % area under cultivation of total geographical area.
- Sufficient average rainfall (1261.2 mm.)
- > Sufficient availability of Agriculture labors.
- ➤ Good marketing connectivity (Road & rail etc.) to the metro cities.
- > Quality wheat producing district.
- Existing Poultry and milk industries well established and functional.

WEAKNESS

Like in all the places, there are a large number of weaknesses in the district, which is responsible, to an extent, for its backwardness. Here's a list of some of the weaknesses of the district comprising of both the problems and the constraints: -

Unavailability of quality inputs i.e. seeds & planting material and their quality and timely availability.

- > Proper marketing channels for commodity chain are not well developed.
- Inadequate power (electricity) supply limiting to obtain optimum production potential.

- Focus on post harvest and storage management is very low.
- ➤ Undulated land.
- > Diversifications of the farming system is very low
- Lack of awareness toward market demand at farmer's level.
- Numbers of small and marginal farmers are more which is limiting to take innovation / diversification.
- Farmers' attitude and traditional practices for the farming limiting to get optimum production potential.

OPPORTUNITIES

If one look at the strengths that are there in the district and observe the weaknesses of the district, one can easily find a lot of opportunity areas to work on, to take the district of the path of development. Here are some of the 'opportunities', clearly evident from the profile of the district, the strengths that operate in favour of the district and the weaknesses that one need to work towards addressing:

- Potential for crop/ agriculture and other components of the farming system diversification.
- Establishment of the education hubs (for agriculture- technology and latest Technical knows how).
- > Strengthen the existing supply system and organize up-gradation course for the staff.
- > Opportunity cost for the labour is comparatively low and labour available.
- Scope for organic cultivation enough quantity of the required material required for the same is available in sufficient quantity.
- Floriculture- an option as district is near to metro.
- > Gap in production potential of the prominent crops.
- Easy e- extension in rural areas due to IT revolution in the country.
- Improving purchasing capacity.
- The dairy and diary product can be an opportunity for the marginal and small farmers.
- The farm mechanization can be enhance as the required industries are readily available as and required for.
- Scope exists to increase the returns to farmers by establishing small agro processing units in production catchments.
- Scope for entrepreneurship development for custom hiring of high capacity and costly farm machinery.

Threats -

- Over exploitation of the ground water and subsequent decline in water table.
- > Small & reducing size of land holdings with associates constraints of being Resource poor, low risk taking abilities, thereby extension of new technologies further difficult.
- Natural calamities like draughts, pest and disease appearance.
- Deterioration in soil health.
- ➤ Biological and environmental degradation.

Major Problems in District:

- Lack of high yielding varieties/ hybrids in field crops.
- ❖ Poor seed replacement rate & negligible seed treatment.
- Heavy incidence of insect & diseases.
- Heavy infestation of weeds in Kharif crops.
- Imbalance use of fertilizer declining soil health.
- Lack of soil & water conservation techniques.
- **.** Low input use efficiency.
- Slow crop diversification under Horticultural crop and Integrated Farming System

- Poor adoption of latest technologies at farmers part.
 High post harvest losses (10 12 % in grain, 25 30 % in vegetable & fruit crops).
 Poor credit support particularly small & marginal farmers.
 Weak transfer of technology system.

DETAILS OF ADOPTED VILLAGE during the reporting period (Approved by competent Authority in meetings/workshops)

KVK Name	Village Name	Year of adoption	Block Name	Distance from KVK	Population	Number of farmers (having land in the village)
SEHORE	Kothara Pipalya	2016	Nasrullaganj	68 Km.	1486	355
SEHORE	Bijlon	2017	Sehore	50 Km	2141	424
SEHORE	NarsinghKheda	2018	Ichhawar	25 Km.	2008	407
SEHORE	Gawakheda	2019	Ashta	29 Km.	2255	217
SEHORE	Bawadiya Chor	2021	Ichhawar	28 Km.	1238	238

Details of Operational area / Villages (31st December, 2023)

S.No	KVK	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
01 02 03 04	SEHORE SEHORE SEHORE	Ichhawar	Narsinghkheda Golukhedi Bawadiya Chor Gular Chhapari		 Soil health High Soil erosion due to undulation & non bunding of farms Deterioration in Soil health due to adoption of Soybean – Wheat Paddy – Wheat, Soybean- Chickpea cropping system 	 Soil Health Management, Crop management Practices (CMP) Horticulture & Végétales
05 06 07	SEHORE SEHORE	Asta	Gwakheda BheelKhedi Bafapur	SoybeanMaize	• Deterioration in soil health due to imbalance use of plant nutrient	Corps (H & VC) Animal Science (A S) Integrated Plant Protection
08 09 10 11 12	SEHORE SEHORE SEHORE SEHORE	Sehore	Mehtwada Bijlon Heerapur Ramakhedi Thuna Pachama Bichhia	 Paddy Black Gram Wheat Chickpea Lentil Green Gram Dairy Poultry Animal Husbandr 	 Lack of knowledge about bio fertilizer & its application Unavailability of high yielding varieties/ hybrids in field crops Low seed replacement rate in major Crops Lack of awareness about seed treatment Weed infestation in Crops Low yield due to Old varieties, No use of Recommended Package of Practices Low water use efficiency Low fertilizer use efficiency due to imbalance use of fertilizer Heavy infestation of insect & disease 	Techniques (IPPT) Women in Agriculture. (W A) Implements & Farm Machinery (I & FM) Natural Resource Management (NRM) Livelihood & Nutritional Security Doubling Farmers income
14	SEHORE	Nasrullaganj	Kothra Pipalya & Kankaria	у	Slow crop diversification in Horticultural crops ption of farm mechanization High post harvest losses in grain, vegetable & Fruits crops Poor adoption of technology by Farmers Weed infestation of crops Water stress in critical stages of plant growth	

THRUST AREAS identified by KVK (Approved by competent Authority in meetings/workshop)

KVK Name	THRUST AREA
SEHORE	Soil Health Management, Crop management Practices (CMP)
SEHORE	Horticulture & Végétales Corps (H & VC)
SEHORE	Animal Science (A S)
SEHORE	Integrated Plant Protection Techniques (IPPT)
SEHORE	Women in Agriculture. (W A)
SEHORE	Implements & Farm Machinery (I & FM)
SEHORE	Natural Resource Management (NRM)
SEHORE	Livelihood & Nutritional Security
SEHORE	Doubling Farmers income by 2021-22
SEHORE	Resource Management (Water & Energy saving)
SEHORE	Introduction of recommended improved varieties
SEHORE	Processing, Post harvest and Storage facilities.
SEHORE	Conservation Agriculture Technologies
SEHORE	Application of Integrated Technology (IWM, ICM)

PROBLEM IDENTIFIED by KVK –

KVK	Problem identified	Methods of problem identification	Location Name of Village & Block
Name			Location Name of Village & Diock
SEHORE	Soil health - High Soil erosion due to undulation & non bunding of farms	Field visit, Discussion, Meeting, Krisak sangosthi,	
	Deterioration in Soil health due to adoption of Soybean – Wheat , Paddy –	PRA, SAC meeting, Interface, Extrainees meet etc.	
	Wheat, Soybean- Chickpea cropping system Deterioration in soil health due		Problem are common in entire district
	to imbalance use of plant nutrient Lack of knowledge about bio fertilizer & its		
	application		
SEHORE	Unavailability of high yielding varieties/ hybrids in field crops	Field visit, Discussion, Meeting, Krisak sangosthi,	Problem are common in entire district
		PRA, Interface, Extrainees meet etc.	
SEHORE	Low seed replacement rate in major Crops	Field visit, Discussion, Meeting, Krisak sangosthi,	Problem are common in entire district
		PRA, SAC meeting, Interface, Extrainees meet etc.	
SEHORE	Lack of awareness about seed treatment	Field visit, Discussion, Meeting, Krisak sangosthi,	Problem are common in entire district
		PRA, SAC meeting, Interface, Extrainees meet etc.	
SEHORE	Weed infestation in Crops	Field visit, Individual contact	Problem are common in entire district
SEHORE	Low yield due to Old varieties, No use of Recommended Package of	PRA, Field visit, Individual contact	Gawakheda, Bijlon, Narsinghkheda Kothra
	Practices		Pipalya
SEHORE	Low water use efficiency	Field visit, Discussion, Meeting, Krisak sangosthi,	Problem are common in entire district
		PRA, SAC meeting, Interface, Extrainees meet etc.	
SEHORE	Low fertilizer use efficiency due to imbalance use of fertilizer	Field visit, Discussion, Meeting, Krisak sangosthi,	Problem are common in entire district
		PRA, SAC meeting, Interface, Extrainees meet etc.	
SEHORE	Heavy infestation of insect & disease	Field visit, Discussion, Meeting, Krisak sangosthi,	Problem are common in entire district

		PRA, SAC meeting, Interface, Extrainees meet etc.	
SEHORE Slow crop diversification in Horticultural crops Fie		Field visit, Discussion, Meeting, Krisak sangosthi,	Problem are common in entire district
		PRA, SAC meeting, Interface, Extrainees meet etc.	
SEHORE	Slow adoption of farm mechanization	Field visit, Discussion, Meeting, Krisak sangosthi,	Problem are common in entire district
		PRA, SAC meeting, Interface, Extrainees meet etc.	
SEHORE	High post harvest losses in grain, vegetable & Fruits crops	Field visit, Discussion, Meeting, Krisak sangosthi,	Problem are common in entire district
		PRA, SAC meeting, Interface, Extrainees meet etc.	
SEHORE Poor adoption of technology by Farmers Fig.		Field visit, Discussion, Meeting, Krisak sangosthi,	Problem are common in entire district
	PRA, SAC meeting, Interface, Extrainees meet etc.		
SEHORE	SEHORE Weed infestation of crops Field visit, Discussion, Meeting, Krisak sangosthi,		Problem are common in entire district
PRA, SAC meeting, Interface, Extrainees meet etc.			
SEHORE	Water stress in critical stages of plant growth	Field visit, Discussion, Meeting, Krisak sangosthi,	Problem are common in entire district
		PRA, SAC meeting, Interface, Extrainees meet etc.	

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

S.	Farming system/enterprise	Description		
No.				
1	AES – 1 Vindhyan Plateau (AES- I)	•Under block covered Sehore, Asta and Ichhawar total area 409.494 thousand ha, farming system existi Agriculture+Animal husbandry, Agriculture+Horticulture+Animal husbandry		
		•Under block covered Budani & Nasrullaganj total area 246.874 thousand ha, farming system existing Agriculture+Animal husbandry, Agriculture+Horticulture+Animal husbandry		

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

S. No.	Agro-climatic Zone	Characteristics	
1	AES – 1 Vindhyan Plateau	The district fall in the Vindhya plateau, as the zone is characterized by black soil mostly medium in depth. The major crop are grown in the region are Soybean and Wheat crop. The district has about 60% area is under medium black soil (30 - 60 cm depth) and about 20% deep (more than 60 cm depth) and about 20% shallow soil (30 cm depth). The average mean sea level is falls in the range of	
		457 to 609 meter.	

SWOT Analysis of each Agro-Ecological Situations of district AES-1 (name)

Strength	Weakness	Opportunities	Threats
☐ Suitability of climate and soil	Proper marketing channels for	• Potential for crop/ agriculture and other	• Over exploitation of the
(medium black) for various,	commodity chain are not well	components of the farming system	ground water and
Cereals, Oilseeds (soybean)	developed.	diversification.	subsequent decline in
Pulses & Horticultural crops.	• Inadequate power (electricity)	• Establishment of the education hubs (for	water table.

- Excellent institutional support- Agriculture collage, Krishi Vigyan Kendra, Farm machinery training & testing centre etc.
- 78.2 % area under irrigation.
- 60.29 % area under cultivation of total geographical area.
- Sufficient average rainfall (1261.2 mm.)
- Sufficient availability of Agriculture labors.
- Good marketing connectivity (Road & rail etc.) to the metro cities
- Quality wheat producing district.
- Existing Poultry and milk industries well established and functional.

- supply limiting to obtain optimum production potential.
- Focus on post harvest and storage management is very low.
- Undulated land.
- Diversifications of the farming system is very low
- Lack of awareness toward market demand at farmer's level.
- Numbers of small and marginal farmers are more which is limiting to take innovation / diversification.
- Farmers' attitude and traditional practices for the farming limiting to get optimum production potential.

- agriculture- technology and latest Technical knows how).
- Strengthen the existing supply system and organize up-gradation course for the staff.
- Opportunity cost for the labour is comparatively low and labour available.
- Scope for organic cultivation enough quantity of the required material required for the same is available in sufficient quantity.
- Floriculture- an option as district is near to metro.
- Gap in production potential of the prominent crops.
- Easy e- extension in rural areas due to IT revolution in the country.
- Improving purchasing capacity.
- The dairy and diary product can be an opportunity for the marginal and small farmers.
- The farm mechanization can be enhance as the required industries are readily available as and required for.
- Scope exists to increase the returns to farmers by establishing small agro processing units in production catchments.
- Scope for entrepreneurship development for custom hiring of high capacity and costly farm machinery.

- Small & reducing size of land holdings with associates constraints of being Resource poor, low risk taking abilities, thereby
- extension of new technologies further difficult.
- Natural calamities like draughts, pest and disease appearance.
- Deterioration in soil health.
- Biological and environmental degradation.

Land Use Pattern

Particulars	Area "000 ha"
Total Geographical area	656368
Forest	164039
Waste Land	9605
Other than cultivated area	83830
Cultivable waste and alkaline land	13000
Pastures	36200
Bushes	-
Current Fallow	400
Other Fallow	3300
Agricultural Land	408894
Area Sown	400856
Kharif	389500
Rabi	369548
Zaid	11000
Cropping Intensity	188.32 %

Irrigated Area with Different Sources:

S.	Description	Area (ha)
No.		
1	Canal	69607
2	Well	97755
3	Tube well	124824
4	Ponds	13365.7
5	Others	22136

Area, Production and Productivity of major crops cultivated in the district 2021-22

S.	Crop	Area (ha)	Production (Qt.)	Productivity (Q /ha)
No				
1	Soybean	324000	509510	12.00
2	Paddy	45000	156860	46.0
3	Maize	18500	-	14.89
4	Pigeon pea	2000	190	11.50
5	Black gram	4000	-	7.00
6	Green gram	7000	111142	7.00
7	Wheat	261990	1500970	38.00
8	Chickpea	94400	93940	16.13

Weather data (Jan, 2023- Dec., 2023)

Month /Year	Rainfall (m.m.)	Temperature (⁰ C)	ture (⁰ C)
		Maximum	Minimum
Jan, 2023	10.23	25.0	12.2
Feb, 2023	7.67	28.3	14.4
Mar, 2023	7.67	33.3	19.4
Apr, 2023	5.12	37.8	23.9
May, 2023	20.46	40.0	27.2
Jun, 2023	148.36	36.1	26.1
July, 2023	329.98	30.0	23.9
Aug., 2023	317.19	28.9	23.3
Sept., 2023	140.69	30.6	22.8
Oct. 2023	33.25	31.7	20.0
Nov. 2023	10.23	28.9	16.1
Dec. 2023	7.67	25.6	12.8

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

Category	Population	Production	Productivity		
Cattle					
Crossbred/ Indigenous	308268	155 Lakh Litre	-		
Buffalo	195086		-		
Sheep	•	•			
Crossbred/Indigenous	-	-	-		
Goats	105135	407.30 MT	-		
Pigs Crossbred/Indigenous					
Rabbits					
Poultry					
Hens	303627	106.46 Lakh eggs	-		
Turkey and others					
Category	Area	Production	Productivity		
Fish	8364.66 ha	95605.84 Q	10.10 Q/ha		

TECHNICAL PROGRAMME

A. Details of targeted mandatory activities by KVK

to Details of this Section in the section of 11 viz.				
OFT		FLD and CFLD		
1		2		
Number of OFTs	Number of Farmers	Number of FLDs	Number of Farmers	
16	170	24 and 30 ha	275 and 75	

Trai	ining	Extension Activities				
	3	4				
Number of Courses	Number of Participants	Number of activities	Number of participants			
78	1445	467	15384			

Seed Production (Qtl.)	Planting material (Nos.)
65.84	580

B. Abstract of interventions undertaken

S.	Thrust area	Crop/	Identified Problem			Intervention	ns		
No.		Enterpri se		Title of OFT	Titl e of FLD	Title of Training	Title of training for extension	Extension activities	Supply of seeds, planting materials etc.
							personnel		
01	Weed management	Soybean	Low yield of soybean due to heavy infestation of weeds in early stage	Assessment of Preemergence herbicide Sulfentrazone + Clomazone 58 % WP (F 8072) premix @ 725 g a.i./ha in soybean	-	-	-	Group meeting	Preemergence herbicide Sulfentrazone + Clomazone 58 % WP (F 8072) premix @ 725 g a.i./ha
02	CMP	soybean	Low yield of soybean due to existing varieties eg. JS-9560, JS-2034	Assessment of soybean variety RVSM 2011-35 (RVSM-35) under soybean- wheat cropping system				Group meeting	Seed Variety RVSM 2011-35
03	Introduction of recommende d improved varieties	Wheat	Low yield of Wheat and lack of nutrition due to use of old varieties	Assessment of Wheat variety HI- 1634 (Pusa Ahilya)	-	-	-	Group meeting	Seed Wheat variety HI-1634
04	Introduction of recommende d improved varieties	chickpea	Low yield of chick pea due to Exist varieties & Manual Harvesting is Costly	Assessment of Chick pea variety RVG-204	-	-	-	-	Seed chickpea variety RVG-204

05	СМР	Green gram	Delay in Kharif Crop Sowing due to lack of Early mature variety of Green gram	-	Demonstrati on of Green gram variety IPM 205-7 (Virat) in summer season	Improved agronomi c technolo gies of Summer Green gram cultivatio	-	Field day Field visit	Seed
06	Introduction of recommende d improved varieties	wheat	Low yield of wheat due to Exist varieties	-	Demonstrati on of wheat variety HI- 8759	Improved agronomi c technolo gies of Chickpea cultivatio	Improved agronomic technologi es of Chickpea cultivation	Field day Field visit	Seed
07	Weed managemnt	Wheat	Low yield of wheat due to infestation of weeds	-	Dwmonstrati on of weed management in wheat	Weed managem ent in wheat	-	Field day Field visit	Herbicide
08	Crop diversificatio n	Maize	-	-	Diversificati on of soybean through Hybrid Maize	Diversifi cation of soybean through Hybrid Maize	Diversifica tion of soybean through Hybrid Maize	Field day Field visit Group meeting	Seed
09	Nutritional security	Pigeon pea	Lackof protien in daily diet and no use of waste land	-	Demonstrati on of pigeon pea cultivation in waste land for nutritional security.	pigeon pea cultivatio n in waste land	pigeon pea cultivation in waste land	Field day Field visit Group meeting	Seed
10	AEG	Paddy	-	-	Demonstrati on of DSR Machine	Demonst ration of DSR Machine	-	Field day Field visit Group meeting	Sowing of paddy with DSR Machine

11	CMP	Chickpea	Low yield of Chickpea due to old varieties	-	Demonstrati on of Chickpea variety RVG-204	Improved agronomic technologi es of Chickpea cultivation	Improved agronomi c technolo gies of Chickpea cultivatio	Field day Field visit Group meeting	Seed
12	CMP	Wheat	Low yield of wheat due to use of old varieties	-	Demonstrati on of Wheat variety HI 1634 (Pusa Ahilya)	Improved agronomic technologi es of Chickpea cultivation	Improved agronomi c technolo gies of Chickpea cultivatio	Field day Field visit Group meeting	Seed-
13	SFM	Soybean	Low yield due to Imbalance use of Plant Nutrient in Soybean crop.	Assessment of Sulphur along with recommended dose of plant nutrient as per soil test value in Soybean crop.	-	-	-	-	Sulphur
14	SFM	Maize	Low fertilizer use efficiency and One time application of nitrogen 170 kg/ha through Urea	Assessment of Nano- Nitrogen technology in Maize crop.	-	-	-	Group meeting	Nano Urea
15	SFM	Wheat	Low fertilizer use efficiency and One time application of nitrogen 170 kg/ha through Urea	Assessment of Nano- Nitrogen technology in wheat crop.	-	-	-	Group meeting	Nano Urea
16	NRM	Soybean Chickpea	High production cost of cultivation and toxicity of chemical fertilizer/ pesticide in crop and soil	-	Demonstrati on of Jeevamrit and GhanJeevam rit on growth and yield of Soybean & Chickpea crop	Natural Farming	Nutrient managem ent in rabi Crop	Field day and Method demonstrat ion	Drum 200 liter, Gaggery, chickpea flour
17	SFM	Soybean	Low yield & quality due to No use of potassium nutrient		Demonstrati on of Foliar spray of potassium nutrient in soybean crop	Use and application of water soluble fertilizer in soybean crop	-	-	NPK 00:00:50

18	SFM	Garlic	Low yield of garlic due to no use of micronutrient	-	Demonstrati on on foliar spray of vegetable micronutrien t mixture on yield of garlic crop.	Applicatio n and use of micronutri ent in vegetable crop	Nutrient managem ent in rabi Crop	Group meeting	Micronutrient Mixture
19	SFM	Onion	Low Fertilizer use efficiency	-	Demonstrati on of Nutrient management in onion crop	nutrient manageme nt in onion crop	Nutrient managem ent in rabi Crop	-	Sulphur, NPK 18:18:18
20	NRM	Enterpris es	More time consume in composting process	-	Demonstrati on of Bio waste decomposer for composting	Soil fertility manageme nt through compostin g	-	method, demonstrat ion	Bio Waste decomposer, Gaggery
21	ICT	Onion & Garlic	Love yield of onion and garlic due to poor information sources	Assessment of different use of information sources for production technology of onion and garlic	-	-	-	-	-
22	ITK Practice	okra	Low yield of vegetables due to infestation of insect-pest (Average yield losses up to 15-20%)	Assessment of ITK practice for the management of insect-pest by spraying of starch, animal urin and dusting of cowdung ash in vegetables (Okra & bitter gourd)	-	-	-	-	-
23	ITK Practice	Chickpe a	Low yield of chickpea due to incidence of fungal diseases (Average yield losses up to 15-20%)	Assessment of ITK practice for the management of Fungal diseases by Seed treatment with Burn Engine Oil and application with irrigation in chickpea	-	-	-	-	-
24	IDM	Garlic	Low yield of garlic due to incidence of stemphylium blight and Purple Blotch (Average yield losses up to 15-20%)	Assessment of IDM module for the management of stemphylium blight and Purple Blotch in Garlic	-	-	-	-	-
25	IPM	Soybean /wheat		Assessment of newer molecule Azoxystrabin+thiophinate methyl+thiomethoxam@ 2ml/kg	-	-	-	-	-

				seed for the management of stem fly in soybean and root aphid in wheat					
26	IDM	Green gram	Low yield of summer green gram due to heavy incidence of yellow mosaic (Average yield losses up to 20-25%)	-	Demonstrati on IDM module for the management of yellow mosaic in summer green gram	IPM in summer green gram	-	Field day	-
27	IPM	Maize	Low yield maize due to infestation of stem borer and fall army worm (Average yield losses upto 15-20%)	-	Demonstrati on IPM module for the management of stem borer and Fall Army Warm in maize	IPM in maize crop	IPM in Kharif crop	Field day	-
28	IPM	Soyabea n	Low yield of Soybean due to heavy infestation of Girdle Beetle and defoliator (Average yield) losses up to 20- 25%)	-	Demonstrati on IPM module for the management of Girdle Beetle and defoliator in Soybean crop	IPM in Kharif crop	IPM in Kharif crop	Field day	-
29	IDM	Chickpea	Low yield of chickpea due to heavy incidence of wilt, root rot & disease (Average yield losses up to 20-25%)	-	Demonstrati on IDM module for the management of Wilt, root rot & Collar rot disease in chickpea.	IPM in chickpea crop	IPM rabi crop	Field day	-
30	IPM	Chickpea	Low yield of chickpea due to heavy infestation of gram pod borer (Average yield losses up to 20-		Demonstrati on of IPM module for	IPM in chickpea crop	IPM rabi crop	Field day	-

			25%)	the management of gram pod borer in chickpea				
31	Natural farming	Soybean/ wheat	High production cost of cultivation and toxicity of chemical pesticide in crop and soil	Demonstrati on of Neemastra, Brahmastra and Agni Astra on insect —pest of Soybean & Chickpea	Natural farming	Natural farming	Field day	

Technologies assessed A.1 Abstract on the *number of* technologies assessed in respect of crops

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber	TOTAL
									Crops	
ICM	01	2	01	-			-			4
SFM	01	02	-	-	-	-	-	-	-	3
NRM	-	-	-	-	-	-	-	-	-	-
ITK practice	-	-	-	-	01	-	-	-	-	1
IPM	-	-	01	-	-	-	-	-	-	1
ITK practice	-	-	01	-	-	-	-	-	-	1
IDM	-	-	-	-	01					1
IPM	01		01		-	-	-	-	-	2
Total			-	-	-	-	-	-	-	13

Abstract on the number of technologies assessed in respect of livestock/enterprises-NII

Thematic areas	Cattle	Poultry	Sheep	Goat	Piggery	Rabbitary	Fisheries	TOTAL
-	-	-	-	-	-	-	-	-
TOTAL								

Detailed Information about OFT: 1 (2022-23Rabi)

Title of on-farm trial:	Assessment of Wheat variety HI-1634 (Pusa Ahilya)
Year/Season:	2022-23/ Rabi
Farming situation:	Restricted Irrigated
Problem diagnosis:	Low yield of Wheat and lack of nutrition due to use of old varieties
Thematic area:	CMP
No of trials:	05
No. of farmers involved	05
Type of OFT (Assessment/ Refinement):	Assessment
Details of technology selected for assessment/ refinement:	
T1 – Farmers Practice-	T1 – Farmers Practice Wheat var Local (Lok 1)
T2 –Recommended Practice-	T2 – Wheat var. HI-1544
T3- Recommended Practice-	T3 – HI-1634 (Pusa Ahilya)
Date of sowing:	25-30 Oct 2022
Date of harvesting:	2-8, March, 2023
Source of technology:	ICAR-Indian Agricultural Research Institute, Regional Station, Indore
Characteristics of technology:	HI 1634 is an early flowering (60-65 days) variety which matures in 105-110 days, and produces bold grains (TGW 40.0g)
Name of Crop/Enterprises:	Wheat
Recommendations for Farmers	This technology is appropriate with farming situation and farmer convenience for adoption
Recommendations for Deptt. Personnel	This technology have to be spread by the Dept. personnel between farm ring community
Feedback	Higher grain yield and quality produce, Not sattering

Details of technology	Name and Unit of Parameter	Result	Average Cost of cultivation (Rs/ha)	Average Gross Return (Rs/ha)	Average Net Return (Rs/ha)	Benefit-Cost Ratio (Gross Return / Gross Cost)
T1(Farmers Practice)	No of Effective tillers /plant	5.48				
	No. of kernels/ear	43.06	27680.00	105899.08	78219.08	3.83
	Test weight (g)	43	27000.00	105099.00		3.63
	Yield (q/ha)	46.04				
T2(Recommended Practice)	No of Effective tillers /plant	5.828				
	No. of kernels/ear	43.6	28000.00	114275.47	86275.47	4.08
	Test weight (g)	44	28000.00	1142/5.4/	802/5.4/	4.08
	Yield (q/ha)	49.68				
T3(Recommended Practice)	No of Effective tillers /plant	5.98				
	No. of kernels/ear	44.6	29010.00	124622.79	95612.79	4.30
	Test weight (g)	45	29010.00	124022.79	95012./9	4.30
	Yield (q/ha)	54.18				

Information about OFT (2): Agronomy 2022-23

·	
Title of on-farm trial:	Assessment of Chick pea variety RVG-204
Year/Season:	2022/ Rabi
Farming situation:	Irrigated
Problem diagnosis:	Low yield of chick pea due to Exist varieties & Manual Harvesting is Costly
Thematic area:	CMP
No of trials:	05
No. of farmers involved	05
Type of OFT (Assessment/ Refinement):	Assessment
Details of technology selected for assessment/ refinement:	
T1 – Farmers Practice-	Farmers Practice — Vishal
T2 –Recommended Practice-	T2 – Chick pea var, RVG-202
T3- Recommended Practice-	T3 – Chick pea var, RVG-204
Date of sowing:	20-25 Oct 2022
Date of harvesting:	25-30 Feb 2023
Source of technology:	RVSKVV, RAK, CoA. Sehore (2017)
Characteristics of technology:	Long plant, bold seeded, Resistant to wilt and tolerance to pod borer, suitable for mechanical harvesting
Name of Crop/Enterprises:	Chick Pea
Recommendations for Farmers	This technology is appropriate with farming situation and farmer convenience for adoption
Recommendations for Deptt. Personnel	This technology have to be spread by the Dept. personnel between farm ring community
Feedback	Wilt resistance variety and suitable for mechanical harvesting

Result: (Economic Performance of OFT)

Details of technology	Name and Unit of Parameter	Result	Average Cost of cultivation (Rs/ha)	Average Gross Return (Rs/ha)	Average Net Return (Rs/ha)	Benefit-Cost Ratio (Gross Return / Gross Cost)
T1(Farmers Practice)	No. of Branches/plant	13.57				
	No of pods/plant	26.6			36942	2.47
	No. of seeds/pod	1.0	25200	62142		
	Test weight (g)	195.2				
	Yield (q/ha)	11.95				
T2(Recommended Practice)	No. of Branches/plant	14.45				
	No of pods/plant	27.8			45191	2.75
	No. of seeds/pod	1.02	25880	71071		
	Test weight (g)	197.2				
	Yield (q/ha)	13.67				
T3(Recommended Practice)	No. of Branches/plant	15.57	25940	79357	53417	3.06

No of pods/plant	29.8
No. of seeds/pod	1.04
Test weight (g)	198.6
Yield (q/ha)	13.67

Information about OFT (3): Agronomy 2023

Title of on-farm trial:	Assessment of Preemergence herbicide Sulfentrazone + Clomazone 58 % WP (F 8072) premix @ 725 g
	a.i./ha in soybean
Year/Season:	2023/ Kharif
Farming situation:	Irrigated
Problem diagnosis:	Low yield of soybean due to heavy infestation of weeds in early stage
Thematic area:	CMP
No of trials:	05
No. of farmers involved	05
Type of OFT (Assessment/ Refinement):	Assessment
Details of technology selected for assessment/ refinement:	
T1 – Farmers Practice-	T1 – Farmers Practice – Apply Post Emergence herbicide
T2 –Recommended Practice-	T2 – Pre emergence herbicide Pendimethalin 30 EC@1.0 liter / ha
T3- Recommended Practice-	T3 – Preemergence herbicide Sulfentrazone + Clomazone 58 % WP (F 8072) premix @ 725 g a.i./ha
Date of sowing:	22-28 June 2023
Date of harvesting:	1-5 oct.2023
Source of technology:	Indian Institute of Soybean Research, Indore-2018
Characteristics of technology:	Effective control of Monocot and dicot weeds in soybean
Name of Crop/Enterprises:	Soybean
Recommendations for Farmers	-
Recommendations for Deptt. Personnel	-
Feedback	Effective control of all type weeds at 20-25 DAS and much growth and development of soybean at Initial
	stage

Result : (Economic Performance of OFT)

Details of technology	Name and Unit of Parameter	Result	Average Cost of cultivation (Rs/ha)	Average Gross Return (Rs/ha)	Average Net Return (Rs/ha)	Benefit-Cost Ratio (Gross Return / Gross Cost)
T1(Farmers Practice)	No .of Weed density/m ²	12.82				
	No of pods/plant	22.00				2.39
	No. of seeds/pod	1.66	26240.00	62603	62602.97	
	Test weight (g)	90.54				
	Yield (q/ha)	13.61				
T2(Recommended Practice)	No .of Weed density/m ²	9.34				
	No of pods/plant	23.60		68299		2.68
	No. of seeds/pod	1.68	25440		42859.30	
	Test weight (g)	91.18				
	Yield (q/ha)	14.85				

T3(Recommended Practice)	No .of Weed density/m ²	3.30				
	No of pods/plant	26.40				
	No. of seeds/pod	1.71	26140	75315	49174.67	2.88
	Test weight (g)	92.14				
	Yield (q/ha)	16.37				

Information about OFT (4): Agronomy 2023

Result: (Economic Performance of OFT)

Title of on-farm trial:	Assessment of soybean variety RVSM 2011-35 (RVSM-35) under soybean- wheat cropping system
Year/Season:	2023/ Kharif
Farming situation:	Irrigated
Problem diagnosis:	Low yield of soybean due to existing varieties eg. JS-9560, JS-2034
Thematic area:	CMP
No of trials:	05
No. of farmers involved	05
Type of OFT (Assessment/ Refinement):	Assessment
Details of technology selected for assessment/ refinement:	
T1 – Farmers Practice-	T1 – Farmers Practice – Soybean Var. JS-9560
T2 –Recommended Practice-	T2 – Soybean Var. JS-2034
T3- Recommended Practice-	T3 – Soybean Var. RVSM-1135
Date of sowing:	22-28 June 2023
Date of harvesting:	01-05 oct 2023
Source of technology:	RVSKVV, Gwalior-2021
Characteristics of technology:	Climate resilient variety, suitable for machenical harvesting, medium resistance to YVM
Name of Crop/Enterprises:	Soybean
Recommendations for Farmers	-
Recommendations for Deptt. Personnel	-
Feedback	Climate resilient variety, suitable for machenical harvesting, resistance to Pest and diseases

Details of technology	Name and Unit of Parameter	Result	Average Cost of cultivation (Rs/ha)	Average Gross Return (Rs/ha)	Average Net Return (Rs/ha)	Benefit-Cost Ratio (Gross Return / Gross Cost)
T1(Farmers Practice)	No of pods/plant	23.1				
	No. of seeds/pod	1.67	26540	88494	61954	3.33
	Test weight (g)	90.54	20340	88494	01934	
	Yield (q/ha)	14.75				
T2(Recommended Practice)	No of pods/plant	24.6		95123	69383	3.70
	No. of seeds/pod	1.68	25740			
	Test weight (g)	91.18	23740			
	Yield (q/ha)	15.85				
T3(Recommended Practice)	No of pods/plant	27.4				
	No. of seeds/pod	1.70	26440	104544	70104	3.95
	Test weight (g)	92.14	20440	104344	78104	3.95
	Yield (q/ha)	17.42	1			

Name of Discipline	Soil Science
Title of on-farm trial:	Assessment of Jeevamrit and GhanJeevamrit on growth and yield of Soybean & Chickpea crop
Year/Season:	2022-23/ Kharif and Rabi
Farming situation:	Irrigated
Problem diagnosis:	High production cost of cultivation and toxicity of chemical fertilizer/ pesticide in crop and soil
Thematic area:	NRM
No of trials:	05 No.
No. of farmers involved	05
Type of OFT (Assessment/ Refinement):	Assessment
Details of technology selected for assessment/ refinement:	
T1 – Farmers Practice-	Recommended dose of plant nutrient NPK 20:60:20 kg/ha through fertilizer in soybean and chickpea crop
T2 –Recommended Practice-	Application GhanJeevamrit @ 5 q/ha and foliar spray of Jeevamrit @ 100 ml/liter of water at 15 days
	interval in Soybean & Chickpea crop
T3- Recommended Practice-	-
Date of sowing:	June 2022
Date of harvesting:	March 2023
Source of technology:	Natural Farming Technology (Shri SubhashPalakar)
Characteristics of technology:	Microbial prepared GhanJeevamrit and Jeevamrit promotes biological activity in soil and enhances nutrient
	availability and uptake by the crop
Name of Crop/Enterprises:	Soybean & Chickpea
Recommendations for Farmers	The technology was found compatible with farmer practices and recommendation for micro level situation
Recommendations for Deptt. Personnel	Technology found more effectively and reducing cost of cultivation
Feedback	The Farmers had shown the result between farmer practice & Technology, according to farmers adopted
	technology.

Result : (Economic Performance of OFT)

Details of technology	Fertilizer Saving	Unit of Parameter	Result (qtl./ha)	Average Cost of cultivation Fertilizer Saving	Average Gross Return (Rs/ha)	Average Net Return (Rs/ha)	Benefit-Cost Ratio (Gross Return / Gross Cost)	
Soybean Crop	Soybean Crop							
T1 (Farmers Practice)	-	Rs/ha	11.79	23250	44803	21553	1.93	
T2(Recommended Practice)	3600	Rs/ha	12.49	20725	47460	26735	2.29	
Chickpea Crop	Chickpea Crop							
T1 (Farmers Practice)	-	Rs/ha	13.16	23960	61201	34609	2.44	
T2(Recommended Practice)	3600	Rs/ha	13.76	21506	64205	39765	2.84	

Name of Discipline	Soil Science
Title of on-farm trial:	Assessment of Foliar application of water soluble plant nutrient and micronutrient Zn & B on yield and quality of Tomato.
Year/Season:	2022-23/ Rabi
Farming situation:	Irrigated
Problem diagnosis:	Low yield ,quality and fruit set due to Nutrient deficiency
Thematic area:	SFM.
No of trials:	05 No.
No. of farmers involved	05
Type of OFT (Assessment/ Refinement):	Assessment
Details of technology selected for assessment/ refinement:	
T1 – Farmers Practice-	Application of 120:75:40 NPK kg/ha.
T2 –Recommended Practice-	Application of 120:75:40 NPK kg/ha.+ Foliar application of NPK 18:18:18 at 30 and 45 DAT.
T3- Recommended Practice-	Application of 120:75:40 NPK kg/ha.+ Foliar application of NPK 18:18:18 at 30 and 45 DAT.+ Foliar application of Zinc 0.5 % and Baron 0.1 % at 30 and 45 DAT.
Date of sowing:	September – 2022
Date of harvesting:	March – 2023
Source of technology:	IIVR, Varanasi (U.P.)
Characteristics of technology:	Foliar application 0f NPK, Zn & B increase yield and quality of Tomato
Name of Crop/Enterprises:	Tomato
Recommendations for Farmers	The technology was found compatible with farmer practices and recommendation for micro level situation
Recommendations for Deptt. Personnel	Technology found more effectively but it was more testing require for analysis of data
Feedback	The Farmers had shown the result between farmer practice & Technology, according to farmers adopted technology.

Result: (Economic Performance of OFT)

Result . (Economic I criormane)	Result: (Economic 1 Criot mance of OF 1)								
Details of technology	Average fruit weight	Unit of Parameter	Result Yield (q/ha)	Average Cost of cultivation (Rs/ha)	Average Gross Return (Rs/ha)	Average Net Return (Rs/ha)	Benefit-Cost Ratio (Gross Return / Gross Cost)		
T1 (Farmers Practice)	72.00	gram	674.00	106124.00	269600.00	163476.00	2.54		
T2(Recommended Practice)	76.00	gram	704.00	108294.00	299200.00	190906.00	2.76		
T3(Recommended Practice)	78.00	gram	722.00	110044.00	306850.00	196806.00	2.79		

Name of Discipline	Soil Science
Title of on-farm trial:	Assessment of Nano- Nitrogen technology in wheat crop.
Year/Season:	2022-23/ Rabi
Farming situation:	Irrigated
Problem diagnosis:	Low fertilizer use efficiency and One time application of nitrogen 170 kg/ha through Urea
Thematic area:	SFM.
No of trials:	05 No.
No. of farmers involved	05
Type of OFT (Assessment/ Refinement):	Assessment
Details of technology selected for assessment/ refinement:	
T1 – Farmers Practice-	Application of Urea 210 kg/ha
T2 –Recommended Practice-	Application of 50% nitrogen (105 kg/ha Urea) + Foliar application of Nano- Urea @ 625 ml/ha. at 40 and 55 days after sowing
T3- Recommended Practice-	Application of 75% nitrogen (158 kg/ha Urea) + Foliar application of Nano- Urea @ 625 ml/ha. at 40 and 55 days after sowing
Date of sowing:	October – 2022
Date of harvesting:	March – 2023
Source of technology:	ICAR- CIRCOT, Nagpur and IFFICO
Characteristics of technology:	Enhancing fertilizer use efficiency and reduce input cost
Name of Crop/Enterprises:	Wheat
Recommendations for Farmers	The technology was found compatible with farmer practices and recommendation for micro level situation
Recommendations for Deptt. Personnel	Technology found more effectively but it was more testing require for analysis of data
Feedback	The Farmers had shown the result between farmer practice & Technology, according to farmers adopted technology.

Result : (Economic Performance of OFT)

Details of technology	no. of Effective tiller/plant	Test weight (g)	Result yield (q/ha)	Average Cost of cultivation (Rs/ha)	Average Gross Return (Rs/ha)	Average Net Return (Rs/ha)	Benefit-Cost Ratio (Gross Return / Gross Cost)
T1 (Farmers Practice)	6.28	46.38	52.05	29826.00	100196.72	70370.72	3.36
T2(Recommended Practice)	5.54	44.92	44.41	29421.00	85498.38	56077.38	2.91
T3(Recommended Practice)	6.20	46.66	52.28	29736.00	100634.18	70898.18	3.38

Not- 53 kg/ha Urea saving under treatment T3

Name of Discipline	Soil Science
Title of on-farm trial:	Assessment of Sulphur along with recommended dose of plant nutrient as per soil test value in Soybean
	crop.
Year/Season:	2023/ Kharif
Farming situation:	Irrigated
Problem diagnosis:	Low yield due to Imbalance use of Plant Nutrient in Soybean crop.
Thematic area:	SFM.
No of trials:	05 No.
No. of farmers involved	05
Type of OFT (Assessment/ Refinement):	Assessment
Details of technology selected for assessment/ refinement:	
T1 – Farmers Practice-	Imbalance use of plant nutrient (09:23:00 NPK kg/ha)
T2 –Recommended Practice-	Balance use of plant nutrient (20:60:20 NPK kg/ha)
T3- Recommended Practice-	Balance use of plant nutrient (20:60:20 NPK kg/ha) + 40 kg/ha. sulphur.
Date of sowing:	June – 2023
Date of harvesting:	October – 2024
Source of technology:	IISS, Bhopal
Characteristics of technology:	Application of Sulphur & Balance use of Plant Nutrient as per STV, Increase yield and quality of Soybean
	crop.
Name of Crop/Enterprises:	Soybean
Recommendations for Farmers	The technology was found compatible with farmer practices and recommendation for micro level situation
Recommendations for Deptt. Personnel	Technology found more effectively but it was more testing require for analysis of data
Feedback	The Farmers had shown the result between farmer practice & Technology, according to farmers adopted technology.

Result : (Economic Performance of OFT)

Details of technology	No of Pods / Plant	Test weight (g)	Result Yield (q/ha)	Average Cost of cultivation (Rs/ha)	Average Gross Return (Rs/ha)	Average Net Return (Rs/ha)	Benefit-Cost Ratio (Gross Return / Gross Cost)
T1 (Farmers Practice)	17.35	94.05 g	12.35	23200.00	55594.29	32394.29	2.40
T2(Recommended Practice)	17.75	94.70 g	13.63	24450.00	61356.61	36906.61	2.51
T3(Recommended Practice)	18.35	95.20 g	14.28	25250.00	64261.80	39011.80	2.55

Detailed Information about OF1: 05	,
Name of Discipline	Soil Science
Title of on-farm trial:	Assessment of Nano- Nitrogen technology in Hybrid maize crop.
Year/Season:	2023/ Kharif
Farming situation:	Irrigated
Problem diagnosis:	Low fertilizer use efficiency and One time application of nitrogen 170 kg/ha through Urea
Thematic area:	SFM.
No of trials:	05 No.
No. of farmers involved	05
Type of OFT (Assessment/ Refinement):	Assessment
Details of technology selected for assessment/ refinement:	
T1 – Farmers Practice-	Application of Urea 210 kg/ha
T2 –Recommended Practice-	Application of 50% nitrogen (105 kg/ha Urea) + Foliar application of Nano- Urea @ 625 ml/ha. at 40 and 55 days after sowing
T3- Recommended Practice-	Application of 75% nitrogen (158 kg/ha Urea) + Foliar application of Nano- Urea @ 625 ml/ha. at 40 and 55 days after sowing
Date of sowing:	June – 2023
Date of harvesting:	October – 2023
Source of technology:	ICAR- CIRCOT, Nagpur and IFFICO
Characteristics of technology:	Enhancing fertilizer use efficiency and reduce input cost
Name of Crop/Enterprises:	Wheat
Recommendations for Farmers	The technology was found compatible with farmer practices and recommendation for micro level situation
Recommendations for Deptt. Personnel	Technology found more effectively but it was more testing require for analysis of data
Feedback	The Farmers had shown the result between farmer practice & Technology, according to farmers adopted technology.

Result: (Economic Performance of OFT)

Result: (Economic Ferror mance of OF 1)							
Details of technology	No of seeds/cob	Test weight (g)	Result yield (q/ha)	Average Cost of cultivation (Rs/ha)	Average Gross Return (Rs/ha)	Average Net Return (Rs/ha)	Benefit-Cost Ratio (Gross Return / Gross Cost)
T1 (Farmers Practice)	383.40	225.00	56.14	26758.40	78600.64	51842.24	2.94
T2(Recommended Practice)	370.20	219.00	52.72	26353.40	73807.52	47454.12	2.80
T3(Recommended Practice)	388.20	227.20	57.40	26668.40	80365.54	53697.14	3.01

Not- 53 kg/ha Urea saving under treatment T3

Name of Discipline	Soil Science
Title of on-farm trial:	Assessment of Nano- Nitrogen technology in wheat crop.
Year/Season:	2023/ Rabi
Farming situation:	Irrigated
Problem diagnosis:	Low fertilizer use efficiency and One time application of nitrogen 170 kg/ha through Urea
Thematic area:	SFM.
No of trials:	05 No.
No. of farmers involved	05
Type of OFT (Assessment/ Refinement):	Assessment
Details of technology selected for assessment/ refinement:	
T1 – Farmers Practice-	Application of Urea 210 kg/ha
T2 –Recommended Practice-	Application of 50% nitrogen (105 kg/ha Urea) + Foliar application of Nano- Urea @ 625 ml/ha. at 40 and 55 days after sowing
T3- Recommended Practice-	Application of 75% nitrogen (158 kg/ha Urea) + Foliar application of Nano- Urea @ 625 ml/ha. at 40 and 55 days after sowing
Date of sowing:	October – 2023
Date of harvesting:	March – 2024
Source of technology:	ICAR- CIRCOT, Nagpur& IFFICO
Characteristics of technology:	Enhancing fertilizer use efficiency and reduce input cost
Name of Crop/Enterprises:	Wheat
Recommendations for Farmers	The technology was found compatible with farmer practices and recommendation for micro level situation
Recommendations for Deptt. Personnel	Technology found best for wheat grower farmer, Recommended for demonstration.
Feedback	The Farmers had shown the result between farmer practice & Technology, according to farmers adopted technology.

Result : (Economic Performance of OFT)

Acoust . (Economic I criormand	Suit: (Economic 1 criormance of O1 1)						
Details of technology	Parameter Name	Unit of Parameter	Result	Average Cost of cultivation (Rs/ha)	Average Gross Return (Rs/ha)	Average Net Return (Rs/ha)	Benefit-Cost Ratio (Gross Return / Gross Cost)
							Cost)
T1 (Farmers Practice)	no. of Effective						
	tiller/plant			In progress			
T2(Recommended Practice)	Test weight (g)	g		1 0			
T3(Recommended Practice)	Yield	q/ha	7				

Name of Discipline	Plant Protection
Title of on-farm trial:	Assessment of ITK practice for the management of insect-pest by spraying of starch, animal urin and
	dusting of cowdung ash in vegetables (Okra & bitter gourd)
Year/Season:	2023/Kharif
Farming situation:	Irrigated
Problem diagnosis:	Low yield of vegetables due to infestation of insect-pest (Average yield losses up to 15-20%)
Thematic area:	ITK practice
No of trials:	10
No. of farmers involved	10
Type of OFT (Assessment/ Refinement):	Assessment
Details of technology selected for assessment/ refinement:	
T1 – Farmers Practice-	Application of insecticide only
T2 –Recommended Practice-	spraying of starch, animal urin and dusting of cowdung ash in vegetables three time 15 day interval (Okra
	& Bitter Gourd)
T3- Recommended Practice-	-
Date of sowing:	15 June,2023
Date of harvesting:	15 Dec, 2023
Source of technology:	Traditional knowledge in agriculture, B00klets psge no. 16
Characteristics of technology:	Reduce Insect pest
Name of Crop/Enterprises:	Okra
Recommendations for Farmers	Technology was appropriate with farming situation and farmers convince to adopt but low cost not
	economically effective
Recommendations for Deptt. Personnel	This technology was suitable in farming situation and deptt. Personnel was spread the technology other
	farmers
Feedback	Farmers was observed cow dung ash and animal urin not effective to insect pest population

Details of technology	Parameter Name Insect infastation	Unit of Parameter	Result q/ha	Average Cost of cultivation (Rs/ha)	Average Gross Return (Rs/ha)	Average Net Return (Rs/ha)	Benefit-Cost Ratio (Gross Return / Gross Cost)
T1 (Farmers Practice)	15.4	.5	119.30	24322.00	578605.00	554283.00	23.81

T2(Recommended Practice)	18.73	156.90	22314.10	760965.00	738650.90	34.10
T3(Recommended Practice)						

Name of Discipline	Plant Protection
Title of on-farm trial:	Assessment of IDM module for the management of stemphylium blight and Purple Blotch in Garlic
Year/Season:	2022-23/Rabi
Farming situation:	Irrigated
Problem diagnosis:	Low yield of garlic due to incidence of stemphylium blight and Purple Blotch (Average yield losses up to
	15-20%)
Thematic area:	IDM
No of trials:	10
No. of farmers involved	10
Type of OFT (Assessment/ Refinement):	assessment
Details of technology selected for assessment/ refinement:	
T1 – Farmers Practice-	Application of Fungicides (Carbendazim 12%+Menchozeb 63% 1kg/ha)
T2 –Recommended Practice-	Foliar application Mancozeb @ 025 % at 30, 60 and 90 DAP
T3- Recommended Practice-	Soil app. Of <i>Pseudomonas fluorescens</i> @ 5 kg/ha + foliar spray Cabriotop (metiram 55%+ pyraclostrobin
	5% WDP) @ 0.25 % at 30,60 and 90 DAP
Date of sowing:	15 Oct, 2022
Date of harvesting:	10 March, 2023
Source of technology:	ICAR- IIHR Bangalore (2017
Characteristics of technology:	Reduce disease incidance
Name of Crop/Enterprises:	Garlic
Recommendations for Farmers	Technology was appropriate with farming situation and farmers convince to adopt
Recommendations for Deptt. Personnel	This technology was suitable in farming situation and deptt. Personnel was spread the technology other
	farmers
Feedback	Pseudomonas fluorescens was effective manage fungal disease and metiram 55%+ pyraclostrobin 5%
	WDP is also effective control diseases of stem phylum blight/purple blotch

Details of technology	Parameter Name	Unit of Parameter	Result q/ha	Average Cost of cultivation (Rs/ha)	Average Gross Return (Rs/ha)	Average Net Return (Rs/ha)	Benefit-Cost Ratio (Gross Return / Gross
	Insect infastation	%					Cost)
T1 (Farmers Practice)	12.29		60.10	51146.00	180300.00	129154.00	3.53
T2(Recommended Practice)	6.85		69.50	51660.00	208500.00	156840.00	4.04
T3(Recommended Practice)		4.59	75.90	52966.00	227700.00	174734.00	4.30

Detailed Information about OFT: 3 in progress

Name of Discipline	Plant Protection				
Title of on-farm trial:	Assessment of IDM module for the management of stemphylium blight and Purple Blotch in Garlic				
Year/Season:	2022-23/Rabi				
Farming situation:	Irrigated				
Problem diagnosis:	Low yield of garlic due to incidence of stemphylium blight and Purple Blotch (Average yield losses up to				
	15-20%)				
Thematic area:	IDM				
No of trials:	10				
No. of farmers involved	10				
Type of OFT (Assessment/ Refinement):	assessment				
Details of technology selected for assessment/ refinement:					
T1 – Farmers Practice-	Application of Fungicides (Carbendazim 12%+Menchozeb 63% 1kg/ha)				
T2 –Recommended Practice-	Foliar application Mancozeb @ 025 % at 30, 60 and 90 DAP				
T3- Recommended Practice-	Soil app. Of <i>Pseudomonas fluorescens</i> @ 5 kg/ha + foliar spray Cabriotop (metiram 55%+ pyraclostrobin				
	5% WDP) @ 0.25 % at 30,60 and 90 DAP				
Date of sowing:	15 Oct, 2023				
Date of harvesting:	-				
Source of technology:	ICAR- IIHR Bangalore (2017				
Characteristics of technology:	Reduce disease incidance				
Name of Crop/Enterprises:	Garlic				
Recommendations for Farmers	-				
Recommendations for Deptt. Personnel	-				
Feedback	-				

Details of technology	Parameter Name Insect infastation	Unit of Parameter %	Result q/ha	Average Cost of cultivation (Rs/ha)	Average Gross Return (Rs/ha)	Average Net Return (Rs/ha)	Benefit-Cost Ratio (Gross Return / Gross Cost)
T1 (Farmers Practice)	In Progress						
T2(Recommended Practice)	1						
T3(Recommended Practice)							!

Detailed Information about OFT: 4

Name of Discipline	Plant Protection
Title of on-farm trial:	Assessment of ITK practice for the management of Fungal diseases by Seed treatment with Burn Engine Oil
	and application with irrigation in chickpea
Year/Season:	2022-23/Rabi
Farming situation:	rainfed
Problem diagnosis:	Low yield of chickpea due to incidence of fungal diseases (Average yield losses up to 15-20%)
Thematic area:	ITK practice
No of trials:	10
No. of farmers involved	10
Type of OFT (Assessment/ Refinement):	Assessment
Details of technology selected for assessment/ refinement:	
T1 – Farmers Practice-	Seed treatment with carbendazim 25% + Manchozeb 50% @ 3g/kg Seed
T2 –Recommended Practice-	Seed treatment with burn engine oil @ 10 ml/kg seed
T3- Recommended Practice-	Seed treatment with carbendazim 25% + Manchozeb 50% @ 3g/kg Seed + burn engine oil @ 10 ml/kg seed
Date of sowing:	20 Oct, 2022
Date of harvesting:	25 feb, 2023
Source of technology:	Traditional knowledge of farmers village Gawakheda, block-Ashta, DisttSehore
Characteristics of technology:	Reduce fungal disease
Name of Crop/Enterprises:	chickpea
Recommendations for Farmers	Technology was appropriate with farming situation and farmers convince to adopt
Recommendations for Deptt. Personnel	This technology was suitable in farming situation and deptt. Personnel was spread the technology other
	farmers
Feedback	Burn engine oil was effective manage fungal disease and irrigation water was more effective control fungal
	diseases

Result: (Economic Performance of OFT) (Please choose and give the parameters name and value according to suitable your OFT)

Details of technology	Parameter Name	Unit of Parameter	Result q/ha	Average Cost of cultivation (Rs/ha)	Average Gross Return (Rs/ha)	Average Net Return (Rs/ha)	Benefit-Cost Ratio (Gross Return / Gross
	Insect infastation	%					Cost)
T1 (Farmers Practice)		18.95	13.684	23554	66367.4	42813.4	2.82
T2(Recommended Practice)		11.67	16.189	24478	78516.65	54038.35	3.21
T3(Recommended Practice)		6.07	20.726	22310	100521.1	78211.1	4.51

Detailed Information about OFT: 5 in progress

Name of Discipline	Plant Protection
Title of on-farm trial:	Assessment of ITK practice for the management of Fungal diseases by Seed treatment with Burn Engine Oil
	and application with irrigation in chickpea
Year/Season:	2023-24/Rabi
Farming situation:	rainfed
Problem diagnosis:	Low yield of chickpea due to incidence of fungal diseases (Average yield losses up to 15-20%)
Thematic area:	ITK practice
No of trials:	10
No. of farmers involved	10
Type of OFT (Assessment/ Refinement):	Assessment
Details of technology selected for assessment/ refinement:	
T1 – Farmers Practice-	Seed treatment with carbendazim 25% + Manchozeb 50% @ 3g/kg Seed
T2 –Recommended Practice-	Seed treatment with burn engine oil @ 10 ml/kg seed
T3- Recommended Practice-	Seed treatment with carbendazim 25% + Manchozeb 50% @ 3g/kg Seed + burn engine oil @ 10 ml/kg seed
Date of sowing:	10 Oct, 2023
Date of harvesting:	-
Source of technology:	Traditional knowledge of farmers village Gawakheda, block-Ashta, DisttSehore
Characteristics of technology:	Reduce fungal disease
Name of Crop/Enterprises:	chickpea
Recommendations for Farmers	-
Recommendations for Deptt. Personnel	-
Feedback	-

Result : (Economic Performance of OFT) (Please choose and give the parameters name and value according to suitable your OFT)

Details of technology	Parameter Name Insect infastation	Unit of Parameter	Result q/ha	Average Cost of cultivation (Rs/ha)	Average Gross Return (Rs/ha)	Average Net Return (Rs/ha)	Benefit-Cost Ratio (Gross Return / Gross Cost)
T1 (Farmers Practice)		In Progress					
T2(Recommended Practice)							
T3(Recommended Practice)							

Detailed Information about OFT: 6

Name of Discipline	Plant Protection			
Title of on-farm trial:	Assessment of IPM module for the management of gram pod borer in chickpea			
Year/Season:	2022-23/Rabi			
Farming situation:	Rainfed			
Problem diagnosis:	Low yield of chickpea crop due to infestation of gram pod borer (losses upto 15-20%)			
Thematic area:	IPM			
No of trials:	05			
No. of farmers involved	05			
Type of OFT (Assessment/ Refinement):	Assessment			
Details of technology selected for assessment/ refinement:				
T1 – Farmers Practice-	Application of insecticides			
T2 –Recommended Practice-	SDP+ resistance variety +optimum seed rate (75kg/ha)+mix 5g rabi sorghum seed with chickpea seed/bird			
	percher 50/ha+ Bacillus thuringiensis var. Kurstaki 1kg/ha+need based application of Emmamectin			
	benzoate 5%SG 220 g/ha			
T3- Recommended Practice-	SDP+Resistance variety+Optimum seed rate (75kg/ha)+Mix 5g rabi sorghum seed with chickpea seed/bird			
	percher 50/ha+light trap 5/ha + pheromone trap 10/ha+Bacillus thuringiensis var. Kurstaki 1kg/ha+ Need			
	based application of emmamectin benzoate 5% SG 220 g/ha			
Date of sowing:	20 Oct, 2022			
Date of harvesting:	15 Feb, 2023			
Source of technology:	ICAR-NCIPM, New Delhi(2017)			
Characteristics of technology:	Reduce fungal disease			
Name of Crop/Enterprises:	chickpea			
Recommendations for Farmers	Technology was appropriate with farming situation and farmers convince to adopt			
Recommendations for Deptt. Personnel	This technology was suitable in farming situation and deptt. Personnel was spread the technology other			
	farmers			
Feedback	Summer deep ploughing was effective control pupal stage of gram pod borer			
	 Resistance variety RVG-202 was low infestation of gram pod borer 			
	Bacillus thuringiensis var. Kurstaki was effective control gram pod borer			

Result : (Economic Performance of OFT) (Please choose and give the parameters name and value according to suitable your OFT)

Details of technology	Parameter Name	Unit of Parameter	Result q/ha	Average Cost of cultivation (Rs/ha)	Average Gross Return (Rs/ha)	Average Net Return (Rs/ha)	Benefit-Cost Ratio (Gross Return / Gross
	Insect infastation	%					Cost)
T1 (Farmers Practice)	12.69		12.93	22020.00	62700.80	40680.80	2.85
T2(Recommended Practice)	7.20		15.93	22398.00	77260.50	54862.50	3.45
T3(Recommended Practice)		3.73	18.87	22926.00	91519.50	68593.50	3.99

Detailed Information about OFT: 7 in progress

Name of Discipline	Plant Protection
Title of on-farm trial:	Assessment of newer molecule azoxystrabin 205%+thiophinate methyl11.25%+thiomethoxam 25% FS @
	2ml/kg seed for the management of stem fly in soybean & root aphid in wheat
Year/Season:	2023-24/Rabi
Farming situation:	rainfed
Problem diagnosis:	Low yield of soybean/wheat due to stem fly in soybean & root aphid wheat (Average yield losses up to 15-
	20%)
Thematic area:	IPM
No of trials:	10
No. of farmers involved	10
Type of OFT (Assessment/ Refinement):	Assessment
Details of technology selected for assessment/ refinement:	
T1 – Farmers Practice-	Seed treatment with carbendazim 25%+ menchozeb 50% @3g/kg seed
T2 –Recommended Practice-	Seed treatment with carbendazim 25%+ menchozeb 50% @3g/kg + thiomethoxam 30% FS@ 1.2ml/kg seed
T3- Recommended Practice-	azoxystrabin 205%+thiophinate methyl11.25%+thiomethoxam 25% FS @ 2ml/kg seed
Date of sowing:	23 june,2023
Date of harvesting:	10 Oct, 2023
Source of technology:	ICAR-IIHR Banlore
Characteristics of technology:	Reduce insect infastation
Name of Crop/Enterprises:	Soybean/wheat
Recommendations for Farmers	Technology was appropriate with farming situation and farmers convince to adopt
Recommendations for Deptt. Personnel	This technology was suitable in farming situation and deptt. Personnel was spread the technology other
	farmers
Feedback	azoxystrabin 205%+thiophinate methyl11.25%+thiomethoxam 25% FS @ 2ml/kg seed was effective
	manage stem fly infestation

Result: (Economic Performance of OFT) (Please choose and give the parameters name and value according to suitable your OFT) Soybean

Details of technology	Parameter Name	Unit of Parameter	Result q/ha	Average Cost of cultivation (Rs/ha)	Average Gross Return (Rs/ha)	Average Net Return (Rs/ha)	Benefit-Cost Ratio (Gross Return / Gross
	Insect infastation	%					Cost)
T1 (Farmers Practice)	16.41		10.43	21475.00	50580.65	29105.65	2.36
T2(Recommended Practice)	13.20		12.48	22314.10	60518.30	38204.20	2.71
T3(Recommended Practice)		6.96	14.98	22555.20	72633.60	50078.40	3.22

Result : (Economic Performance of OFT) (Please choose and give the parameters name and value according to suitable your OFT) Wheat – in progress

Details of technology	Parameter Name	Unit of Parameter	Result q/ha	Average Cost of cultivation (Rs/ha)	Average Gross Return (Rs/ha)	Average Net Return (Rs/ha)	Benefit-Cost Ratio (Gross Return / Gross
	Insect infastation	%					Cost)
T1 (Farmers Practice)							
T2(Recommended Practice)				In Progre	ess		
T3(Recommended Practice)							

Information about Extension OFT:

Title	Assessment of Effective use of different information sources for production technology information sources.
Season & Year	Rabi, 2022-23
Problem identified	Low yield of Onion & Garlic due to poor information sources
Thematic Area	Information and Communication Technology
Farming situation	Irrigated
Name of Technology Intervention under study	Use of what's app for Onion & Garlic Production technology information
Farmers Practice	Use traditional information Sources
No. of replication (Farmers)	60

Results / findings (Please choose and give the parameters name and value according to suitable your OFT)

Results / findings (1 lease choose and give the param	eters name and value accordin	ig to suitable your OF 1)				
Performance indicators/ parameters	Unit/ details	Observation				
		T1 (Farmers Practice)	T2(Recommended Practice)	T3(Recommended Practice)		
Knowledge Change	%	38.40	54.16	66.71		
Adoption of Share Technology	%	37.75	47.50	57.00		
Information Reliability	%	47.53	59.60	71.21		
Timeliness	%	37.60	49.50	58.30		

Information about Home Science OFT:

Title of on-farm trial:	Assessment of Sorghum Khichidi for anaemic children
Year/Season:	2023
Problem diagnosis:	Anaemic children in Rural areas.
Thematic area: (Focus area in DFI and nutri smart initiatives)	Nutritional Security
No of trials:	10
No. of farmers/farm women involved	10
Type of OFT (Assessment/ Refinement):	Assessment
Details of technology selected for assessment:	
T1 – Farmers Practice-	Intake low Protein, Vitamin and Mineral diet in first half day.
T2 –Recommended Practice-	Sorghum+Moong Dal = sorghum Khichidi
Source of technology:	IIMR, Hydrabad, 2021
Characteristics of technology:	It is rich sources of protein, vitamin and minerals and rich in potassium, phosphorus and calcium and sufficient amount of
	iron, zinc and sodium to reduce malnutrition
Name of Crop/Enterprises:	Sorghum
Farming situation:	Home Steed
Date of sowing:	Start: Dec. 2023
Date of harvesting:	End: March, 2024
Recommendations for Farmers	
Recommendations for Dept. Personnel	
Feedback	

Economic Performance Home Science OFT: (For Nutritional security)

Name of Enterprise /product: -Sorghum Khichdi

Detail of Technology	Name of Product/	Per capita		Nutrient Inta	ke (Unit)		Anthro	pometric measu	rements
	enterprise	Consumption	Energy (kcal)	Protein (gm)	Iron	Calcium (mg)	Increase in	Increase in	BMI
		gm/ day			(mg)		Weight (Kg)	Height (cm)	((Weight (Kg)/
									(Height(in m) *
									Height(in m)))
T ₁ (Farmers Practices)	-	0							
T ₂ (Recommended Practices)	Sorghum Khichdi	50				In Progress			
T ₃ (Recommended Practices									

Details of FLDs organized (Based on soil test analysis)

KVK	Season	Discipline	Thematic	Technology for	Crop	Name	Name of	Farming Situation	Complet	Crop-		No	o. of farme	ers
Name		(Agronomy/Horticultur e/ Soil Science/Plant Protection/Plant Breeding/ Agroforestry)	area	demonstration	Categor y	of Crop	Variety	(rainfed/irrigated/s emi-irrigated)	ed/Ongoi ng	Area (ha)	SC	ST	Others	General
SEHO RE	Rabi 2022- 23	Agronomy	ICM	Wheat Variety HI-8759 (Pusa Tejus)	Cereal	Whea t	HI- 8759	Irrigated	Complet ed	2.0	1	-	09	-
SEHO RE	Rabi 2022- 23	Agronomy	IWM	Application of Metsulfuron + Clodinofop ai @ 64 g/ha	Cereal	Whea t	HI- 1544 /8759	Irrigated	Complet ed	2.0	-	05	-	-
SEHO RE	Summ er	Agronomy	ICM	Green gram variety IPM 205-7(Virat)	Pulse	Green gram	IPM 205- 7(Virat)	Irrigated	Complet ed	4.0	01	04	05	-
SEHO RE	Kharif 2023	Agronomy	Crop diversific ation	Hybrid maize +BMP	Cereal	Maize	Hybrid	Irrigated and Restricted Irrigated	Complet ed	4.0	02	07	01	-
SEHO RE	Kharif 2022	Agronomy	ICM	Pigeon pea cultivation in wasteland for nutritional security	Pulses	Pigeo n pea	TJT-501	Irrigated and Restricted Irrigated	Complet ed	1.0	05	10	35	-

SEHO RE	Kharif 2023	Agronomy	ICM	Pigeon pea cultivation in wasteland for nutritional security	Pulses	Pigeo n pea	TJT-501	Irrigated and Restricted Irrigated	In- progress	0.5	03	09	15	-
SEHO RE	Rabi 2023- 24	Agronomy	ICM	Wheat Variety HI-1634 (Pusa Ahilya)	Cereal	Whea t	HI- 1634	Irrigated	In- progress	2.0	-	-	-	05
SEHO RE	Rabi 2023- 24	Agronomy	ICM	Chickpea variety (RVG-204)	Pulse	Chick pea	RVG-204	Irrigated and Restricted Irrigated	In- progress	2.0	-	05	-	-
SEHO RE	Rabi - 2023- 24	Agronomy	ICM	Application of Metsulfuron + Clodinofop ai @ 64 g/ha	Cereal	Whea t	HI- 1544 /8759	Irrigated	In- progress	2.0	-	01	04	-
SEHO RE	2002- 23 Rabi	Soil Science	SFM	Demonstration of Nutrient Management in onion crop	Bulb crop	Onion	Fursungi	Irrigated	complete d	1 ha	01	-	04	-
SEHO RE	2023 khafif & Rabi	Soil Science	NRM	Demonstration of Jeevamrit and GhanJeevamrit on growth and yield of Soybean - Chickpea cropping system	Oil seed & Pulses	Soybe an & Chick ea	J.S. 2034 and Katila	Irrigated		01 ha	01	02	02	-
SEHO RE	2023 Kharif	Soil Science	SFM	Demonstration of Foliar Spray of Potassium Nutrient in Soybean crop.	Oil seed	Soybe an	Rvs-18	Irrigated	complete d	02 ha	01	01	03	-
SEHO RE	2023 Rabi	Soil Scien ce	SFM	Demonstration on foliar spray of vegetable micronutrient mixture in garlic crop	Bulb crop	Garlic	G-282	Irrigated		02 ha	02	-	08	-
SEHO RE	20223 Kharif	Soil Science	NRM	Demonstration of Bio Waste-Decomposer for composting	Enterpr ise	Enter prise	-	-	complete d	-	-	-	05	-
SEHO RE	2023 Rabi	Soil Science	SFM	Demonstration of Nutrient Management in onion crop	Bulb crop	onion	Fursungi	Irrigated	Ongoing	01 ha	01	-	-	04
SEHO RE	Zaid	Plant Protection	IDM	Demonstration of IDM module for the management of Yellow	Pulse	Green gram	Shikha (IPM-410- 3)	irrigated	Complet ed	4	-	10	-	-

				Mosaic in green gram										
SEHO RE	Kharif	Plant Protection	IPM	Demonstration IPM module for the management of stem borer and Fall Army Warm in maize	Cereals	Maize	Hybrid	irrigated	Complet ed	4	-	-	10	-
SEHO RE	Kharif	Plant Protection	IPM	Demonstration IPM module for the management of Girdle Beetle and defoliator in Soybean crop	Oilseed	Soybe an	Raj soya- 18	irrigated	Complet ed	4	-	-	10	-
SEHO RE	Rabi	Plant Protection	IDM	Demonstration IDM module for the management of Wilt, root rot & Collar rot disease in chickpea	Pulse	Chick pea	JAKI-9218	Rainfed	Complet ed	4	-	-	10	-
SEHO RE	Rabi	Plant Protection	IDM	Demonstration IDM module for the management of Wilt, root rot & Collar rot disease in chickpea	Pulse	Chick pea	JAKI-9218	Rainfed	In- progress	4	-	-	10	-
SEHO RE	Rabi	Plant Protection	IPM	Demonstration of IPM module for the management of gram pod borer in chickpea	Pulse	Chick pea	RVG-202	Rainfed	In- progress	4	-	10	-	-
SEHO RE	Kharif/ rabi	Plant Protection	Natural farming	Demonstration of neemastra, agniastra, brahmastra for the management of insect pest soybean-chickpea crop	Oilseed /pulse	Soybe an/chi ckpea	Raj soya- 18/RVG- 202	Rainfed	Complet ed	4	-	10	-	_
SEHO RE	2023	Agri Extn	Soil Health Manage ment	Demonstration of Soil Health Card Based use of Fertilizer Application in Soybean Crops	-	Soybe an & Chick pea	RVS- 2000-18 & RVG 202	Rainfed	Complet ed	01 ha	04	-	-	16

Economic Impact of Crop FLD

Sehore Sehore	Wheat Variety													Retui Gross Cost)	S	
Sehore				FP (T1)	RP (T2)	FP (T ₁)	RP (T ₂)	FP (T ₁)	RP (T ₂)	FP (T ₁)	RP (T ₂)	FP (T ₁)	$\mathbf{RP}(\mathbf{T}_2)$	FP (T ₁)	RP (T ₂)	
			No. of Effective tillers	per hill	per hill	5.53	6.06							1/		
	HI-8759 (Pusa Tejus)	Wheat	No. of grain	per panical	per panical	45.02	45.99	26965	27365	107056	118757	80091	91393	3.97	4.34	
			Test Weight	(g)	(g)	45.81	46.46	_								
			Yield Weed Density	(qtl/ha)	(qtl/ha)	50.38 8.09	55.89 4.39								 	
	Application of		No. of Effective tillers	per hill	per hill	5.33	5.63	-								
	Metsulfuron + Clodinofop ai @ 64 g/ha	Wheat	No. of grain	per panical	per panical	44.99	45.97	26926	27326	102486	110110	75560	82784	3.81	4.03	
	04 g/na		Test Weight	(g) Q/ha)	(g) Q/ha)	45.65	46.21	-								
Sehore			Yield No.of Cobs/Pods	Per plant	Per plant	48.23	51.82	1		1						
	Hybrid maize +BMP	T1:maize T:2 Soybean	No. of graiins/cob/pod	Per cob/Pod	Per cob/Pod	1.92	303.56	26440	25056	66796	71701	40356	46645	2.53	2.86	
		-	Test Weight	(g)	(g)	90.28	229									
		-	Yield	(Q/ha)	(Q/ha)	13.36	39.29									
Sehore		-	No. of Branch	per Plant	per Plant	8.32	9.77									
	Green gram	-	No of Pods	per Plant	per Plant	18.82	19.70									
	variety IPM	Green gram	No of seeds Test Weight	Per pod (g)	Per pod (g)	7.80	8.65	24016	25356	93030	110840	69014	85484	3.87	4.37	
	205-7(Virat)		Yield)	(Q/ha	(Q/ha	29.27	30.09									
Sehore		Wheat	No. of Effective tillers	per hill	per hill	12.40	14./8									
	Wheat Variety	•					In Progress									
	Wheat Variety HI-1634 Pusa Ahilya)		No. of grain Test Weight	per panical (g)	per panical (g)		In Progress									

Sehore		Wheat	Weed Density	m ²	m ²										
			No. of	per hill	per hill										
	Application of		Effective												
	Metsulfuron +		tillers							In P	rogress				
	Clodinofop ai @ 64 g/ha		No. of grain	per	per						8				
	04 g/11a		_	panical	panical										
			Test Weight Yield	(g) Q/ha)	(g) Q/ha)	_									
Sehore	Chickpea vareity	Chickpea	Tield	Per	Per										
Schole	RVG-204	Спіскреа	No.of Pods	plant	plant										
	K V G 204			Per	Per	1									
			No. of graiins	Pods	Pods					In P	rogress				
			Test Weight	(g)	(g)										
			Yield	(Q/ha)	(Q/ha)										
SEHOR	Demonstration	Onion	No. of bulbs	Per	Per	52.00	52.00	69002.00	72172.	209336.00	232608.00	140334.0	160436.0	3.03	3.22
E	of Nutrient		_	sqm	sqm	10.00	44.70	1	00			0	0		
	Management in onion crop		Average bulb weight	(g)	(g)	40.28	44.76								
			Yield	(q/ha)	(q/ha)	209.3 4	232.6								
SEHOR	Demonstratio			Per	Per	17.25	17.75	23634.00	21109.	57247.56	59394.72	33613.56	38285.72	2.42	2.81
E	n of Jeevamrit and	Soybean	No. of pods	plant	plant				00						
	GhanJeevamrit on growth and	Soysean	Test Weight	(g)	(g)	94.43	94.49								
	yield of Soybean - Chickpea		Yield	(q/ha)	(q/ha)	12.72	13.20	<u>-</u>							
	cropping system		No. of pods/ plant	-	-		ı		ı						
		Chickpea	Test Weight (g)	-	-	In prog	gress								
SEHOR	Demonstratio	Soybean	No. of pods/	Per	Per	18.98	19.18	23570.00	24070.	59802.31	63442.28	36232.		2 2.5	l l
E	n of Foliar Spray of		plant	plant	plant				00				8		4
	Potassium Nutrient in Soybean crop.		No. of grains	Per Pods	Per Pods	1.84	1.92								
	J T		Test Weight	(g)	(g)	92.58	93.06	-							

			Yield	(q/ha)	(q/ha)	13.29	14.10								
SEHOR E	Demonstratio n on foliar spray of vegetable micronutrient mixture in garlic crop	Garlic	Average bulb weight (g)	-	-					In Pr	rogress				
SEHOR E	Demonstratio n of Bio Waste- Decomposer for composting	Enterprise	Time taken for decompositi on (Month)	-	-					In pr	ogress				
SEHOR E	Demonstratio n of Nutrient Management in onion crop	Onion	No. of bulbs/ sqm Average bulb weight (g)	-	-					In pr	ogress				
SEHOR E	Demonstrati on of IDM module for the	green gram	Disease incidence	(%)	(%)	16.1	5.9	2238	24010	84334.8	107269	61946.8	83258.9	3.77	4.47
	managemen t of Yellow Mosaic in green gram		Yield	(q/ha)	(q/ha)	17.39	22.12	8		1		1	5		
SEHOR E	Demonstrati on IPM module for the managemen	maize	Insect Infestation	(%)	(%)	23.9	13	2238		61891.1	76918.	39503.1	52908.3		
	t of stem borer and Fall Army Warm in maize		Yield	(q/ha)	(q/ha)	12.76	15.86	8	24010	4	38	4	8	2.77	3.20

SEHOR	Demonstrati	Soybean	Insect												
E	on IPM	Boybean	Infestation												
	module for														
	the			(%)	(%)	19.5	8.2								
	managemen							2238		71730.6	84956.	49342.6	60946.6		
	t of Girdle							8	24010	8	64	8	4	3.20	3.54
	Beetle and									O	0-1				
	defoliator in		Yield	(q/ha)	(q/ha)										
	Soybean					14.79	17.52								
	=														
SEHOR	crop Demonstrati	chickpea	Insect												
E	on IDM	Спіскреа	Infestation												
	module for														
	the			(%)	(%)	11.74	5.46	2220		00410.5		67000 5			
	managemen							2238	24010	89410.5 7	106685	67022.5	82675	4.00	4.44
	t of Wilt,							8		/		/			
	root rot &														
	Collar rot		Yield	(q/ha)	(q/ha)										
	disease in					18.44	22.00								
CELLOD	chickpea														
SEHOR E	Demonstrati	chickpea													
L	on IDM								In Progress						
	module for								111 1 1 0 9 1 0 5 5						
	the														
	managemen														
	t of Wilt,														
	root rot &														
	Collar rot														
	disease in														
	chickpea														

SEHOR	Demonstrati	chickpea														
E	on of IPM								In D	rogress						
	module for								111 1	Togress						
	the															
	managemen															
	t of gram															
	pod borer in															
	chickpea															
	T = .		_	Т					1	1				1		
SEHORE			Insect Infestation													
	of neemastra agniastra,	,	(%)	18.9	16.1 12	2.85	6.39	22388	21185	62324	54 79467	7.83 3993	6.54 582	82.83	2.78	3.75
SEHORE	brahmastra fo	chickpea														
	the															
	management	t														
	of insect pes	t							In I	Progress						
	soybean-															
	chickpea cro		No. of Pods	Per Plant	.+								1	<u> </u>		
	Demonstration of		No. of Grains	Per Pods	15	5.20 16	6.80									
CEHOPE	Soil Health Card Based use of	Soybean	110. UI GI aills	1 ci i ous		.91 2.	.09	22260	24400	(0)((1)	52551	25200	401.41	2.60		2.01
SEHORE	Fertilizer	& Chickpea	Test Weight	g			2.92	23368	24409	60664	73551	37300	49141	2.60		3.01
	Application in Soybean Crops	_	Yield	Q/ha	11	1.03 13	3.37									

Extension and Training activities under FLDs

S. No.	Activity	No. of activities	Month	Number of participants
1	Field days	01	March 2023,	27
2	Farmers Training	05	Jun to December 2023	124
3	Media coverage	-	-	-
4	Training for extension functionaries	02	July 2023	63
			December 2023	

Details of FLD on Enterprises Farm Implements

Details of FLDs on Agriculture Engineering implemented during Jan-2023 to Dec-2023- NA

F	KVK	Seaso	Themat	Technology	Crop/	Name of	Name of	Farming Situation	Complete	Crop- Area		No.	of farm	ers
ľ	Nam	n	ic area	for	Enterpri	Crop/	Variety/Techn	(rainfed/irrigated/s	d/Ongoin	(ha) /	S	S	Other	Gener
	e			demonstrat	se	Enterpris	ology/	emi-irrigated)	g	Entrep -	C	T	S	al
				ion	Categor	e	Enterprise			No.				
					\mathbf{y}									
	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Economic Impact of Agriculture Engineering FLD-NA

KVK Name	Technology for demonstration	Name of Crop/ Enterprise	Name of Performa nce paramete rs /	Name of Unit	parar rela tech	ata on neter in tion to nology nstrated	of cu	age Cost Itivation Is/ha)	Gross	erage s Return s/ha)		nge Net (Rs/ha)	Benefit Ratio (Return / Cos	Gross Gross
			indicator s		FP (T ₁)	RP (T ₂)	FP (T ₁)	RP (T ₂)	FP (T ₁)	RP (T ₂)	FP (T ₁)	RP (T ₂)	FP (T ₁)	RP (T ₂)
Sehore	DSR Machine	Paddy	No. of Effective tillers	per hill	4.84	3.62	0	90	42	1	4	1		_
			No. of grain	per panical	94.30	85.90	37360	2819	25864	97881	88504	69691	3.37	.47
			Test Weight	(g)	19.31	18.83	37	28	12	97	88	59	α	ω
			Yield	(qtl/ha)	35.96	24.17								

^{*}Field efficiency, labour saving etc.

Livestock Enterprises

Details of FLDs on Animal Science implemented during Jan-2023 to Dec-2023- NA

KVK	Thematic	Technology for	Name of	Name of	Completed/On	No. of unit		No.	of farmers	
Name	area	demonstration	Enterprise	Breed	going	(animals, poultry birds etc.)	SC	ST	Others	Gen
-	-	-	-	-	-	-	-	-		-

Economic Impact of Animal Science FLD- NA

KVK Name	Technology for demonstration	Name of Enterprise	Perfor param indic	eters /	paran relat techi	ita on neter in tion to nology	of cult	Average Cost of cultivation (Rs/ha)		rage coss turn /ha)	Avera Ret (Rs/		(Gross	Ratio Return s Cost)
			Name of Parameter	Name of unit	FP (T ₁)	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$			FP (T ₁)	RP (T ₂)	FP (T ₁)	RP (T ₂)	FP (T ₁)	RP (T ₂)
	-	-	-	-	-	-	-	-	-	-	-	-	-	-

^{*}Milk production, meat production, egg production, reduction in disease incidence etc.

Details of FLDs on Fishery implemented during Jan-2023 to Dec-2023- NA

2000110 01 1		mpromote during our		1					
0KVK	Thematic	Technology for	Name of	Completed/Ongoing	Area (ha) /		No. o	f farmers	
Name	area	demonstration	Enterprise		Entrep - No.	SC	ST	Others	General
-	-	-	-	-	-	-	-	-	-

Economic Impact of Fishery FLD- NA

KVK	Technology	Name of	Perforn	nance	Da	ta on	Averag	ge Cost	Ave	rage	Avera	ge Net	B:C 1	Ratio
Name	for	Enterprise	parameters / indicators		paran	neter in	of cult	ivation	Gr	oss	Ret	urn	(Gross	Return
	demonstration				relat	tion to	(Rs	/ha)	Ret	urn	(Rs/	ha)	/ Gross	s Cost)
					tech	nology			(Rs	/ha)				
					demoi	demonstrated								
			Name of	Name of	FP (T ₁)	$RP(T_2)$	FP	RP	FP	RP	FP	RP	FP	RP
			Parameter unit				(T_1)	(T_2)	(T_1)	(T_2)	(T_1)	(T_2)	(T_1)	(T_2)
-	-	-	-	-	_	_	_	-	-	_	-	-	-	_

Information about Home Science FLDs - (For All Thematic Area)

Thematic area	Technology demonstrated	Name of Crop/	Crop- Area (ha) /			No. of farmer	S
		Enterprise	Entrep - No.	SC	ST	Others	General
Nutritional Security	Demonstration on Kitchen garden for nutritional security	Vegetables	0.38	10	10	-	5
Nutritional Security	Demonstration on Kitchen garden for nutritional security	Vegetables	0.75	08	18	16	08
Nutritional Security	Demonstration of ITK based Iron rich food supplements (Halwa) for anaemic children (1 year-5 years)	Wheat Flour and Groundnut	-	-	15	-	-

Drudgery Reduction	Demonstration of Milking Revolving Stool with Stand for Drudgery Reduction in Farm Women	Milking Revolving Stool with Stand	-	3	2	-	-
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Economic Performance Home Science FLD: (For Nutritional security)

Technology for	Perf	ormance Indi	cator / Pai	rameter			Nutri	ient In	take (Unit)				Anthro	pometric	measuren	nents	
demonstration	Name	of Product	Consum	capita ption gm/ lay	Ene (kc	O	Pro (gr	tein m)	Iro (m			cium ng)		ase in it (Kg)	Incre Height		(K (Heigh * Hei	eight (g)/
	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2
Kitchen garden for nutritional security		All Vegetables	70	100	-	-	-	-	1	-	-	-	52.300	54.250	158.49	158.49	20.82	21.59
Pigeon pea cultivation in wasteland for nutritional security	Pigeon pulse	Pigeon pulse	64.12	112.6	219.9	386.4	14.1	24.7	4.49	7.89	135.4	136.40	-	-	-	-	-	-

Economic Performance Home Science FLD: (For Nutritional security)

Economic 1 citorman		0 8 0101100	(- 10-10-00-00-00-														
Technology for	Per	formance	Indicator /	Parameter			Nutri	ent Int	ake (Uı	nit)				Anth	ropometri	c meas	urements	
demonstration		me of oduct		capita tion gm/ day	Ene (kc	- C		tein m)	Iron	(mg)	Calc (m		Increa Weight		Increas Height (c		BM ((Weight (Height(in Height(in	(Kg)/ n m) *
	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2
Demonstration of ITK based Iron rich food supplements (Poridge) for anaemic children	-	Wheat Poridge	-	50							I	In Prog	gress					

Technology for demonstration		-				Pe	rformanc	e Indica	tor / Pai	rameter				
	Out	put *	Expe	Energy nditure min.	W] beat	HR /min	% redu in dru		% incr effici		Co	rdiac st of ork	% S	aving of cardiac Cost
	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2
Milking Revolving Stool with Stand for Drudgery Reduction in	2.2	6.5	8.35	6.06	107.4	93	0	27.32	0	66.15	-	-	-	-

Farm Women								

^{*}Kindly use Unit as per the machine/implement/equipment used for drudgery reduction

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

Sl.	Crop	Thematic	Technology for	Critical inputs	Season and year	Area	No. of farmers/	Parameters identified
No.		area	demonstration			(ha)	demonstration	
1				Weed Control by Sodium	Kharif,	10.0	25	• Weed density/m ²
				Acceflurfon + Clodinofop	2023			No.of Pods/plant
				NPK 19:19:19				No. of grains/pod
		ICM and	Best management	Sulphor				• Test Weight (g)
	Soybean	AEG	practices of soybean	Heliothis Lure				• Yield (q/ha)
		ALG	practices of soybean	Spodoptera Lure	-			% increase yield
				Funnel Trap	-			• Cost of Cultivation (Rs/ha)
				•				• Gross returns (Rs/ha)
				Yellow Sticky trap				• Net returns (Rs/ha)
2				Mustard Seed (Var.RH 725)	Rabi, 2023-24	20.0	50	No.of pods /plant
				Bentonite Sulfor 90%				• No. of grains/pod
				Azoxystrobin 2.5% + Thiophanate				• Test Weight (g)
			Integrated crop	Methyl 11.25% + Thiamethoxam				• Yield (q/ha)
	Mustard	ICM	management of	25% FS				% increase yield
			Mustard	Tebuconazole 10% + Sulphur				• Cost of Cultivation (Rs/ha)
				65%.				• Gross returns (Rs/ha)
				Imidachloprid				• Net returns (Rs/ha)
				Yellow Sticky trap	1			B C ratio

Extension and Training activities under CFLDs Oilseed and Pulses

S. No.	Activity	No. of activities	Month	Number of participants
1	Field days	16	January to December	271
2	Farmers Training	18	January to December	389
3	Media coverage	05	-	-
4	Training for extension functionaries	06	January to December	155

Training (Including the sponsored and FLD training programmes): A) $\underline{ON\ Campus}$

Category (F/ FW /	Category	Sub Theme	Training Title	No. of	Duratio			P	artic	cipant	ts		
F &FW)				Course	n	Ge	en	S	С	S	Γ	Oth	ers
(do not leave				S	(Days)	M	F	M	F	M	F	M	F
column blank)													
F	Crop Production	Crop Diversification	Crop Diversification throuhj Hy maize	01	01	15	-	02		03	-		-
F	Crop Production	Integrated Crop Management	Improved agronomic technologies of rabi crops	02	01	-	-	03	-	08	0	10	-
	_										2		
F	Plant Protection	Integrated Pest Management	IPM in kharif crop	3	01	2		3		20			
F	Plant Protection	Integrated Pest Management	IPM in soybean crop	2	01	3		5				17	
F	Plant Protection	Integrated Pest Management	IPM in chickpea	2	01	5		2				18	
F	Plant Protection	Integrated Pest Management	Management of sucking pest in onion/garlic	2	01	5		2		2		11	
F	Plant Protection	Integrated Disease	IDM in chickpea	2	01	3		2		3		17	
		Management											

B) OFF Campus

Category (F/FW/	Category	Sub Theme	Training Title	No. of	Duratio			P	artic	ipan	ts		
F &FW)				Courses	n	Ge	en	S	()	S'	Т	Oth	ers
(do not leave column blank)					(Days)	M	F	M	F	M	F	M	F
F &FW	Crop Production	Weed Management	Women friendly weed equipments	01	01	-	1	ı	1 0	ı	1	.1	15
FW	Crop Production	Integrated Crop Management	Weed management in wheat	01	01					07		18	
FW	Crop Production	Integrated Crop Management	Best management practices of Soybean	01				05				20	
FW	Crop Production	Integrated Crop Management	Integrated Crop Management of Mustard	02	02	-	-	08	-	18	0	23	-
F &FW	Crop Production	Nutritional Security	Cultivation of Nutri rich wheat varities for nutritional security						0 6	-	1 9		
FW	Crop Production	Crop Diversification	Crop Diversification throuhj Hy maize	01	01	-	-	1		23	-	-	-
FW	Crop Production	Integrated Crop Management	Improved agronomic practices of summer green gram			-	-	01	1	8	-	19	-
FW	Crop Production	Integrated Crop Management	Direct seeded rice cultivation	02	01	-	-	-		02		13	-
FW	Crop Production	Micro irrigation/irrigation	Irrigation scheduling in rabicrops	02	01					18			

Category (F/FW/	Category	Sub Theme	Training Title	No. of	Duratio					ipant			
F &FW)				Courses	n	G	_	S		S			iers
(do not leave column blank)					(Days)	M	F	M	F	M	F	M	F
FW	Crop Production	Nutritional Security	Pigeonpea cultivation in waste land for nutritional security	01	01	15							
FW	Crop Production	Resource Conservation Technologies	Improved Technologies for reduction of cost of cultivation	02	01					10		15	
F	Plant Protection	Integrated Pest Management	Management of insect & Pest in Green gram	1	01	5		5		15			
F	Plant Protection	Integrated Pest Management	IPM in soybean	1	01	15						10	
FW	Plant Protection	Integrated Pest Management	Store grain pest management	1	01				5		2 0		
FW	Plant Protection	Integrated Pest Management	Nursery management of vegetable crop	1	01		5		8		8		4
F	Plant Protection	Integrated Pest Management	IPM in chickpea	1	01	5				2		18	
F	Plant Protection	Integrated Disease Management	IDM in chickpea	1	01	10		3		2		10	
FW	Soil Health and Fertility Management	Soil fertility management	Application and importance of liquid Bio fertilizer in field crop	01	01	-	-	-	2 5	-	-	-	-
F	Soil Health and Fertility Management	Integrated Nutrient Management	Integrated Nutrient Management in Rabi crop	01	01	20	-	05	1	05	-	-	-
F&FW	Soil Health and Fertility Management	Balance Use of fertilizer	Nutrient management in rabi crop	01	01	04	-	03	1	06	1	09	-
F	Soil Health and Fertility Management	Nutrient Use Efficiency	Application and use of micronutrient in vegetable crop	01	01	02	-	02	1	-	1	20	-
F	Soil Health and Fertility Management	Balance Use of fertilizer	Nutrient management in onion crop	01	01	12	-	03	-	-	1	10	-
F	Soil Health and Fertility Management	Others (Natural Farming)	Natural Farming	01	01	-	-	-	-	22	-	-	-
FW	Soil Health and Fertility Management	Organic manures production	Soil fertility management through composting	01	01	-	-	-	0 3	-	2 3	-	-
FW	Home Science/Women empowerment	Household food security by kitchen gardening and nutrition gardening	Kitchen Gardening for nutritional security	04	01	-	8	-	2 4	-	2 8	-	36
FW	Home Science/Women empowerment	Design and development of low/minimum cost diet	Balanced Diet of Pregnant Women	01	01	-	2 5	-	1	-	1	-	-
FW	Home Science/Women empowerment	Designing and development for high nutrient efficiency diet	Making iron rich food supplement for anaemic children	01	01	-	2 4	-	3	-	1	-	-
FW	Home Science/Women empowerment	Processing & cooking	Preservation of Seasonal Fruits	01	01	-	-	-	-	-	2 6	-	-
FW	Home	Processing & cooking	Nutritious Food through Millets	01	01	-	3	-	2	-	-	-	-

Category (F/FW/	Category	Sub Theme	Training Title	No. of	Duratio			P	artic	ipan			
F &FW)				Courses	n	G		S		S'			ners
(do not leave column blank)					(Days)	M	F	M	F	M	F	M	F
	Science/Women empowerment						5		5				
FW	Home Science/Women empowerment	Value addition	Value Addition of Seasonal Fruits and Vegetables	01	01	-	-	-	-	-	2 6	-	-
FW	Home Science/Women empowerment	Value addition	Develop Value Added Millets Products	01	02	-	1 9	-	1 2	-	-	-	-
FW	Home Science/Women empowerment	Location specific drudgery reduction technologies	Use of Milking Revolving Stool with Stand for Drudgery reduction	01	01	-	-	-	8	-	1 8	-	-
FW	Home Science/Women empowerment	Rural Crafts	Skill Development through Rural Craft	01	02	-	-	-	1	-	-	-	14
F&FW	Capacity Building and Group Dynamics	Others (Crop Insurance)	Others (Crop Insurance)	02	01	12	-	09	-	4	-	24	-
FW	Capacity Building and Group Dynamics	Formation and Management of SHGs	Role of SHG for income generation	01	01	-	5		5	-	4		11
F	Capacity Building and Group Dynamics	Mobilization of social capital	Others Cashless transaction	01	01	-	-	5	-	-	-	20	-
F	Capacity Building and Group Dynamics	Group dynamics	Others Awareness programme on health and sanitation	01	01	-	5		5	-	4		11
F	Capacity Building and Group Dynamics	Mobilization of social capital	Role of Electronic Media in Agriculture	01	01	5	-	3	-	2	-	11	-

Details of Training Programmes conducted by the KVKs for Rural Youth

A. ON Campus

Thematic Area of training	Training Title	No. of	Duration	•							
		Courses	(Days)	Ger	1	S	C	S	T	Oth	ers
				M	F	M	F	M	F	M	F
Repair and maintenance of farm machinery and implements	Repair and maintenance of farm machinery and implements	01	01	14	-	02	-	03	-	-	-
Others(Pl. Specify)	Calculation of pesticide dose & preparation of stock solution	02	01	10	-	2	1	3	ı	10	-
Others(Pl. Specify)	Importance &use of bio/botanical pesticide in vegetable crop	02	01	10	-	3	-	2	-	10	-

B. OFF Campus

Thematic Area of training	Training Title	No. of	Duration]	Partic	ipants			
		Courses	(Days)	Ger	n	S	C	S	T	Oth	ers
				M	F	M	F	M	F	M	F
Others(Agri. Extn)	Role of electronic media in	01	01	02	-	2	-	-	-	17	-
	Agriculture										
Others(Agri. Extn)	Custom hiring centre	01	01	2	-	5	-	-	-	14	-
Tailoring, stitching, embroidery, dying etc.	Dress Designing and	01	05	-	21	-	-	-	-	-	-
	Tailoring										
Value Addition	Value Addition,	01	05	-	-	-	2	-	13	-	-
	Preservation and Storage										
	of Seasonal Foods										
-Others(Pl. Specify)	IPM module in	03	01	7	-	3	-	5	-	10	-
	soybean,pigeonpea, maize										
	crop										
Others(Pl. Specify)	Management of gram pod	02	01	5	-	3	-	2	-	10	-
	borer in chickpea										

Details of Training Programmes conducted by the KVKs for Extension Personnel A. ON Campus

Thematic Area of training (if other please specify name) **Training Title** No. of Duration **Participants** Courses (Days) SC ST Others Gen M M F M F M Productivity enhancement in field crops Improved agronomic 01 01 10

Thematic Area of training (if other please specify name)	Training Title	No. of	Duration			Pa	articipa	ants			
		Courses	(Days)	Gen		S	C	S	T	Oth	hers
				M	F	M	F	M	F	M	F
	technologies of rabi crops				3						
Others(Pl. Specify)	IFS Under Changing climate	01	01	20	0	-			-	-	-
	sceniro				2						
Integrated Pest Management	IPM in kharif crop	03	01	-	-	-	-	-	-	25	-
Integrated Pest Management	IPM in rabi crop	03	01	-	-	-	-	-	-	30	-
Integrated Nutrient management	Nutrient management in Rabi	02	01	=-	-	-	-	-	-	13	-
	crop										
Women and Child care	Role of Millets on Human	01	01	=-	2	-	4	-	-	-	-
	Development				0						

B. OFF Campus- NIL

Thematic Area of training (if other please specify name)	Training Title	No. of	Duration	1							
		Courses	(Days)	Gen		S	C	S'	T	Oth	iers
				M	F	M	F	M	F	M	F
Productivity enhancement in field crops											
Integrated Pest Management											
Integrated Nutrient management											ļ
Rejuvenation of old orchards											
Protected cultivation technology											
Production and use of organic inputs											
Care and maintenance of farm machinery and implements											
Gender mainstreaming through SHGs											
Formation and Management of SHGs											
Women and Child care											
Low cost and nutrient efficient diet designing											
Group Dynamics and farmers organization											
Information networking among farmers											
Capacity building for ICT application											
Management in farm animals											
Livestock feed and fodder production											
Household food security											
Others(Pl. Specify)											

Details of Vocational training programmes for Rural Youth conducted by the KVKs

Thematic Area	Sub Theme	Training title	No of Courses	Duration of		N	umbe	r of B	Benefic	ciarie	S	
				training (days)	Gei	n	S	С	S	Γ	Oth	ers
					M	F	M	F	M	F	M	F
Post harvest technology and value	Value addition	Value Addition, Preservation and	01	05				2		1		
addition		Storage of Seasonal Foods								3		1
Income generation activities	Tailoring, stitching,	Dress Designing and Tailoring	01	05	-	2	-	-	-	-	-	-
	embroidery, dying etc.					1						

Extension Activities (including activities of FLD programmes)

Nature of Extension Activity	No. of		Farmers		E	xtension Offic	ials		Total	
•	activities	Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	18	260	120	380	19	01	20	289	121	410
Kisan Mela	-	-	-	-	-	-	-	-	-	-
Kisan Ghosthi	04	252	24	276	12	04	16	264	28	292
Exhibition	02	935	142	1077	164	20	184	1099	162	1261
Film Show	04	256	37	293	06	02	08	262	39	301
Method Demonstrations	08	132	7	139	02	-	02	134	07	141
Farmers Seminar	02	103	17	120	04	-	04	107	17	124
Interface	02	89	01	90	11	04	15	100	05	105
Workshop	-	-	-	-	-	-	-	-	-	-
Group meetings	11	138	24	162		-	-	138	24	162
Lectures delivered as resource persons	133	6209	1818	8027	52	104	156	6261	1922	8183
Newspaper coverage	114					Mass				
Radio talks	04					Mass				
TV talks	06					Mass				
Popular articles	-	-	-	-	-	-	-	-	-	-
Extension Literature	02	-	-	-	-	-	-	-	-	-
Advisory Services	45	218	45	263	36	08	44	254	53	307
Scientific visit to farmers field	187	712	249	961	44	11	55	647	243	890
Farmers visit to KVK	-	1867	310	2177		-	-	1867	310	2177
Diagnostic visits	30	170	-	170	26	01	27	196	01	197
Exposure visits		-	-	-	-	-	-	-	-	-
Ex-trainees Sammelan	04	86	-	86	03	-	03	89	-	89
Soil health Camp	-		-	-	-	-	-	-	-	-
Animal Health Camp	-	-	-		-	-	-	-	-	-
Agri mobile clinic	02					Mass				
Soil test campaigns	-		-	-	-	-	-		-	-
Farm Science Club Conveners meet	-	-	-	-	-	-	-	-		-
Self Help Group Conveners meetings	-	-	-	-	-	-	-	-		-
Mahila Mandals Conveners meetings	-	-	-	-	=	-	-	-		-
Celebration of important days (World Water Day, World Women Day, World Environment Day, Kisan Diwas, World Food Day, Kisan Mahila Diwas, and	10	287	298	585	15	02	17	302	300	602
World Soil Health Day, World Breast Feeding Week, National Nutrition Month Technological Week)			290		13	02	17		300	
Others (Parthenium Awareness week)	01	31	-	31	-	-	-	31	-	31
Others (FPO)	02	09	32	41	02	01	03	11	33	44

Nature of Extension Activity	No. of		Farmers		Ex	tension Offici	ials		Total	
	activities	Male	Female	Total	Male	Female	Total	Male	Female	Total
Others (World soil day)	01	36	-	36	02	-	02	38	-	38
Others (Awarness program of balance use	01	30	-	30	-	-		30	-	30
of fertilizer)										
Total	467	11820	3124	14944	398	158	556	12119	3265	15384

Mass media used for wide publicity

Name of media	Number	Name of channel/	Place of delivery or	Coverage of the media
	of events	Newspaper used	publication	(Local/ Regional/National)
Radio Talk	01	Akashwani	Bhopal	Regional
TV talks	=	•	-	-
Newspaper coverage	67	Dainik bhaskar, Patrika, Navduniya, Haribui and local	KVK, Farm	Local/ Regional
Social media (Whats App,	22	-	-	Local/ Regional
Facebook, Instagram,				
Twitter etc.)				

Production and supply of Technological products

SEED MATERIALS

Category	Стор	Variety (pl. give the name of variety instead of local)	Quantity (qtl.)	Value (Rs.)	Provided to no. of Farmers/ society	Expected area coverage (ha.)
CEREALS	WHEAT	HI- 1634	26.05	91175.00	29	25
		HI-8805	8	28000.00	05	6
		DDW-48	15.55	54425.00	14	12
OILSEEDS	Soybean	RVS -2018	9.54	66780.00	05	12
PULSES	-	-	-	-	-	-
-	-	-	-	-	-	-
VEGETABLES	NII					
FLOWER CROPS						
OTHERS (Paddy)	Paddy	PB 1509	6.25	31250.00	9	20

PLANTING MATERIALS

Sl. No.	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers	Expected area coverage (ha.)
FRUITS	Karonda	-	75 plants	1500.00	20	=
SPICES	-	-	-	=	-	-
VEGETABLES	Drumstick	PKM- 01	105 plahnts	2100.00	18	-
FOREST SPECIES	-	-		-	-	-
ORNAMENTAL CROPS	-	-	-	-	-	-
PLANTATION CROPS	-	-	-	-	-	-
Others (specify)	-	-	-	-	-	-

Bio-products

S.No	List of Major Group	Name of the Product	Species	Qty (in Kg)	Qty (in	Value	Provided to	Expected area
	Bio agent/Bio				No.)	(Rs.)	no. of	coverage
	fertilizers/Bio						Farmers	(ha.), if
	Pesticides							applied
1	Bio Fertilizers	Non Symbiotic	-	-	-	-	-	-
		Azotobacter						
		Vermicompost	-	-	-	-	-	10
		Azolla						
		Earthworms	Eisenia fetida					
		Compost	Bio waste decomposer	-	-	-	-	04

LIVESTOCK

S.No	Type	Name of the animal /	Breed	Type of			Quantity		Value	No. of
		bird / aquatics		Produce	unit (kg/qt./liter/no)	Qty.	(Rs.)	Beneficiaries		
1	Dairy animals	Cow	Gir	Heifers	No.	04	-	-		

Literature to be Developed/Published

KVK News Letter

Period	Quarter	Number of copies published	Number of copies distributed	Type of beneficiaries receiving the newsletter (Farmer, District/ block/Panchayat Official, D.M. etc.
January to March 2023	Q1	01	-	Share in face book and whatsapp group for farmer
April to June 2023	Q2	01	-	Share in face book and whatsapp group for farmer
July to September 2023	Q3	01	-	Share in facebook and whatsapp group for farmer
October to December 2023	Q4	01	-	Share in facebook and whatsapp group for farmer

Literature developed/published

Туре	Number (please don't give mass please fill number only)	Number of copies printed (please don't give mass please fill number only)
Abstract	-	-
Book	-	-
Book Chapter	-	-
Booklet	-	-
CD/DVD	-	-
Leaflets/ Folder/ Pamphlet	03	12000
Popular article	-	-
Research Paper	01	-
Technical Bulletin	01	-
Training Manual	-	-
Technical Report	01	-
Year Planner	-	-
Others (pl. specify)	-	-

Activities of Soil and Water Testing Laboratory

Year of establishment: 2012

List of equipments purchased:

Sl. No.	Name of the Equipment	Qty.	Condition		
1	-	-	-		

Details of Soil samples analyzed:

	Soil Testing Kits No of soil samples		No.	No. of Samples analyzed		No. of Farmers benefited			No. of	Amou	Soil health card		
till d	late			Departme		Ву	By KVK By Departme		Villag es covere	nt realize d	distributed to the farmers by KVK (Nos)		
Sanction ed	Procur ed	Collect ed by KVKs	Provide d by Dept./ DDA	Mini Soil Testin g kit	Soil testing laborato ry	nt	Mini Soil Testin g kit	Soil testing laborato ry	nt	d		Throug h Mini Soil Testing kit	Through Soil testing laborato ry
-	-	-	-	-	264	-	-	264	-	24	-	-	264

Details of water samples analyzed: NIL

No. of Samples	No. of Farmers	No. of Villages	Amount realized	Test report distributed to the farmers (Nos)
	-	-	-	1

Details of Plant samples analyzed : NIL

No. of Plant Samples analyzed	No. of Farmers	No. of Villages	Amount realized
-	-	-	-

Footfall of farmers in KVKs (Jan. 2023 to Dec. 2023)

Name of KVK		Footfall during 2023								
	No. of Farmers	No. of officials	No. of VIPs	Total						
SEHORE	2177	213	-	2390						

* JPEG Photographs (2-3 only)

Status of Kisan Mobile Advisory (KVK-KMA)

KVK	S. No.	Thematic area	Particulars	No of Calls	No of advisory sent	No of Messages sent	No. of farmers received messages	Total no of villages in District	No of village Covered by KVK through KMA
			Crop Production Technology	358	01	01	16201	1049	1049
	1	Cron Monogoment	Integrated Farming	-	-	-		-	-
	1	Crop Management	Field Preparation	-	-	-	-	-	-
			Any Other (Specify)	-	-	-		-	-
			Advisory	-	-	-		-	-
			Change in variety	336	01	01	34350	1049	1049
	2	Weather	Change in Sowing technique	-	-	-		-	-
			Climate forecast	-	-	-		-	-
			Any Other (Specify)	-	-	-		-	-
			Soil Testing	-	-	-		-	-
			INM	-	-	-	-		-
		Soil Management	Fertilizer Application	259	01	01	32569	1049	1049
	3		Vermi composting/ bio-waste recycling	-	-	-	-	-	
			Bio-fertilizer	-	-	-	-	-	
			Any Other (Specify)	-	-	-	-	-	
		Disease & Pest Management	Disease Management	518	01	01	32175	1049	1049
SEHORE			Pest Management	-	-	-		-	-
	4		Preventive Advisory Disease Management	-	-	-	-	-	-
			Preventive Advisory Pest Management	516	01	01	33156	1049	1049
			Nutrition Awareness	-					
		Nutrition Committee 0	Kitchen garden	-	-	-	-	-	-
	_	Nutrition Security &	Value Addition and Processing	-	-	-	-	-	-
	5	Women	Drudgery Reduction	-	-	-	-	-	-
		Empowerment	Entrepreneurship & Income Generation	-	-	-	-	-	-
			Vegetable	-	-	-	-	-	=
		TT (* 1)	Fruit	-	-	-	=	-	-
	6	Horticulture	Hi Tech Horticulture	-	-	-	-	-	=
			Any Other (Specify)	-	-	-	_	-	-
			Feed and Fodder	-	-	-	-	-	-
	7	Livestock	Dairy Management	-	-	-	_	-	-
		DI VOSCOCK	Vaccination & Disease	_	-	_	_	_	_

KVK	S. No.	Thematic area	Particulars	No of Calls	No of advisory sent	No of Messages sent	No. of farmers received messages	Total no of villages in District	No of village Covered by KVK through KMA
			management						

Status of KVK Website during Jan to Dec. 2023

Date of start of website	Address of Website	No. of updates during 2023	No. of visitors during 2023	Flag Collected	Year Planner
2015-16	Kvksehore.nic.in	05	9350	-	-

Mobile Apps developed by KVK during 2023

		- 10 J == 1 == 0.02====	8				
S.No	Name of	Name of Host	Title of Mobile App	Content (in one line)	Languages (in	Number of	Total expenditure
	KVK	organization			which app	downloads	incurred in
	(Developer)				developed)		developing app
	_						(Rs.)
01	SEHORE	NIL					

ICT based module

Information on Whats app in social media by KVK

KVK	Discipline wise group with name of discipline	No of Farmer members	Activity details on whats app group
SEHORE	E-Farmers, KVK, Sehore	312	Share weekly advisory and solve farmers queries
SEHORE	Nutri- Smart Villages	165	Share weekly advisory and solve farmers queries

Information on social media by KVK

KVK	Facebook			Twitter		Instragram	
	Scientists	Farmers	No of Post	No of tweets	People	No of share	People following
	linked	connected			following		
Sehore	23	245	12	15	253	-	-

DETAILS OF TECHNOLOGY WEEK CELEBRATIONS

Types of Activities	No. of Activities	Number of Participants	Related crop/livestock /technology
Field day	02	39	- Demo. of Bio Waste D-Composure - Demo. of Pigeon pea cultivation on waste land (Bunds)
Swachhta Activities related to microbial based activities	02	54	Vermi composting & NADEP, D- Composure technology
Farmers Training	03	63	Important of Soil Health Card & PMKSY Training
Farm Women Training	01	28	Weed Management in Rabi Crops
Awareness Programme	02	50	- Scope of Agriculture Entrepreneurship for Agriculture Student
Others (Farmers Day)	01	106	- Celebrate National farmers Day Programme
Others (Sangosthi)	01	51	- Plant Protection Measures in Rabi Crops

Participation in HRD Programmes organized by ATARI

Name of KVK	Name of Staff	Post held	Programme attended (Nos)	Remarks
SEHORE	Mr. Dharmendra	Head (I/C) & Scientist (Agri. Extension)	02	Annual Action Plant Workshop 2024 &
SEHORE	Sandeep Todwal	Scientist Soil Science	02	Zonal workshop & Action plan workshop

Name of KVK	Total Number of staff Attended HRD Programme organized by ATARI (nos)	Total Number of Programme attended (Nos)
SEHORE	01	01

Participation in HRD Programmes organized by DES

Name of KVK	Name of Staff	Post held	Programme attended (Nos)	Remarks
SEHORE	Sandeep Todwal	Scientist (Soil Science)	04	

Name of KVK	Total Number of staff Attended HRD Programmes organized by DES (nos)	Total Number of Programmes attended (Nos)

Participation in HRD Programmes by KVK Staff (Refresher course, Short course, Training programme etc.)

Name of KVK	Name of Staff	Post held	Programmes attended (Nos)	Duration (days)	Type of HRD activities (Refresher course/CAFT/Summer winter school/short course)
-	-	-	-	-	-

Name of KVK	Total Number of staff Attended HRD Programmes by	Total Number of Programmes attended (Nos)
	KVK staff (nos)	
-	-	-

Information for TSP Jan-Dec 2023- NA

Sl	Farı	ner	Wome	en	Rural Yo	uths	Extensi	on	ľ	Number	r of	Partic	Prod	Prod	Prod	Prod	Testing
	Traiı	ning	Farme	er			Personr	nel		farme	rs	ipants	uctio	uctio	uctio	uctio	of Soil,
N			Traini	ng						involve	ed	in	n of	n of	n of	n of	water,
0.	No. of	No. of	No. of	No.	No. of	No.	No. of	No.	0	Fro	Mo	extens	seed	Plant	Lives	finge	plant,
	Traini	Farm	Training	of	Training	of	Training	of	n-	ntlin	bile	ion	(q)	ing	tock	rlings	manure
	ngs/De	ers	s/Demos	Wo	s/Demos	Yo	s/Demos	Ext	fa	e	agro	activit		mate	strain	(Num	S
	mos			men		uth		•	r	dem	-	ies		rial	S	ber	samples
				Far		S		Per	m	os	advi	(No.)		(Num	(Num	in	(Numbe
				mer				son	tri		sory			ber	ber	lakh)	r)
				S					al		to			in	in		
									S		far			lakh)	lakh)		
											mer						
											S						
	-	-	-	-	-	-	-	-	ı	-	-	_	_	_	_	_	_

39. Information for SCSP Jan-Dec 2023- NA

Sl	Farı	mer	Women 1	Farmer	Rural Yo	uths	Extens	sion	N	lumber	of	Partici	Pro	Prod	Prod	Prod	Testin
	Train	ning	Train	ing			Person	nel	farn	ners inv	volved	pants	duct	uctio	uctio	uctio	g of
N	No. of	No. of	No. of	No. of	No. of	No.	No. of	No.	On	Fro	Mob	in	ion	n of	n of	n of	Soil,
0.	Traini	Farm	Trainin	Wom	Trainin	of	Trainin	of	-	ntlin	ile	extensi	of	Plant	Lives	finge	water,
	ngs/De	ers	gs/Dem	en	gs/Demo	Yo	gs/Dem	Ext.	far	e	agro	on	seed	ing	tock	rlings	plant,
	mos		os	Farm	s	uth	os	Per	m	dem	-	activiti	(q)	mate	strain	(Num	manur
				ers		S		son	tri	os	advi	es		rial	S	ber	es
									als		sory	(No.)		(Num	(Num	in	sampl
											to			ber	ber	lakh)	es
											farm			in	in		(Num

											ers			lakh)	lakh)		ber)
_	_	-	-	-	-	-	-	-	-	-	-	_	-	-	_	_	_

40. Information for KSHAMTA Jan-Dec 2023- NA

Sl. No.	State	Name of KVK	Number of	No. of A	ctivities	No. of farmers benefited			
			Adopted Villages	Demo	Training	Demo	Training		
_	-	-	-	-	-	-	_		

Activities in Nutri-Smart Village during Jan-Dec 2023

Information about Nutri-Smart Village

Name of KVK	Block	Name of Nutri Smart Village
SEHORE	Ichhawar	Narsinghkheda

1. Technologies Assessed (OFT) in Nutri Smart Village

Name of KVK	Thematic area	Name of Intervention	No. of Activity	Area	No. of beneficiaries
SEHORE	Income generation (activity in no. of Unit/Enterprise)	Assessment of Nano nitrogen technology in hybrid maize	01	02	05
SEHORE	Nutritional Security	Assessment of Sorghum Khichidi for anaemic children	01	-	10
SEHORE	Bio-fortified Crops (activity in no. of Unit) (ha)	Wheat variety HI 1634	01	1.0	05
SEHORE					

2. Technologies Demonstrated (FLD) in Nutri Smart Village

Name of KVK	Thematic area	Name of Intervention	No. of Activity	Area	No. of beneficiaries
SEHORE	Other Enterprises (activity in no. of	BIO waste decomposer for	01	-	05
	Unit/Enterprise)	composting			
SEHORE	Income generation (activity in no. of	Integrated nutrient management in	01	01	05
	Unit/Enterprise)	onion crop			
SEHORE	Income generation (activity in no. of	Foliar spray of vegetable	01	02	10
	Unit/Enterprise)	micronutrient in garlic crop			
SEHORE	Nutritional Committee	Assessment of Sorghum Khichidi for	01	-	10
	Nutritional Security	anaemic children			

SEHORE Value addition (activity in no. of Unit/Enterprise) Pigeon pea cultivation	01	0.1	05
---	----	-----	----

Training Programme conducted in Nutri Smart Village

Name of	Training Title	No. of	No. of Duration Gen			SC		ST		Other		Total
KVK		Courses	(Days)	M	F	M	F	M	F	M	F	
SEHORE	Application and use of micronutrient in vegetable crop	01	01	-	-	02	-	-	-	22	•	24
SEHORE	Balanced Diet for Pregnant Women	01	01	-	-	-	-	-	-	-	25	25
SEHORE	Kitchen Gardening for Nutritional Security	01	01	-	-	-	10	-	-	-	15	25
SEHORE	Making iron rich food supplement for anaemic children	01	01	-	-	-	3	-	-	-	24	27
SEHORE	Develop Value added millet products	01	02		-		12	-	-	-	19	31
SEHORE	Women friendly weeding equipment	01	01	-	-	-	10	-	-	-	15	25

4. Extension Activities in Nutri Smart Village

Name of KVK	Activity	No. of activities	SO	SC		ST		Other		Officials	
			M	F	M	F	M	F	M	F	
SEHORE	Field Day	02	-	19	-	-	-	32	1	1	53
SEHORE	Field visit	06	07	-	02	-	24	-	-	-	33
SEHORE	Group Meeting	01	-	4	-	-	-	07	-	-	11
SEHORE	World Breast feeding Week	01	-	16	-	-	-	26	1	1	44
SEHORE	National Nutrition Month	01	-	9	-	-	-	16	-	2	27

LINKAGES

Functional linkage with different organizations

Name of organization	Nature of linkage
CEROC	
Piramal Foundation	
Relience foundation	Demonstration, Training, Field visit, camp, exposer visit and other extension activity
ICT	
SIPA	
IFFCO	
NFL	
Samarthan	

Details of linkage with ATMA / NFSM-

a) Is ATMA implemented in your district

Yes/No

Name of Programme	Nature of linkage

Give details of programmers implemented under National Horticultural Mission

Name of Programme	Nature of linkage

Flagship programmes implemented at KVK

(NICRA, ARYA, Natural farming, CBBO, Seed Hub, Agri Drone etc)

Name of Flagship programmes- NIL

Month	Activity details	Beneficiaries/Area/Coverage
Natural Farming	Training Programme	
	Field day	
	Demonstration	

Crop Cafeteria-

Total Area of Crop cafeteria: 4000 Sq m

Crop	Season	Variety	Particulars /details	Area (Sq m)
Paddy		Kranti, Sehbhagi, P.B1, P.B1121, P.B1509		
Maize		Hybrid- AHC- 2595, INDAM- 1122, PAC- 751, INDAM-1205, INDAM-1501, HIRA-1122		
Pigeaon pea		UPAS- 120, PUSA-16, JKM-183, ASHA, TJT-501		
Green gram		SHIKHA, VIRAT, IPM- 2-3		4000
Black gram	Kharif	PU-1,UTTARA, IPU-2-43		
Caribaan		RVS- 2011-1, JS-2096, JS-2029, RKS-24, PAC-1082, JS-2117, JS- 2098, JS-20-116, JS-2053,		
Soybean		JS- 2069, JS-9560, JS-2094, RVS-24, RVS-76, RVS- 2001-04, RVS-18, PS-15		
Seasamum		TKG- 22, TKG-21, TKG-55, TKG-306, TKG- 308, GTS-8		
		HI-1634, HI-1633, HI-8713, HI-8736, HI-8759, HI-1544, HI-1454, HI-1605, HI-1612, HI-8777,		
Wheat		HI- 8663, GW-451, GW-366, JW-3288, JW- 3382, MP- 1202, MP-1203, MPO- 1215, HD- 2962,		
		DBW- 110,		
Chickpea		RVG- 202,RVG- 203, RVG- 204, RVG-205, SHUBHRA, JAKI- 9218, VIKRAM PHULE,		
	Rabi	KAK-2, PKV-4, JKG-3, JG- 412, JG- 16, JG-11		4000
Lentil		JL-3 and IPL-316		
Pea		Kashi Nandni		
Mustard		RVM-02		
Castor		NARI- 6		
Linseed		JLS-9		
Garlic		G-282, G-384		
Fenugreek		RMT- 305		

Details of Demonstration Unit at KVK

Demonstration Unit	Particulars /details	Area	Output /Production
		(Sq m)	
Dairy	-	=	Promote Indian Breed (Gir) at present time two breed available
Poultry	-	=	Proposed Plan
Goatry	-	=	Proposed Plan
NADEP	-	=	Composed Agri waste 16 Ton
Vermi Composting	-	-	Production of vermicompost through Portable vermibed, Pakka Pit and ground floor – 30 Ton
Natural Farming	-	6000	Prepare Jeewamrat, Ghanjeewamrat, Neemashtra, Brahmastra etc
Organic Farming	-	=	Production of NADEP compost, Vermi compost, vermiwash
Kithcen Garden	-	=	Produce round the year nutritional vegetables and fruit
Seed Production	-	=	Produce improved crop variety seeds
Crop Cafeteria	-	-	Demonstration of different types of technology
Soil & Water Conservation	-	-	Testing of soil sampling with 12 Parameter
Azolla Production	-	-	Production of protein rich animal feed (Azolla)
Round the year Green Fodder	-	-	Napier Grass, Gini Grass, CO-4 etc variety grown for round the year green fodder

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

Success stories/Case studies – (best two only in the following format in separate file attached)

Name of the KVK

Sehore

Photographs (2-3 Photographs with caption in .jpeg format)

Name of the KVK	Sehore				
TITLE	Best management practices of Soybean				
Introduction	Durga prasad s/o shri Ghasiram 1.60 ha areas of land with all the facilities of crop cultivation. They fallow Soybean –Wheat Soybean –Onion,				
	Soybean –Garlic in irrigated situation.				
KVK intervention	1. BBF sowing				
	2. PoE herbicide Sodium Aciflorfen 16.5 % + Clodinafop propargyl 8 % EC @ 1 li/ha				
	3. Foliar spray of NPK 18:18:18 @ 2.5 kg/ha				
	4. Foliar spray of Sulphar 55.16 % @ 1.25 kg/ha				
	5. Pheromone Trap (@ 25 No./ha) + Spado and heli lure 25 No./ha				
	6. Sticky Trap (25 No./ha)				
Dutput					
Important Danamatana	Findings/results				
Important Parameters	Varity/ Practice/Intervention	Local/control			
Pods/ plant (No.)	30	25			
No of seed/pod 1.8					
No of seed/pod	1.8	1.71			
No of seed/pod Test weight (g)	1.8 92.00	1.71 91.12			
	15				
Test weight (g)	92.00	91.12			
Test weight (g) Yield (q/ha)	92.00 19.87	91.12			
Test weight (g) Yield (q/ha)	92.00 19.87 1.Highest benefit cost ratio in Recommended practices as Compare to Farmer	91.12 16.75			
Test weight (g) Yield (q/ha)	92.00 19.87 1.Highest benefit cost ratio in Recommended practices as Compare to Farmer 2. 18.62% yield increase in Demonstration due to Best management practices	91.12 16.75 ce to adverse climate condition and IPM tools such as			
Test weight (g) Yield (q/ha)	92.00 19.87 1.Highest benefit cost ratio in Recommended practices as Compare to Farmer 2. 18.62% yield increase in Demonstration due to Best management practices 3. Farmers observed BBF sowing and improved variety RVS-2002-4 is tolerand	91.12 16.75 ce to adverse climate condition and IPM tools such as phar application to enhance yield Seed yield, net return and			



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

S. No.	Training	Need analysis tools/methodology followed
1	Identification of courses for farmers/farm women	
2	Rural Youth	
3	In-service personnel	PRA, SAC meeting, field visit and Line department
4	methodology for identifying OFTs/FLDs	
5	Matrix ranking	

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	Kothara Pipalya	Nasrullaganj	68 Km.
2	Bijlon	Sehore	50 Km
3	NarsinghKheda	Ichhawar	25 Km.
4	Gawakheda	Ashta	29 Km.
5	Bawadiya Chor	Ichhawar	28 Km.

(Dharmendra) Head(I/C) KVK SEHORE