

# ANNUAL REPORT

January to December 2024



Submitted at-

ICAR-ATARI, Zone-IV, Patna

2024



Submitted by -

**Krishi Vigyan Kendra Gumla**

**Vikas Bharti Bishunpur**

Dist- Gumla, Jharkhand 835231

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**PROFORMA FOR ANNUAL REPORT 2024 (01<sup>st</sup> January- 31<sup>st</sup> December 2024)**

**1. GENERAL INFORMATION ABOUT THE KVK**

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

Address	Telephone		E mail
	Office	FAX	
Krishi Vigyan Kendra, Gumla Vikas Bharti Bishunpur Po – Bishnpur Dist – Gumla PIN – 835 231 State - Jharkhand	06523-297004	-	kvk.gumla@gmail.com  Website -gumla.kvk4.in

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

Address	Telephone		E mail
	Office	FAX	
Vikas Bharti Bishunpur PO – Bishnpur Dist – Gumla PIN – 835 231 State - Jharkhand	-	-	vikasbharti1983@hotmail.com  Website: www.vikasbharti.org

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Sanjay Kumar Krishi Vigyan Kendra, Gumla Vikas Bharti Bishunpur PO – Bishnpur Dist – Gumla PIN – 835 231 State - Jharkhand	-	7366082870	drsanjaykumar.kvk@gmail.com

**1.4. Year of sanction of KVK with council order No. and date: F. No. 6-1/1998-AE-1 dated May 20, 2004**

**1.5 Year of start of KVK: May 20, 2004**

### 1.5. Staff Position (as on 31<sup>st</sup> December 2024)

Sl. No.	Sanctioned post	Name of the Incumbent	Designation	Discipline	Pay Scale with Present Basic	Date of joining	Permanent/probation	Category (SC/ST/OBC/Others)
1.	Senior Scientist & Head	Dr. Sanjay Kumar	Senior Scientist & Head	Agronomy	187200 Level-13A	09/02/06	Extension period	Others
2.	Subject Matter Specialist	Mr. Sunil Kumar	Subject Matter Specialist	Horticulture	84900 Level- 10	03/06/06	Permanent	OBC
3.	Subject Matter Specialist	Mr. Neeraj Kumar Vaishya	Subject Matter Specialist	Soil Science	84900 Level- 10	05/06/06	Permanent	OBC
4.	Subject Matter Specialist	Mrs. Nisha Tiwari	Subject Matter Specialist	Home Science	69000 Level- 10	24/04/09	Permanent	Others
5.	Subject Matter Specialist	Atal Bihari Tiwari	Subject Matter Specialist	Plant Protection	67000 Level- 10	01/11/13	Permanent	Others
6.	Subject Matter Specialist	Er. Eno Rai	Subject Matter Specialist	Ag. Eng	67000 Level- 10	01/11/13	Permanent	OBC
7.	Subject Matter Specialist	Dr. Binod Kumar	Subject Matter Specialist	Vet. & Ani. Sc.	59500 Level- 10	18/10/16	Permanent	OBC
8.	Farm Manager	Mr. Rajeev Kumar Singh	Farm Manager	B. Sc. (Ag)	55200 Level- 6	14/01/06	Permanent	Others
9.	Computer Programmer	Mrs. Sweta Vishwakarma	Programme Assistant (Computer)	BCA	55200 Level- 6	14/01/06	Permanent	OBC
10.	Accountant / Superintendent	Mr. Ratan Oraon	Programme Assistant (Accounts)	B.A.	55200 Level- 6	14/01/06	Permanent	ST
11.	Programme Assistant	Mr. Mritunjay Kumar Singh	Programme Assistant	B. Sc. (Ag)	53600 Level- 6	01/02/07	Permanent	Others
12.	Stenographer	Miss Sheela Kumari	Stenographer-cum-typist	B.A.	31400 Level- 4	05/06/06	Retired on 31 <sup>st</sup> Jan 2025	
13.	Driver	Mr. Abhitendra Oraon	Driver	I.A	29300 Level-3	14/01/06	Permanent	ST
14.	Driver	Mr. Jeetendra Kherwar	Driver	Matric	26000 Level-3	01/11/13	Permanent	ST
15.	Supporting staff	Mr. Ajay Oraon	Supporting Staff	I.A.	25600 Level-1	14/01/06	Permanent	ST
16.	Supporting staff	Mr. Ramesh Oraon	Supporting staff	Matric	25600 Level-1	28/01/06	Permanent	ST

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

S. No.	Item	Area (ha)	Name of Infrastructure
1	Under Buildings	0.12	Under Buildings
2.	Under Demonstration Units	0.13	Under Demonstration Units
3.	Under Crops	9.00	Under Crops
4.	Orchard/Agro-forestry	11.00	Orchard/Agro-forestry
5.	Others with details		Others with details
6.	<b>Total</b>	<b>20.25</b>	

**1.7. Infrastructure Development:**
**A) Buildings and others**

S. No.	Name of infrastructure	Not yet started	Completed up to plinth level	Completed up to lintel level	Completed up to roof level	Totally completed	Plinth area (sq.m)	Functional/ non-functional*	Source of funding
1.	Administrative Building	-	-	-	-	√	500	use	ICAR
2.	Farmers Hostel	-	-	-	-	√	305	use	ICAR
3.	Staff Quarters (6)	-	-	-	-	√	400	use	ICAR
4.	Piggery unit	-	-	-	-				
5	Fencing	-	-	-	-	√	2100	use	ICAR
6	Rain Water harvesting structure	-	-	-	-	√	Jal kund (2x2x1m)-16 nos Pond (30x40x3m) - 1 no 5% model (6 ft) -17 nos Sprinkler - 4 ha Drip - 2 ha	*NF F NF NF	ICAR
7	Threshing floor	-	-	-	-	√	100' x100'	use	ICAR
8	Farm go down	-	-	-	-	√	(25 x 25) sq ft	use	ICAR
9	IFS	-	-	-	-	√	-	use	ICAR
i	Dairy unit	-	-	-	-	√	-	use	

S. No.	Name of infrastructure	Not yet started	Completed up to plinth level	Completed up to lintel level	Completed up to roof level	Totally completed	Plinth area (sq.m)	Functional/ non-functional*	Source of funding
ii	Goatry unit	-	-	-	-	√	-	use	ICAR
iii	Mushroom production unit	-	-	-	-	√	-	use	ICAR
iv	Vermi Compost Production Unit	-	-	-	-	√	-	use	ICAR
10	Bee keeping	-	-	-	-	√	-	-	ICAR
11	Shade house	-	-	-	-	-	-	-	
12	Soil test Lab	-	-	-	-	√	-	use	ICAR
13	Poultry unit	-	-	-	-	-	-	-	-
14	Mushroom Lab	-	-	-	-	√	-	use	ICAR
15	WBM Road	-	-	-	-	√	1 km	use	ICAR
16	Irrigation Channel	-	-	-	-	√	1100 ft	use	ICAR

\* F- Functional NF- Non Functional

**B) Vehicles**

Type of vehicle	Year of purchase	Cost (Rs.)	Total km. Run	Present status
2 <sup>nd</sup> Bolero SLX (JH-01BF 1226)	March 2014	799969.00	278387 km	Good
Motor cycle (JH-07F 6435)	Nov 2015	119580.00	7107 km	Good
Motor cycle (JH-07F 9320)	Nov 2015		7945 km	Good
2 <sup>nd</sup> Tractor (JH 08 F 2076)	March 2017	697199.00	312.4 Hrs	Good

**C) Equipment & AV aids**

Name of the equipment		Qty	Head	Year of purchase	Cost (Rs.)	Present status
<b>a. Farm machinery &amp; implements</b>	Tractor	01	ICAR	2005	349454.00	Condemned
	Tractor (JH 08 F 2076)	01	ICAR	2017	697199.00	Working
	Trialer	01	ICAR	2005	55555.55	Working
	Disk plough	01	ICAR	2005	7407.41	Not Working
	Leveler	01	ICAR	2005	6481.48	Not Working
	Cultivator	01	ICAR	2005	10185.20	Not Working
	Disk Harrow	01	ICAR	2005	10185.18	Not Working
	Seed drill	01	ICAR	2005	12962.96	Not Working
	Belt pulley	01	ICAR	2005	2770.78	Not Working
	Cage Wheel	01	ICAR	2005	4629.63	Not Working
	Disk harrow new	01	ICAR	2010	27000.00	Working
	Cultivator new	01	ICAR	2010	18300.00	Working
	Sprayer (1/2 HP)	01	ICAR	2010	5800.00	Working
	Zero Tillage	01	ICAR	2010	32700.00	Working
	Weight machine (100 kg)	01	ICAR	2009	8528.00	Working
	Wheat Thresher	01	ICAR	2011	80015.00	Working
	Power chain saw	01	ICAR	2011	36500.00	Working
	Rotavator	01	ICAR	2012	80000.00	Working
	Paddy Thresher	01	ICAR	2012	105000.00	Working
	<b>Tube well</b>					
	Submersible pump	01	ICAR	2007	18500.00	Working
	Control panel 415 volt	01	ICAR	2007	6000.00	Working
	PVC column pipe	250	ICAR	2007	11250.00	Working
	Submersible wire	100 m	ICAR	2007	4700.00	Working
	Generator 7.5 KVA & Alternator	01	ICAR	2007	57763.00	Working
	<b>Rainwater harvesting</b>					
	Kirloskar pump set 10 HP attached with HW 6D pump	01	ICAR	2007	35000.00	Working
	PVC pipe 110 mm x 4 k/sq cm	300 m	ICAR	2007	541944.40	Working
	PVC pipe 90 mm x 4 k/sq cm	396 m	ICAR	2007	33379.63	Working
	PVC pipe 75 mm x 4 k/sq cm	228 m	ICAR	2007	13716.80	Working
	PVC pipe 63 mm x 4 k/sq cm	594 m	ICAR	2007	24957.50	Working
	30 ltr fertigation tank	02	ICAR	2007	15641.60	Working
	Spin clean filter 25 m <sup>3</sup> /hr <sup>2</sup>	01	ICAR	2007	10778.77	Working
	Clean water 25m <sup>3</sup> /hr <sup>2</sup>	01	ICAR	2007	28577.80	Working
	PVC pipe 110 m x 6 k/cm <sup>2</sup>	204 m	ICAR	2007	36852.19	Working
	ORC HDPC pipe 75 mx4 kg/cm <sup>2</sup>	125 no	ICAR	2007	110110.00	Working
	Overhead sprinkler	32 no	ICAR	2007	12480.00	Working
	Solar panel	01	ICAR	2016	799500.00	Working
	Bush cutter	01	ICAR	2017	29500.00	Working
	Transformer set	01	ICAR	2022	439402.00	Working
<b>b. Office furniture etc</b>	Table (Conference table)	03	ICAR	2006	16500.00	Working
	Table (Conference table)	08	ICAR	2012	156636.00	Working
	Table (Conference table)	02	ICAR	2013	39900.00	Working
	Table (medium size with drawer)	04	ICAR	2006	13200.00	Working

Name of the equipment		Qty	Head	Year of purchase	Cost (Rs.)	Present status
	Steel Almirah	02	ICAR	2009	13838.00	Working
	Book Shelf	01	ICAR	2009	5456.00	Working
	Table (5 x 3) size	02	ICAR	2009	11138.00	Working
	Chair (revolving)	02	ICAR	2009	4838.00	Working
	Sethi	06	ICAR	2013	125913.00	Working
	Corner table	02	ICAR	2013	33972.00	Working
	TV Table	01	ICAR	2013	11172.00	Working
	Foot rest	06	ICAR	2013	24054.00	Working
	Chair plastic (neelkamal)	63	ICAR	2005	28350.00	Not Working
	S-Type chair (steel)	10	ICAR	2006	3900.00	Working
	Tube chair	20	ICAR	2005	31000.00	Working
	Tube chair	14	ICAR	2006	16100.00	Working
	Wooden chair	16	ICAR	2005	24800.00	Working
	Wooden chair	36	ICAR	2012	116964.00	Working
	Wooden chair	06	ICAR	2013	21204.00	Working
	Computer table	01	ICAR	2006	3100.00	Working
	Chair with writing pad	09	ICAR	2005	2925.00	Not Working
	Revolving chair	06	ICAR	2008	27000.00	Working
	Visitors chair	12	ICAR	2008	45000.00	Working
	Steel almirah	05	ICAR	2006	21000.00	Working
	Steel almirah	02	ICAR	2013	21660.00	Working
	Book self	04	ICAR	2006	16400.00	Working
	Book self	01	ICAR	2013	9690.00	Working
	Executive chair	01	ICAR	2006	1700.00	Working
	Executive chair	07	ICAR	2012	43092.00	Working
	Table (T9)	02	ICAR	2007	17244.44	Working
	Table (executive)	01	ICAR	2007	20813.00	Working
	Chair (Revolving)	08	ICAR	2017	83970.00	Working
	Chair (Ch 1112)	02	ICAR	2007	4700.00	Working
	Rack	01	ICAR	2007	4000.00	Working
	Rack	08	ICAR	2013	21660.00	Working
	Training hall desk and bench	20	ICAR	2017	67746.00	Working
	Godrej Almirah	01	ICAR	2019	21023.98	Working
	Book shelf	01	IACR	2019	26397.99	Working
	Chair	02	ICAR	2019	27705.99	Working
	Wooden Sofa Set	01	ICAR	2018	35000.00	Working
	Centre Table with glass	01	ICAR	2018	6800.00	Working
	Computer chair	01	ICAR	2009	1631.25	Working
	Visitors chair	15	ICAR	2009	24468.75	Working
	Visitors chair	04	ICAR	2013	11172.00	Working
	Steel Almirah	02	ICAR	2009	13500.00	Working
	Generator (8 HP)	01	ICAR	2009	49500.00	Working
	*Ceiling Fan	37	Vikas Bharti	2008	--	Working
	Executive chair	01	ICAR	2023	23950.00	Working
	Plato chair	02	ICAR	2023	22539.00	Working
	Recliner chair (Godrej)	01	ICAR	2023	28843.00	Working
	File cabiner (2 drawer)	01	ICAR	2023	17550.00	Working
	Godrej pluto chair	02	ICAR	2023	22539.00	Working
	Chair (Revolving)	01	ICAR	2023	23950.00	Working
	Recliner chair (Godrej)	01	ICAR	2023	28843.00	Working
	Almirah	01	ICAR	2023	35919.00	Working
	File cabinet	01	ICAR	2023	17550.00	Working
	Revolving chair	02	ICAR	2022	11000.00	Working
	Plastic chair	30	ICAR	2024	30750.00	Working
	Stand fan	02	ICAR	2024	6510.00	Working
	Almirah	01	ICAR	2011	3900.00	Working
	Almirah (Small)	01	ICAR	2012	1950.00	Working

Name of the equipment		Qty	Head	Year of purchase	Cost (Rs.)	Present status
c. Office equipments	Table	06	ICAR	2008	118400.00	Working
	Computer table	01	ICAR	2009	4500.00	Not Working
	Pantry table	01	ICAR	2013	20406.00	Working
	Computer table	01	ICAR	2024	15000.00	Working
	Computer chair	01	ICAR	2006	1300.00	Working
	Computer	01	ICAR	2007	21849.98	Working
	Camera (S.C 600 Sony)	01	ICAR	2007	13990.00	Working
	Fax machine	01	ICAR	2007	9880.00	Not Working
	File cabinet	02	ICAR	2007	23949.00	Working
	File cabinet	01	ICAR	2013	17120.00	Working
	Generator (200 AC)	01	ICAR	2007	41200.00	Working
	Printer (color)	01	ICAR	2006	2975.00	Not Working
	Printer (Laser)	01	ICAR	2007	16536.00	Not Working
	P A System	01	ICAR	2011	14625.00	Working
	Xerox machine	01	ICAR	2006	72800.00	Not Working
	Fan	04	ICAR	2007	4700.00	Working
	Table (Mushroom Lab)	01	ICAR	2016	35000.00	Working
	Rack (Angel ) Mushroom Lab	08	ICAR	2016	48000.00	Not Working
	Iron Rack Mushroom Lab	05	ICAR	2016	50000.00	Working
	Biometric	01	ICAR	2016	30100.00	Working
	Sewing machine	01	ICAR	2006	3609.00	Working
	Projector	01	ICAR	2008	55000.00	Not Working
	Projector stand	01	ICAR	2008	6000.00	Not Working
	Laptop	01	ICAR	2008	40040.00	Not Working
	Mini Laptop	01	ICAR	2013	19000.00	Not Working
	Inverter	01	ICAR	2009	4299.99	Working
	Okaya Digi Turbo 6030 Battery)	01	ICAR	2009	9500.00	Working
	Colour photo copier	01	ICAR	2011	75000.00	Not Working
	Fax, Scanner combined	01	ICAR	2011	16200.00	Working
	Podium	01	ICAR	2013	44460.00	Working
	Genset 62.5 KV	01	ICAR	2016	500000.00	Working
	Rice mill unit	01	ICAR	2016	86725.00	Working
	Flour mill unit	01	ICAR	2016	85790.00	Working
	Candel unit	01	ICAR	2016	11655.00	Working
	BOD incubator	02	ICAR	2016	264600.00	Working
	Autoclaves	02	ICAR	2016	264600.00	Working
	Digital Balance	04	ICAR	2016	13818.00	Working
	Laminar flow	02	ICAR	2016	382200.00	Working
	Glass ware	01	ICAR	2016	30870.00	Working
	AC 1.5 TR	04	ICAR	2016	199160.00	Working
	AC 1.5 TR	03	ICAR	2020	125400.00	Working
	Refrigerator 258 liter	01	ICAR	2016	26970.00	Working
	Computer set	01	ICAR	2017	47450.00	Working
	CCTV set	01	ICAR	2017	40193.00	Working
	Camera	01	ICAR	2017	21700.00	Working
	Xerox machine	01	ICAR	2019	107598.00	Working
	LCD 32"	01	ICAR	2019-20	19500.00	Working
	Sound system	01	ICAR	2021	16500.00	Working
	LED 40"	01	ICAR	2016-17	69000.00	Working
	Kiosk machine	01	ICAR	2017	113650.00	Working
	Projector (K-Yan)	01	ICAR	2017	124750.00	Working
	Showcase	01	ICAR	2018-19	13580.00	Working
	Showcase with side table	01	ICAR	2018-19	13000.00	Working
	Projector	01	ICAR	2021	299975.00	Working
	Laptop	01	DBT	2021	60000.00	Working



Name of the equipment		Qty	Head	Year of purchase	Cost (Rs.)	Present status
d. Farmers Hostel	Portable Projector & Screen	01	ICAR	2023	24100.00	Working
	Printer (HP 1005)	01	ICAR	2023	23500.00	Working
	Solar Panel (Office) 5 KVA	01	ICAR	2023	328475.00	Working
	Drone	01	ICAR	2023	996000.00	Working
	Gyser	03	ICAR	2023	29400.00	Working
	Moniter	01	ICAR	2011	6600.00	Not Working
	Printer	01	ICAR	2014	13200.00	Not Working
	Scanner	01	ICAR	2007	3350	Not Working
	Projector (Small)	01	ICAR	2024	19500.00	Working
	Projector Stand	01	ICAR	2024	4600.00	Working
	TV and accessories	01	ICAR	2011	9333.00	Not Working
	Fire extinguisher	02	ICAR	2013	6498.00	Working
	Water cooler	01	ICAR	2016	18500.00	Working
	Desktop computer (All in one)	01	ICAR	2024	70000.00	Working
	Trunk	02	ICAR	2009	2050.00	Working
	Steel sofa	02	ICAR	2013	13680.00	Working
	Utensils (Kitchen set for 50 farmers)	01	ICAR	2009	19990.00	Working
	LPG Connection (Single cylinder)	01	ICAR	2009	4700.00	Working
	Refrigerator (190 lit)	01	ICAR	2009	9800.00	Working
	Dining Table Set (8 chairs)	02	ICAR	2009	59625.00	Working
	Folding Bed	40	ICAR	2008	50000.00	Discarded
	Bed	02	ICAR	2013	18810.00	Working
	Mattress	40	ICAR	2008	54800.00	Discarded
	Mattress	02	ICAR	2013	11742.00	Working
	Kurlon Pillow	40	ICAR	2008	4600.00	Discarded
	Centre Table	01	ICAR	2013	4275.00	Working
	Wooden bed	20	ICAR	2019	153400.00	Working
	Mattress	20	ICAR	2021	69800.00	Working

- With administrative building

**D) Farm implements**

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
<b>a. Lab equipment</b>				
Soil & water testing lab	2017	1700063.00	Working	ICAR
Mini Lab	2017	86000.00	Working	ICAR
<b>b. Farm machinery</b>				
Tractor	2005	349454.00	Condemned	ICAR
Trialer	2005	55555.55	Working	ICAR
Belt pulley	2005	2770.78	Working	ICAR
Submersible pump	2007	18500.00	Working	ICAR
Generator 7.5kva, 3 Alternator	2007	557763.00	Working	ICAR
Kirloskar pump set 10Hp with HWED pump	2007	35000.00	Working	ICAR
Fertigation tank 30lit.	2007	15641.00	Not working	ICAR
Kirloskar pump set 8Hp	2008	--	Not working	JHALCO, Gumla
Electric pump 10Hp	2008	--	Working	JHALCO, Gumla
Sprayer	2009	5800.00	Working	ICAR
Weight machine	2009	8528.00	Working	ICAR
Wheat Thresher	2011	75015.00	Working	ICAR
Power chain saw	2011	36500.00	Working	ICAR
Paddy Thresher	2012	105000.00	Working	ICAR
Rotary Power Tiller	2013	--	Not working	Soil Conservation, Gumla
Self propelled reaper (regal 4 HP) 06 no	2014		Working	District soil conservation dept.
Eicher 241 tractor (without cultivator) - 01	2014		Working	-do-
Multicrop thresher	2015		Working	Dist.
2 <sup>nd</sup> Tractor	2017	697199.00	Working	ICAR
Lac processing machine	2018		Working	ICAR-ARYA
<b>Drip irrigation system</b>				
a. PVC water tank (500 lit)- 01	2014		Working	Vikas Bharti Bishunpur
b. PC dripline 200 m -01	2014		Working	District soil conservation dept.
c. Screen filler (1")-01	2014		Working	-do-

**2. Priority thrust areas of KVKs**

S. No	Thrust area
1.	Promotion of chilli
2.	Strengthening of FPO
3.	Promotion of Natural farming
4.	Promotion of Pulses and Oilseed
5.	Women empowerment
6.	Secondary Agriculture
7.	Integrated Farming System approach through
8.	Promotion of Lac cultivation
9.	Promotion of Agri Drone Technology
10.	Micro-Irrigation and Soil health card

## 2. a. District level data on agriculture, livestock and farming situation (2024)

### 1. Major farming systems/enterprises – RAINFED (based on the analysis made by the KVK)

S. No	Farming system/enterprise
<b>Integrated crop – livestock – fish farming system</b>	
1.	Watershed based farming system
2.	Crop based farming system
3.	Agro forestry based farming system
4.	Live stock based farming system

### 2. One District one product (NITI Ayog)

Sl. No.	Items	Information
2	One district one product (NITI Ayog)	Chilli

### 3. Agro-climatic Zone

Agro-climatic Zone	Characteristics
Zone V	<p>The soil of plateau is nutritionally poor &amp; organic matter rapidly declining due to deforestation, leaching &amp; soil erosion. Hence high degree of soil management and soil husbandry have become imperative for intensive cultivation in the existing soil of the plateau the soil of the district is Red laterite to Sandy Clay &amp; Clay loam.</p> <p>The farming situation of the district is rainfed the cropping pattern is mainly monocropping &amp; kharif based</p>

### 4. Agro ecological situation

Agro ecological situation	Characteristics
South Western plateau	<p>South Western plateau is characterized by hot sub humid eco-region with red loamy soil. Summer season is generally hot and winter is cold.</p> <p>The soil type varied from red laterite to sandy clay and clay loam with an undulating topography and least irrigation facilities.</p>

### 5. Soil type/s

Soil type	Characteristics	Area in ha
Red laterite to sandy clay & clay loam	<p>The soil is universally poor in N &amp; K due to high excessive leaching. They have high P fixation capacity due to the presence of Kaolinitic along with sesquioxides.</p> <p>Hence high degree of soil management and soil husbandry have become imperative for intensive cultivation in the existing soil of the plateau</p>	80% of the total geographical area (531396.13 ha)

## 6. Production and Productivity of major crops of district\*\*

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1.	Total Cereals	211879	5023791	20.33
2.	Total Pulses	36237	416579	10.08
3.	Total Oil seeds	27508	154424	5.036
4.	Total vegetables	16911	2504880	148.12
5.	Paddy	185239	4686546	25.3
6.	Maize	7474	210019	28.1
7.	Ragi	9373	111538	11.9
8.	Wheat	9793	15688	16.02
9.	Redgram	13878	190128	13.7
10.	Blackgram	7662	84665	11.05
11.	Greengram	472	3823	8.1
12.	Chickpea	11723	119574	10.2
13.	Lentil	2502	18389	7.35
14.	Pea	7872	52348	6.65
15.	Groundnut	4363	60864	13.95
16.	Sesame	41	84	2.05
17.	Niger	687	673	0.98
18.	Mustard	20192	83792	4.15
19.	Linseed	2225	9011	4.05
20.	Fresbeen	1850	386610	209
21.	Bottle gourd	75	9700	129
22.	Bitter gourd	100	10800	108
23.	Tomato	1100	114000	103.63
24.	Potato	2600	318490	122.5
25.	Pea (Green pea)	3040	461200	151.71
26.	Onion	531	133100	250.66
27.	Okra	580	53200	91.72
28.	Green Chilli	2450	323150	131.89
29.	Cauliflower	1290	242000	187.59
30.	Ginger	120	13420	111.83

\*\* As per DAO and DHO Data 2024

## 7. Mean yearly temperature, rainfall, humidity of the district \*\*

Month	Rainfall (mm)	No. of rainy days	Temperature ° C		Relative Humidity (%)
			Maximum	Minimum	
January 24	4.30	03	3	16	
February 24	31.80	04	16.2	26	
March 24	49.00	03	18	30	
April 24	1.40	01	26.3	35.2	
May 24	30.20	04	28	37	
June 24	92.60	09	28.6	39.5	
July 24	272.80	21	24.1	32.6	
August 24	387.20	21	25.8	32.8	
September 24	284.40	21	22.5	30.5	
October 24	32.80	06	18.6	30	
November 24	0.00	0	14.2	22.6	
December 24	2.70	02	3.6	17.3	
<b>Total</b>	<b>1189.2</b>	<b>95</b>			

\*\* Source of data: - District Agriculture Department, Gumla & IMD

## 8. Production of major livestock products like milk, egg, meat etc

Category	Population (000) area	Production	Productivity
<b>Cattle</b>			
<b>Cattle</b>	<b>559.717</b>	--	--
<i>Crossbred</i>	--	--	--
<i>Indigenous</i>	--	--	--
<b>Buffalo</b>	90.996	--	--
<b>Sheep</b>	7.975	--	--
<i>Crossbred</i>	--	--	--
<i>Indigenous</i>	--	--	--
<b>Goats</b>	613.738	--	--
<b>Pigs</b>	109.066	--	--
<i>Crossbred</i>	--	--	--
<i>Indigenous</i>	--	--	--
<b>Rabbits</b>	--	--	--
<b>Poultry</b>	1330.117	--	--
Hens	--	--	--
<i>Desi</i>	--	--	--
<i>Improved</i>	--	--	--
Ducks	<b>34.819</b>	--	--

Category	Area (in ha)	Production (in metric ton)	Productivity (ton/ha)
Fish	636	3100 MT	--
<i>Marine</i>	--	--	--
<i>Inland</i>	4000	1500	3
Prawn	--	--	--
Scampi	--	--	--
Shrimp	--	--	--

## 2 (b) Details of operational area / villages (2024)

Sl. No.	Name of the block	Name of the villages	Major crops & enterprises	Major problems identified (crop-wise)	Identified Thrust Areas
1	Ghaghra	Halmati, Nawatoli, Nawadih, Shivrajpur, Nawatoli, Kubatoli, Chundari, Nawadih, Lalmati	Porso millets, Ragi	1. Generally monocropping due to poor irrigation facilities and open grazing. 2. Poor adoption of improved technology due to scarce resources. 3. Seed replacement ratio is poor. 4. Malnutrition. 5. Soil & Water erosion. 6. Unavailability of green fodder for whole year. 7. Low miltching rate due to indiscript breed. 8. Agri – based opportunity is very poor.	1. Promotion of double or multiple cropping 2. Water Conservation. 3. Promotion of Seed Village. 4. Create awareness about improved technology 5. Area expansion under oilseed and pulses especially in rainfed upland. 6. Employment generation through Agri based entrepreneur.
		Belagara, Shivrajpur, Nawatoli, Sarnatoli Gunia, Jargatoli, Hapamuni, Kurag, Halmati	Mustard		
		Duko, sikwar	Sesame		
		Mayel, Kugawn, Kurag, Icha, Sehal Bansitooli, Chapka, Totambi, Itkiri, Khatanga	Sunflower		
		Lahastand, Podi, Shivrajpur, Sehalbansitoli, Lawadag, Shivsereng	Niger		
		Shivrajpur, Gunia	Linseed		
		Shivrajpur, Sarnatoli, Nawatoli	Blackgram		
		Shivrajpur, Sarnatoli, Nawatoli	Redgram		

Sl. No.	Name of the block	Name of the villages	Major crops & enterprises	Major problems identified (crop-wise)	Identified Thrust Areas
2	Bishunpur	Lbga, Longa, Karamtoli	Niger	9. Low yield potential 10. Low irrigation opportunity 11. Low productivity in Lac 12. Low body weight gain in Pig 13. Low productivity in Ragi	7. Capacity building of Kisan Club/ Krishak Mitra. 8. Women empowerment through SHG. 9. Development of Pashu Mitra (Para-Vet) 10. Awareness for stalk feeding of animal. 11. Irrigation sources development 12. Enhanced cropping intensity 13. Improve breed
		Amatipani, Helta, Serka, Arangloya, Samdari, Langratanr, Range, Majeera, Bahar Serka,	Linseed		
		Tumse, Serka, Chapatoli, Beti, Helta, Chipri, Langratanr, Bendi, Arangloya, Oreyia	Sunflower		
3	Sisai	Semra,	Groundnut		
		Kudra, Shivnathpur, Gurgaon	Sesame		
		Jamgai, Bhutwitoli, Bishrampur, Chatakpur, Nagar	Linseed		
		Kataidamar, Lalmati, Bhandartoli, Gokhulpur, Olmunda	Lac		
		Nagar	Sunflower		
4	Gumla	Kasira, Kulabira, Luto bertoli, Panso, Bhabhari	Groundnut		
		Kulabira, Khora Jampani, konatoli, Bartoli, Lutobertoli	Sesame		
		Gumla, Dhangaon , Nawatoli, Kotam, Kasira, Paharpanari	Pig		
		Patia, Kasira, Sawariya, Kotam	Sunflower		
		Lutobertoli, Panso, Kulhi	Niger		
5	Raidih	Masgaon, Hargada	Linseed		
		Basdih,	Niger		
		Masgaon	Sunflower		
6	Jari	Tilhaitoli	Ragi		
7	Dumri	Ratantoli	Mustard		
		Ratantoli	Sunflower		
8	Palkot	Umda	Ragi		
		Umda,	Niger		
		Umda, Baghima, Tepsatoli, Ganjhotoli	Linseed		
9	Bharno	Turiamba, Kumbhro, Bharno, Amboa	Linseed		
		Samsera, Jamtoli	Sunflower		
10	Chainpur	Duttra	Niger		
11	Basia	Kumhari	Sesame		
12	Kamdara	Turbul, Arhara, Gadha, Surhu	Lac		

**2(c) Details of village adoption programme during 2024:**

**Name of the villages adopted by Senior Scientist & Head and SMS ( in the year 2023) for its development and action plan**

<b>Name of village</b>	<b>Block</b>	<b>Action taken for development</b>
Maiyl	Ghaghra	Promotion of biofortified wheat for nutritional security and Promotion of oilseed crop Sunflower
Luto Bartoli	Gumla	Promotion of Oilseed crops
Shivrajpur	Ghaghra	Promotion of resilient agriculture & training
Borang	Bishunpur	Natural farming, CFLD, Natural farming & installation of irrigation lift device
Kubatoli	Bishunpur	Promotion of fruit & vegetable cultivation & Mushroom cultivation
Salam Nawatoli	Bishunpur	Promotion of sustainable agriculture
Chhota Ajiyatu	Ghaghra	Nursery management & goat rearing
Tapkara	Palkot	FLD & OFT conducted
Nagar	Sisai	Entrepreneur development under lac cultivation, CFLD & Goat farming
Langratanr	Bishunpur	Breed development
Duttra	Chainpur	Promotion of Resilient agriculture technology
Belagara	Ghaghra	Promotion of resilient agriculture & training
Majhgawn	Dumri	Promotion of resilient agriculture & training

### 3. TECHNICAL ACHIEVEMENTS

#### 3.1. Summary details of target and achievement of mandatory activities by KVK during the year 2024

OFT											
No. of technologies tested:											
Number of OFTs			Number of farmers								
Target	Achievement	Target	Achievement								
			SC		ST		Others		Total		
			M	F	M	F	M	F	M	F	T
14	13	160	-	-	72	77	7	16	79	93	172

	FLD											
	No. of technologies demonstrated:											
	Number of FLDs			Number of farmers								
	Target	Achievement	Target	Achievement								
				SC		ST		Others		Total		
				M	F	M	F	M	F	M	F	T
CFLD Kharif Oilseeds (2024-25)	500	413	500	-	-	233	89	38	42	271	131	402
CFLD Rabi Oilseeds (2024-25)	650	650	650	03	01	320	206	42	23	365	230	595
Model Village Oilseed Rabi (2024-25)	500	500	500	05	05	202	130	28	02	235	137	372
DRMR Rabi (2024-25)	100	100	100	0	0	59	32	06	03	65	35	110
AICRP Niger kharif (2024-25)	50	50	50	0	0	50	0	0	0	50	0	50
ICAR-IIPR Pulses Kharif (2024-25)	25	25	25	0	0	19	03	02	0	21	03	24
Cereals crop (2024-25)	84	84	84	0	2	86	64	03	0	89	66	155
Vegetables (2024-25)	85	85	85	0	0	345	339	0	0	345	339	684
Natural farming Rabi (2024-25)	12	12	12	0	0	11	0	01	0	12	0	12
Natural farming Kharif (2024-25)	12	12	12	0	0	11	0	01	0	12	0	12
Nutritional Garden (2024-25)	100	100	100	0	0	0	40	0	0	0	40	40
Fodder crop (2024-25)	08	08	08	0	0	49	04	02	0	51	04	55
Kisan Drone (Mustard)( 2023-24)	81	81	81	01	0	60	14	12	0	73	14	87



	FLD											
	No. of technologies demonstrated:											
	Number of FLDs		Number of farmers									
	Target	Achievement	Target	Achievement								
				SC		ST		Others		Total		
				M	F	M	F	M	F	M	F	T
Kisan Drone (Mango) (2023-24)	03	03	03	0	0	0	0	01	0	01	0	01
Kisan Drone (Watermelon) (2023-24)	11	11	11	0	0	01	0	01	0	02	0	02
Kisan Drone Paddy (2024-25)	42	42	42	0	0	07	06	01	0	08	06	14
Goat (Black bengal)	04	04	04	0	0	01	03	0	0	01	03	04
Backyard Poultry	03	03	03	0	0	0	03	0	0	0	03	03
Composite fish	10	10	10	0	0	04	0	05	01	09	01	10
Mushroom (Oyster) 2024-25	30	30	30	0	01	0	26	0	03	0	30	30
Mushroom (Oyster) 2023-24	25	25	25	0	0	0	25	0	0	0	25	25
<b>Total</b>	<b>2335</b>	<b>2248</b>	<b>2335</b>	<b>9</b>	<b>9</b>	<b>1458</b>	<b>984</b>	<b>143</b>	<b>74</b>	<b>1610</b>	<b>1067</b>	<b>2687</b>

Training										
	Target	Achievement	Target	SC/ST		Others		Total		
				M	F	M	F	M	F	T
PF	89	47	2143	685	722	86	86	771	808	1579
SHC		12		362	117	50	13	412	130	542
CFLD/FLD		59		690	397	86	53	776	450	1226
Natural Farming	3	3	60	64	25	20	3	84	28	112
PMO	6	6	144	79	55	14		93	55	148
<b>Total</b>	<b>98</b>	<b>127</b>	<b>2347</b>	<b>1880</b>	<b>1316</b>	<b>256</b>	<b>155</b>	<b>2136</b>	<b>1471</b>	<b>3607</b>
								0	0	0
RY	31	18	642	158	183	35	21	193	204	397
Vocational	3	4	51	18	20	64	12	82	32	114
School Dropout	15	10	348	49	46	3	1	52	47	99
ASCI	1		25							
<b>Total</b>	<b>50</b>	<b>32</b>	<b>1066</b>	<b>225</b>	<b>249</b>	<b>102</b>	<b>34</b>	<b>327</b>	<b>283</b>	<b>610</b>
EF	19	4	570	36	54	16	2	52	56	108
Grand Total (PF/RV/EF)	167	163	3983	2141	1619	374	191	2515	1810	4325

Extension activities											
Number of activities			Number of participants								
Target	Achievement	Target	Achievement								
			SC		ST		Others		Total		
			M	F	M	F	M	F	M	F	T
1028	472	14669	194	168	8901	7838	2493	995	11588	9001	20589

Impact of capacity building											Impact of Extension activities										
Number of Participants trained		Number of Trainees got employment (self/ wage/ entrepreneur/ engaged as skilled manpower)									Number of Participants attended		Number of participants got employment (self/ wage/ entrepreneur/ engaged as skilled manpower)								
Target	Achievement	SC		ST		Others		Total			Target	Achievement	SC		ST		Others		Total		
		M	F	M	F	M	F	M	F	T			M	F	M	F	M	F	M	F	T
334	377	3	9	38	34	10	6	51	49	100	1028	742	194	168	8901	7838	2493	995	11588	9001	20589

Seed production (q)					Planting material (in Lakh)				
Target (Crop and variety)			Achievement (q)	Sold (q)	Target (crop and variety)			Achievement	Sold (number)
Crop	Variety	Area (q)			Crop	Variety	no.		
Ragi	BM-3	5.0	8.60	Stock in hand	Tomato	Swarna Prakash, Super Sonia	8000	2350	
Rice	Swarna Shreya	6.0	6.30	Stock in hand	Brinjal	Swarna Shyamali, RCBR-22	8000	9650	45500.00 Farm use & Distribution
Rice	MTU-1010	60.0	92.00	Stock in hand	Chilli	Swarna Apurva	10500	4550	3250.00 Farm use
Rice	Black Rice	-	1.90	Stock in hand	Cauliflower	Hybrid Lucky	2500	525	Farm use
Sesame	RT-351	5.0	0.77	Stock in hand	Cabbage	Golden acre	0	450	Farm use
Niger	Birsa Niger-03	5.0	1.80	Stock in hand	Onion	Nasik Red	15000	4200	Farm use
Dhaincha	Dhaincha	-	0.71	Stock in hand	Bottle gourd	Anokhi	500	0	-
Redgram	Rajeev Lochan	4.0	Result awaited		Bittergourd	Long green	500	0	-
Mustard	PM-30, BBM-1	10.0	Result awaited		Mango	Amrapali, Langra	1000	1000	Stock in hand
Wheat	K-1006, DBW-187	10.0	Result awaited		Mango	Local	1000	0	-
Linseed	Priyam	3.0	0.00		Guava	L-49, Kg Guava	200	0	-
<b>Total</b>		<b>108.09</b>	<b>112.08</b>	<b>0.00</b>	Pomegranate	Ganesh	150	0	-
					Pear	Netarhat Selection	500	1500	300 no
					Papaya	Ranchi Papaya	4000	2500	630.00
					Jackfruit	Local	500	0	-
					Drumstick	Local	500	0	-
					Napier	Pusa Jaint	10000	0	-
					Arhul		250	0	-
					Bougainvillea		200	0	-
					Marigold	Pusa Narangi	0	450	Farm use
					Neem		500	0	-
					Lemongrass	Krishna	0	5000	Stock in hand
					<b>Total</b>		<b>63800</b>	<b>32175</b>	

Livestock strains (in no's) and fish fingerlings produced (in lakh)*			Soil, water, plant, manures samples tested (in lakh)	
Target		Achievement	Target	Achievement
Piglet	30 no	36 no	600	1943
Goat	10 no	07 no		
Duck egg	300 no	35 no		
Poultry Chicks	600 no	612 no		
Duck Chicks	200 no	0		

\* Give no. only in case of fish fingerlings

### 3.2 ACHIEVEMENTS ON TECHNOLOGIES ASSESSED AND REFINED (OFT)

#### 3.2. 1 Technology Assessed by KVK (Discipline wise)

A	Technologies assessed under various crops (Cereal Crop Production)			
	Thematic areas	Number of the technologies (Technology Interventions)	No. of trials	No. of Locations
1	Integrated Nutrient Management	02	01	01
2	Varietal Evaluation			
3	Integrated Pest Management			
4	Integrated Crop Management			
5	Integrated Disease Management			
6	Small Scale Income Generation Enterprises			
7	Weed Management	02	01	02
8	Resource Conservation Technology			
9	Farm Machineries			
10	Integrated Farming System			
11	Seed / Plant production			
12	Post Harvest Technology / Value addition			
13	Drudgery Reduction			
14	Storage Technique			
15	Others (Pl. specify)			
16	Cropping Systems			
17	Farm Mechanization			

18	Others			
	<b>Total</b>			
<b>B</b>	<b>Technologies assessed under various crops (Hort crops. )</b>			
	<b>Thematic areas</b>	<b>Number of the technologies (Technology Interventions)</b>	<b>No. of trials</b>	<b>No. of Locations</b>
1	Integrated Nutrient Management			
2	Varietal Evaluation			
3	Integrated Pest Management	02	01	03
4	Integrated Crop Management	04	02	06
5	Integrated Disease Management	02	01	02
6	Small Scale Income Generation Enterprises			
7	Weed Management			
8	Resource Conservation Technology			
9	Post-harvest Technology / Value addition			
10	Others if any specify			
	Mulching	02	01	01
	Organic cultivation	02	01	02
	Water management	02	01	03
<b>C</b>	<b>Technologies assessed under livestock &amp; Fisheries by KVKs</b>			
	<b>Thematic areas</b>	<b>No. of technologies (Technology Interventions)</b>	<b>No. of trials</b>	<b>No. of locations</b>
1	Disease & Health Management			
2	Breeding management/Evaluation of Breeds			
3	Feed and Fodder management			
4	Nutrition Management			
5	Production and Management			
6	Processing and Value addition			
7	Fisheries management			
8	Others (waste, ITK etc)			
	Livestock production and management	02	03	04
	Animal Disease management	02	02	04

	<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>D</b>	<b>Technologies assessed under miscellaneous enterprises by KVKs</b>			
	<b>Thematic areas</b>	<b>No. of technologies (Technology Interventions)</b>	<b>No. of trials</b>	<b>No. of locations</b>
1	Drudgery reduction			
2	Entrepreneurship Development			
3	Health and nutrition			
4	Processing and value addition			
5	Energy conservation			
6	Small-scale income generation			
7	Storage techniques			
8	Household food security			
9	Organic farming			
10	Agroforestry management			
11	Mechanization			
12	Resource conservation technology			
13	Value Addition			
14	Others			
	<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>E</b>	<b>Technologies assessed under various enterprises for women empowerment</b>			
	<b>Thematic areas</b>	<b>No. of technologies (Technology Interventions)</b>	<b>No. of trials</b>	<b>No. of locations</b>
1	Drudgery Reduction			
2	Entrepreneurship Development			
3	Health and Nutrition			
4	Value Addition	02	01	03
5	Others			
	<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>

### 3.2.2 OFT (All discipline)

**OFT – 01 (Horticulture )**  
**(Kharif/ Perennial crop 2023-24)**

- **Thematic area:** Mulching
- **Problem definition/Name of OFT:** Moisture stress leads yield losses in Mango

1.	Title of On farm Trial (OFT)	Assessment of Biomass Mulching in Mango																																																																																
2.	Problem diagnosed	More no. fruit dropping																																																																																
3.	Details of technologies selected for assessment/refinement	FP - No Mulching/ Liter fall of trees. TO <sub>1</sub> – Taphrosia 1 kg dry biomass/ m <sup>2</sup> Canopy (Plant spread) TO <sub>2</sub> – Grass/ Paddy straw/ Any local available mulching 15 cm thick (Plant spread) + Greece band 30 cm from GL.																																																																																
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	ICAR-FSRCHPR, Palndu, Ranchi																																																																																
5.	Production system and thematic area	Mango Production System and Mulching																																																																																
6.	Performance of the Technology with performance indicators	<table><tr><th rowspan="3">Technology Option</th><th rowspan="3">No. Of replication</th><th colspan="4">Data related problem addressed</th><th rowspan="3">Yield (q/ha)</th><th rowspan="3">C.C. (Rs.ha)</th><th rowspan="3">Gross income</th><th rowspan="3">Net Return (Rs/ha)</th><th rowspan="3">B:C</th></tr><tr><th rowspan="2">Soil Moisture (%)</th><th colspan="3">Weed number</th></tr><tr><th>1<sup>st</sup> month Nov 23</th><th>2<sup>nd</sup> Month Dec 23</th><th>3<sup>rd</sup> month Jan 24</th></tr><tr><td>FP - No Mulching/ Liter fall of trees.</td><td rowspan="3">10</td><td>9.95</td><td>27.30</td><td>32.10</td><td>40.30</td><td>82.0</td><td>60500</td><td>205000</td><td>144500</td><td>3.38</td></tr><tr><td>TO<sub>1</sub> – Taphrosia 1 kg dry biomass/ m<sup>2</sup> Canopy (Plant spread)</td><td>11.44</td><td>6.50</td><td>8.40</td><td>11.20</td><td>120.0</td><td>65500</td><td>300000</td><td>234500</td><td>4.58</td></tr><tr><td>TO<sub>2</sub> – Grass/ Paddy straw/ Any local available mulching 15 cm thick (Plant spread) + Greece band 30 cm from GL</td><td>10.94</td><td>8.10</td><td>10.90</td><td>15.40</td><td>102.0</td><td>62500</td><td>255000</td><td>192500</td><td>4.08</td></tr><tr><td>SEM±</td><td></td><td></td><td>0.66</td><td>0.77</td><td>1.15</td><td>1.34</td><td></td><td></td><td></td><td></td></tr><tr><td>CDCP=0.05</td><td></td><td></td><td>1.97</td><td>2.31</td><td>3.47</td><td>4.02</td><td></td><td></td><td></td><td></td></tr></table>										Technology Option	No. Of replication	Data related problem addressed				Yield (q/ha)	C.C. (Rs.ha)	Gross income	Net Return (Rs/ha)	B:C	Soil Moisture (%)	Weed number			1 <sup>st</sup> month Nov 23	2 <sup>nd</sup> Month Dec 23	3 <sup>rd</sup> month Jan 24	FP - No Mulching/ Liter fall of trees.	10	9.95	27.30	32.10	40.30	82.0	60500	205000	144500	3.38	TO <sub>1</sub> – Taphrosia 1 kg dry biomass/ m <sup>2</sup> Canopy (Plant spread)	11.44	6.50	8.40	11.20	120.0	65500	300000	234500	4.58	TO <sub>2</sub> – Grass/ Paddy straw/ Any local available mulching 15 cm thick (Plant spread) + Greece band 30 cm from GL	10.94	8.10	10.90	15.40	102.0	62500	255000	192500	4.08	SEM±			0.66	0.77	1.15	1.34					CDCP=0.05			1.97	2.31	3.47	4.02				
Technology Option	No. Of replication	Data related problem addressed				Yield (q/ha)	C.C. (Rs.ha)	Gross income	Net Return (Rs/ha)	B:C																																																																								
		Soil Moisture (%)	Weed number																																																																															
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TO <sub>1</sub> – Taphrosia 1 kg dry biomass/ m <sup>2</sup> Canopy (Plant spread)		11.44	6.50	8.40	11.20	120.0	65500	300000	234500	4.58																																																																								
TO <sub>2</sub> – Grass/ Paddy straw/ Any local available mulching 15 cm thick (Plant spread) + Greece band 30 cm from GL		10.94	8.10	10.90	15.40	102.0	62500	255000	192500	4.08																																																																								
SEM±			0.66	0.77	1.15	1.34																																																																												
CDCP=0.05			1.97	2.31	3.47	4.02																																																																												

7.	<b>Final recommendation for micro level situation</b>	The on Farm Trail was conducted on 10 Farmers Field of Village Shivrajpur of Ghaghra Block During Kharif/ Perennial Crop (2023-24) to find Out mulching Maximizing The Fruit Yield and income. The data Collected during the trail Clearly indicated that minimum weed number (11.20) at 3 <sup>rd</sup> month January 2024. Maximum Soil Moisture (11.44%), Maximum Fruit Yield (120 q / hac), net income (Rs. 234500) and B:C ratio (4.58) was found under Technology option 1 ( Taphrosia 1kg dry biomass/Square meter canopy ( Plant spread). The Present yield enhancement of 46.34 and 17.64 was found over FP and Technology option 2. Hence T01 ( Taphrosia 1kg dry biomass/Square meter canopy ( Plant spread) is being recommended.
8.	<b>Constraints identified and feedback for research</b>	<ul style="list-style-type: none"> <li>Lack of knowledge about Taphrosia mulching .</li> <li>More number of awareness is required about Taphrosia mulching</li> </ul>
9.	<b>Process of farmers participation and their reaction</b>	<ul style="list-style-type: none"> <li>Participatory and interactive.</li> <li>Awareness about Taphrosia through field training</li> <li>By Seeing the result of Taphrosia farmer of adjoining village was highly impressive</li> </ul>

#### B. Results with Table and good quality photographs in jpg.

Thematic area	Technology options with detailed treatments	Area (ha in crop & Fodder)/ Nos (in livestock)		Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Proposed	Actual					
Mulching	FP - No Mulching/ Litter fall of trees.	0.025	0.025	82.0	60500	205000	144500	3.38
	TO <sub>1</sub> – Taphrosia 1 kg dry biomass/ m <sup>2</sup> Canopy (Plant spread)	0.025	0.025	120.0	65500	300000	234500	4.58
	TO <sub>2</sub> – Grass/ Paddy straw/ Any local available mulching 15 cm thick (Plant spread) + Greece band 30 cm from GL	0.025	0.025	102.0	62500	255000	192500	4.08

#### NPK Status

Sampling Time	Avg N (kg/ha)	Avg P <sub>2</sub> O <sub>5</sub> (kg/ha)	Avg K <sub>2</sub> O (Kg/ha)
NPK status (Pre)	201.25	10.32	210.19
NPK status (Post)			
FP	205.34	16.46	215.65
TO <sub>1</sub>	225.42	21.35	252.44
TO <sub>2</sub>	220.29	19.24	247.35





- | 1.  | Title of On farm Trial (OFT)                                 | <b>Inter cropping in mango orchard</b>   |                                |                               |                                    |              |              |                    |      |  |  |                   |                    |                           |                                |                 |                                 |              |              |                    |     |                               |                                    |   |    |   |   |       |       |       |        |       |      |  |        |       |       |   |        |        |        |      |   |        |        |       |   |        |        |        |      |   |  |        |        |       |   |        |        |        |      |             |  |  |             |              |  |  |  |  |  |                  |  |  |             |             |  |  |  |  |  |
|---|--|--|--------------------------------|-------------------------------|------------------------------------|--------------|--------------|--------------------|------|--|--|-------------------|--------------------|---------------------------|--------------------------------|-----------------|---------------------------------|--------------|--------------|--------------------|-----|-------------------------------|------------------------------------|---|----|---|---|-------|-------|-------|--------|-------|------|--|--------|-------|-------|---|--------|--------|--------|------|---|--------|--------|-------|---|--------|--------|--------|------|---|--|--------|--------|-------|---|--------|--------|--------|------|-------------|--|--|-------------|--------------|--|--|--|--|--|------------------|--|--|-------------|-------------|--|--|--|--|--|
| 2.  | Problem diagnosed  | Low per capita income due to sole cropping and poor fertility in upland (Low productivity and less income)   |                                |                               |                                    |              |              |                    |      |  |  |                   |                    |                           |                                |                 |                                 |              |              |                    |     |                               |                                    |   |    |   |   |       |       |       |        |       |      |  |        |       |       |   |        |        |        |      |   |        |        |       |   |        |        |        |      |   |  |        |        |       |   |        |        |        |      |             |  |  |             |              |  |  |  |  |  |                  |  |  |             |             |  |  |  |  |  |
| 3.  | Details of technologies selected for assessment/refinement   | <b>FP</b> - Mango orchard without intercropping.<br><b>TO<sub>1</sub></b> – Mango + turmeric<br><b>TO<sub>2</sub></b> – Mango + Elephant foot yam.<br><b>TO<sub>3</sub></b> – Mango + Ginger.  |                                |                               |                                    |              |              |                    |      |  |  |                   |                    |                           |                                |                 |                                 |              |              |                    |     |                               |                                    |   |    |   |   |       |       |       |        |       |      |  |        |       |       |   |        |        |        |      |   |        |        |       |   |        |        |        |      |   |  |        |        |       |   |        |        |        |      |             |  |  |             |              |  |  |  |  |  |                  |  |  |             |             |  |  |  |  |  |
| 4.  | Source of Technology (ICAR/ AICRP/SAU/other, please specify) | ICAR-FSRCHPR, Palndu, Ranchi   |                                |                               |                                    |              |              |                    |      |  |  |                   |                    |                           |                                |                 |                                 |              |              |                    |     |                               |                                    |   |    |   |   |       |       |       |        |       |      |  |        |       |       |   |        |        |        |      |   |        |        |       |   |        |        |        |      |   |  |        |        |       |   |        |        |        |      |             |  |  |             |              |  |  |  |  |  |                  |  |  |             |             |  |  |  |  |  |
| 5.  | Production system and thematic area                          | Horticulture based Production System and Integrated crop management  |                                |                               |                                    |              |              |                    |      |  |  |                   |                    |                           |                                |                 |                                 |              |              |                    |     |                               |                                    |   |    |   |   |       |       |       |        |       |      |  |        |       |       |   |        |        |        |      |   |        |        |       |   |        |        |        |      |   |  |        |        |       |   |        |        |        |      |             |  |  |             |              |  |  |  |  |  |                  |  |  |             |             |  |  |  |  |  |
| 6.  | Performance of the Technology with performance indicators    | <b>Table- Intercropping in Mango orchard</b> <table border="1"> <thead> <tr> <th rowspan="2">Technology Option</th><th rowspan="2">No. Of replication</th><th rowspan="2">Yield of Intercrop (q/ha)</th><th rowspan="2">Date related problem addressed</th><th>Yield component</th><th>Yield of main crop mango (q/ha)</th><th rowspan="2">C.C. (Rs.ha)</th><th rowspan="2">Gross income</th><th rowspan="2">Net Return (Rs/ha)</th><th rowspan="2">B:C</th></tr> <tr> <th>Mango equivalent yield (q/ha)</th><th>Weed population (cm<sup>2</sup>)</th></tr> </thead> <tbody> <tr> <td>FP - Mango orchard without intercropping.</td><td rowspan="3">10</td><td>-</td><td>-</td><td>30.50</td><td>80.15</td><td>62500</td><td>160300</td><td>97800</td><td>2.56</td></tr> <tr> <td><b>TO<sub>1</sub></b> – Mango + Turmeric</td><td>145.50</td><td>145.0</td><td>12.80</td><td>-</td><td>105000</td><td>291000</td><td>186000</td><td>2.77</td></tr> <tr> <td><b>TO<sub>2</sub></b> – Mango + Elephant foot yam</td><td>211.47</td><td>317.20</td><td>23.10</td><td>-</td><td>165000</td><td>634400</td><td>469400</td><td>3.84</td></tr> <tr> <td><b>TO<sub>3</sub></b> – Mango + Ginger.</td><td></td><td>170.35</td><td>340.69</td><td>18.30</td><td>-</td><td>172000</td><td>681380</td><td>509380</td><td>3.96</td></tr> <tr> <td><b>SEM+</b></td><td></td><td></td><td><b>1.85</b></td><td><b>0.825</b></td><td></td><td></td><td></td><td></td><td></td></tr> <tr> <td><b>CDCP=0.05</b></td><td></td><td></td><td><b>5.41</b></td><td><b>2.40</b></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table> |                                |                               |                                    |              |              |                    |      |  |  | Technology Option | No. Of replication | Yield of Intercrop (q/ha) | Date related problem addressed | Yield component | Yield of main crop mango (q/ha) | C.C. (Rs.ha) | Gross income | Net Return (Rs/ha) | B:C | Mango equivalent yield (q/ha) | Weed population (cm <sup>2</sup> ) | FP - Mango orchard without intercropping. | 10 | - | - | 30.50 | 80.15 | 62500 | 160300 | 97800 | 2.56 | <b>TO<sub>1</sub></b> – Mango + Turmeric | 145.50 | 145.0 | 12.80 | - | 105000 | 291000 | 186000 | 2.77 | <b>TO<sub>2</sub></b> – Mango + Elephant foot yam | 211.47 | 317.20 | 23.10 | - | 165000 | 634400 | 469400 | 3.84 | <b>TO<sub>3</sub></b> – Mango + Ginger. |  | 170.35 | 340.69 | 18.30 | - | 172000 | 681380 | 509380 | 3.96 | <b>SEM+</b> |  |  | <b>1.85</b> | <b>0.825</b> |  |  |  |  |  | <b>CDCP=0.05</b> |  |  | <b>5.41</b> | <b>2.40</b> |  |  |  |  |  |
| Technology Option                                 | No. Of replication   | Yield of Intercrop (q/ha)  | Date related problem addressed | Yield component               | Yield of main crop mango (q/ha)    | C.C. (Rs.ha) | Gross income | Net Return (Rs/ha) | B:C  |  |  |                   |                    |                           |                                |                 |                                 |              |              |                    |     |                               |                                    |   |    |   |   |       |       |       |        |       |      |  |        |       |       |   |        |        |        |      |   |        |        |       |   |        |        |        |      |   |  |        |        |       |   |        |        |        |      |             |  |  |             |              |  |  |  |  |  |                  |  |  |             |             |  |  |  |  |  |
|   |  |  |                                | Mango equivalent yield (q/ha) | Weed population (cm <sup>2</sup> ) |              |              |                    |      |  |  |                   |                    |                           |                                |                 |                                 |              |              |                    |     |                               |                                    |   |    |   |   |       |       |       |        |       |      |  |        |       |       |   |        |        |        |      |   |        |        |       |   |        |        |        |      |   |  |        |        |       |   |        |        |        |      |             |  |  |             |              |  |  |  |  |  |                  |  |  |             |             |  |  |  |  |  |
| FP - Mango orchard without intercropping.         | 10   | -  | -                              | 30.50                         | 80.15                              | 62500        | 160300       | 97800              | 2.56 |  |  |                   |                    |                           |                                |                 |                                 |              |              |                    |     |                               |                                    |   |    |   |   |       |       |       |        |       |      |  |        |       |       |   |        |        |        |      |   |        |        |       |   |        |        |        |      |   |  |        |        |       |   |        |        |        |      |             |  |  |             |              |  |  |  |  |  |                  |  |  |             |             |  |  |  |  |  |
| <b>TO<sub>1</sub></b> – Mango + Turmeric          |  | 145.50   | 145.0                          | 12.80                         | -                                  | 105000       | 291000       | 186000             | 2.77 |  |  |                   |                    |                           |                                |                 |                                 |              |              |                    |     |                               |                                    |   |    |   |   |       |       |       |        |       |      |  |        |       |       |   |        |        |        |      |   |        |        |       |   |        |        |        |      |   |  |        |        |       |   |        |        |        |      |             |  |  |             |              |  |  |  |  |  |                  |  |  |             |             |  |  |  |  |  |
| <b>TO<sub>2</sub></b> – Mango + Elephant foot yam |  | 211.47   | 317.20                         | 23.10                         | -                                  | 165000       | 634400       | 469400             | 3.84 |  |  |                   |                    |                           |                                |                 |                                 |              |              |                    |     |                               |                                    |   |    |   |   |       |       |       |        |       |      |  |        |       |       |   |        |        |        |      |   |        |        |       |   |        |        |        |      |   |  |        |        |       |   |        |        |        |      |             |  |  |             |              |  |  |  |  |  |                  |  |  |             |             |  |  |  |  |  |
| <b>TO<sub>3</sub></b> – Mango + Ginger.           |  | 170.35   | 340.69                         | 18.30                         | -                                  | 172000       | 681380       | 509380             | 3.96 |  |  |                   |                    |                           |                                |                 |                                 |              |              |                    |     |                               |                                    |   |    |   |   |       |       |       |        |       |      |  |        |       |       |   |        |        |        |      |   |        |        |       |   |        |        |        |      |   |  |        |        |       |   |        |        |        |      |             |  |  |             |              |  |  |  |  |  |                  |  |  |             |             |  |  |  |  |  |
| <b>SEM+</b>                                       |  |  | <b>1.85</b>                    | <b>0.825</b>                  |                                    |              |              |                    |      |  |  |                   |                    |                           |                                |                 |                                 |              |              |                    |     |                               |                                    |   |    |   |   |       |       |       |        |       |      |  |        |       |       |   |        |        |        |      |   |        |        |       |   |        |        |        |      |   |  |        |        |       |   |        |        |        |      |             |  |  |             |              |  |  |  |  |  |                  |  |  |             |             |  |  |  |  |  |
| <b>CDCP=0.05</b>                                  |  |  | <b>5.41</b>                    | <b>2.40</b>                   |                                    |              |              |                    |      |  |  |                   |                    |                           |                                |                 |                                 |              |              |                    |     |                               |                                    |   |    |   |   |       |       |       |        |       |      |  |        |       |       |   |        |        |        |      |   |        |        |       |   |        |        |        |      |   |  |        |        |       |   |        |        |        |      |             |  |  |             |              |  |  |  |  |  |                  |  |  |             |             |  |  |  |  |  |

7.	<b>Final recommendation for micro level situation</b>	<p>The on Farm Trail Was Conducted on 10 Farmers Field in Village Teliya of Raidih Block, Shivrajpur of ghaghra block During Kharif (2024-25) to find out profitable inter cropping system and maximizing the yield and income. The data collected during the trail Clearly indicated that minimum weed population ( 18.30) and mango equivalent yield of 340.69 q / hac maximum in technology option 3 that is mango + ginger which is significantly superior to technology option 1 ( mango + turmeric ) and technology option 2 ( mango + elephant foot yam ) technology option- 3 ( mango+ ginger ) also achieving the maximum net return of rs. 509380/hac with B:C ratio of 3.96. whereas 80.15 q/hac yield with net income of rs. 97800/hac was recorded under farmer practice that is mango orchard without intercropping.</p> <p>Hence with this finding Technology option T03 (Mango+ ginger ) is being recommended for better yield and income.</p>
8.	<b>Constraints identified and feedback for research</b>	<ul style="list-style-type: none"> <li>Lack of knowledge about suitable intercropping in mango orchard</li> <li>More number of awareness is required about intercropping with mango orchard</li> </ul>
9.	<b>Process of farmers participation and their reaction</b>	<ul style="list-style-type: none"> <li>Participatory and interactive.</li> <li>Best option for risk management</li> </ul>

**B. Results with Table and good quality photographs in jpg.**

Thematic area	Technology options with detailed treatments	Area (ha in crop & Fodder)/ Nos (in livestock)		Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Proposed	Actual					
Integrated Crop Management	FP - Mango orchard without intercropping.	0.375	0.375	80.15	62500	160300	97800	2.56
	TO <sub>1</sub> – Mango + Turmeric	0.375	0.375	145.0	105000	291000	186000	2.77
	TO <sub>2</sub> – Mango + Elephant foot yam	0.375	0.375	317.20	165000	634400	469400	3.84
	TO <sub>3</sub> – Mango + Ginger.	0.375	0.375	340.69	172000	681380	509380	3.96



- | 1.                                   | <b>Title of On farm Trial (OFT)</b>                                 | <b>Evaluation of Onion variety for Kharif season</b>   |         |         |                     |                    |                     |              |             |         |         |         |  |                   |                    |  |  |  |  |                 |  |              |             |  |  |  |         |         |         |                     |                    |                     |         |         |         |         |                       |    |      |       |       |       |      |     |        |      |      |      |       |                                      |       |       |       |       |      |     |        |      |      |      |      |                                |      |       |       |       |      |     |        |      |      |      |      |       |  |  |  |  |  |  |       |      |  |  |  |  |           |  |  |  |  |  |  |       |      |  |  |  |  |
|--------------------------------------|---|--|---------|---------|---------------------|--------------------|---------------------|--------------|-------------|---------|---------|---------|--|-------------------|--------------------|--|--|--|--|-----------------|--|--------------|-------------|--|--|--|---------|---------|---------|---------------------|--------------------|---------------------|---------|---------|---------|---------|-----------------------|----|------|-------|-------|-------|------|-----|--------|------|------|------|-------|--------------------------------------|-------|-------|-------|-------|------|-----|--------|------|------|------|------|--------------------------------|------|-------|-------|-------|------|-----|--------|------|------|------|------|-------|--|--|--|--|--|--|-------|------|--|--|--|--|-----------|--|--|--|--|--|--|-------|------|--|--|--|--|
| 2.                                   | <b>Problem diagnosed</b>  | No Cultivation of Kharif onion   |         |         |                     |                    |                     |              |             |         |         |         |  |                   |                    |  |  |  |  |                 |  |              |             |  |  |  |         |         |         |                     |                    |                     |         |         |         |         |                       |    |      |       |       |       |      |     |        |      |      |      |       |                                      |       |       |       |       |      |     |        |      |      |      |      |                                |      |       |       |       |      |     |        |      |      |      |      |       |  |  |  |  |  |  |       |      |  |  |  |  |           |  |  |  |  |  |  |       |      |  |  |  |  |
| 3.                                   | <b>Details of technologies selected for assessment/refinement</b>   | <b>FP</b> - Nasik-53 (N-53).<br><b>TO<sub>1</sub></b> – Agrifound Dark Red<br><b>TO<sub>2</sub></b> – Arka Kalyan.   |         |         |                     |                    |                     |              |             |         |         |         |  |                   |                    |  |  |  |  |                 |  |              |             |  |  |  |         |         |         |                     |                    |                     |         |         |         |         |                       |    |      |       |       |       |      |     |        |      |      |      |       |                                      |       |       |       |       |      |     |        |      |      |      |      |                                |      |       |       |       |      |     |        |      |      |      |      |       |  |  |  |  |  |  |       |      |  |  |  |  |           |  |  |  |  |  |  |       |      |  |  |  |  |
| 4.                                   | <b>Source of Technology (ICAR/ AICRP/SAU/other, please specify)</b> | IIHR- Bangalore  |         |         |                     |                    |                     |              |             |         |         |         |  |                   |                    |  |  |  |  |                 |  |              |             |  |  |  |         |         |         |                     |                    |                     |         |         |         |         |                       |    |      |       |       |       |      |     |        |      |      |      |       |                                      |       |       |       |       |      |     |        |      |      |      |      |                                |      |       |       |       |      |     |        |      |      |      |      |       |  |  |  |  |  |  |       |      |  |  |  |  |           |  |  |  |  |  |  |       |      |  |  |  |  |
| 5.                                   | <b>Production system and thematic area</b>                          | Vegetable based Production System and Varietal trial   |         |         |                     |                    |                     |              |             |         |         |         |  |                   |                    |  |  |  |  |                 |  |              |             |  |  |  |         |         |         |                     |                    |                     |         |         |         |         |                       |    |      |       |       |       |      |     |        |      |      |      |       |                                      |       |       |       |       |      |     |        |      |      |      |      |                                |      |       |       |       |      |     |        |      |      |      |      |       |  |  |  |  |  |  |       |      |  |  |  |  |           |  |  |  |  |  |  |       |      |  |  |  |  |
| 6.                                   | <b>Performance of the Technology with performance indicators</b>    | <b>Table- Evaluation of Onion variety for Kharif season</b> <table border="1"> <tr> <th rowspan="2">Technology Option</th><th rowspan="2">No. Of replication</th><th colspan="4">Date related problem addressed<br/>No. of plant population/m<sup>2</sup></th><th colspan="2">Yield component</th><th rowspan="2">Yield (q/ha)</th><th colspan="4">Rotting (%)</th></tr> <tr> <th>15 days</th><th>45 days</th><th>60 days</th><th>at harvesting stage</th><th>Bulb diameter (cm)</th><th>10 bulb weight (gm)</th><th>15 days</th><th>30 days</th><th>45 days</th><th>60 days</th></tr> <tr> <td>FP - Nasik-53 (N-53).</td><td rowspan="3">10</td><td>52.8</td><td>51.21</td><td>50.19</td><td>49.99</td><td>4.26</td><td>650</td><td>205.32</td><td>7.17</td><td>8.24</td><td>9.32</td><td>11.75</td></tr> <tr> <td>TO<sub>1</sub> – Agrifound Dark Red</td><td>58.08</td><td>56.33</td><td>55.21</td><td>54.93</td><td>5.15</td><td>825</td><td>285.16</td><td>5.10</td><td>5.19</td><td>5.75</td><td>7.66</td></tr> <tr> <td>TO<sub>2</sub> – Arka Kalyan.</td><td>59.4</td><td>57.61</td><td>54.46</td><td>56.18</td><td>6.24</td><td>950</td><td>305.24</td><td>3.14</td><td>3.26</td><td>3.88</td><td>5.60</td></tr> <tr> <td>SEM +</td><td></td><td></td><td></td><td></td><td></td><td></td><td>16.27</td><td>1.34</td><td></td><td></td><td></td><td></td></tr> <tr> <td>CDCP=0.05</td><td></td><td></td><td></td><td></td><td></td><td></td><td>48.74</td><td>4.02</td><td></td><td></td><td></td><td></td></tr> </table> |         |         |                     |                    |                     |              |             |         |         |         |  | Technology Option | No. Of replication | Date related problem addressed<br>No. of plant population/m <sup>2</sup> |  |  |  | Yield component |  | Yield (q/ha) | Rotting (%) |  |  |  | 15 days | 45 days | 60 days | at harvesting stage | Bulb diameter (cm) | 10 bulb weight (gm) | 15 days | 30 days | 45 days | 60 days | FP - Nasik-53 (N-53). | 10 | 52.8 | 51.21 | 50.19 | 49.99 | 4.26 | 650 | 205.32 | 7.17 | 8.24 | 9.32 | 11.75 | TO <sub>1</sub> – Agrifound Dark Red | 58.08 | 56.33 | 55.21 | 54.93 | 5.15 | 825 | 285.16 | 5.10 | 5.19 | 5.75 | 7.66 | TO <sub>2</sub> – Arka Kalyan. | 59.4 | 57.61 | 54.46 | 56.18 | 6.24 | 950 | 305.24 | 3.14 | 3.26 | 3.88 | 5.60 | SEM + |  |  |  |  |  |  | 16.27 | 1.34 |  |  |  |  | CDCP=0.05 |  |  |  |  |  |  | 48.74 | 4.02 |  |  |  |  |
| Technology Option                    | No. Of replication  | Date related problem addressed<br>No. of plant population/m <sup>2</sup>   |         |         |                     | Yield component    |                     | Yield (q/ha) | Rotting (%) |         |         |         |  |                   |                    |  |  |  |  |                 |  |              |             |  |  |  |         |         |         |                     |                    |                     |         |         |         |         |                       |    |      |       |       |       |      |     |        |      |      |      |       |                                      |       |       |       |       |      |     |        |      |      |      |      |                                |      |       |       |       |      |     |        |      |      |      |      |       |  |  |  |  |  |  |       |      |  |  |  |  |           |  |  |  |  |  |  |       |      |  |  |  |  |
|                                      |   | 15 days  | 45 days | 60 days | at harvesting stage | Bulb diameter (cm) | 10 bulb weight (gm) |              | 15 days     | 30 days | 45 days | 60 days |  |                   |                    |  |  |  |  |                 |  |              |             |  |  |  |         |         |         |                     |                    |                     |         |         |         |         |                       |    |      |       |       |       |      |     |        |      |      |      |       |                                      |       |       |       |       |      |     |        |      |      |      |      |                                |      |       |       |       |      |     |        |      |      |      |      |       |  |  |  |  |  |  |       |      |  |  |  |  |           |  |  |  |  |  |  |       |      |  |  |  |  |
| FP - Nasik-53 (N-53).                | 10  | 52.8   | 51.21   | 50.19   | 49.99               | 4.26               | 650                 | 205.32       | 7.17        | 8.24    | 9.32    | 11.75   |  |                   |                    |  |  |  |  |                 |  |              |             |  |  |  |         |         |         |                     |                    |                     |         |         |         |         |                       |    |      |       |       |       |      |     |        |      |      |      |       |                                      |       |       |       |       |      |     |        |      |      |      |      |                                |      |       |       |       |      |     |        |      |      |      |      |       |  |  |  |  |  |  |       |      |  |  |  |  |           |  |  |  |  |  |  |       |      |  |  |  |  |
| TO <sub>1</sub> – Agrifound Dark Red |   | 58.08  | 56.33   | 55.21   | 54.93               | 5.15               | 825                 | 285.16       | 5.10        | 5.19    | 5.75    | 7.66    |  |                   |                    |  |  |  |  |                 |  |              |             |  |  |  |         |         |         |                     |                    |                     |         |         |         |         |                       |    |      |       |       |       |      |     |        |      |      |      |       |                                      |       |       |       |       |      |     |        |      |      |      |      |                                |      |       |       |       |      |     |        |      |      |      |      |       |  |  |  |  |  |  |       |      |  |  |  |  |           |  |  |  |  |  |  |       |      |  |  |  |  |
| TO <sub>2</sub> – Arka Kalyan.       |   | 59.4   | 57.61   | 54.46   | 56.18               | 6.24               | 950                 | 305.24       | 3.14        | 3.26    | 3.88    | 5.60    |  |                   |                    |  |  |  |  |                 |  |              |             |  |  |  |         |         |         |                     |                    |                     |         |         |         |         |                       |    |      |       |       |       |      |     |        |      |      |      |       |                                      |       |       |       |       |      |     |        |      |      |      |      |                                |      |       |       |       |      |     |        |      |      |      |      |       |  |  |  |  |  |  |       |      |  |  |  |  |           |  |  |  |  |  |  |       |      |  |  |  |  |
| SEM +                                |   |  |         |         |                     |                    | 16.27               | 1.34         |             |         |         |         |  |                   |                    |  |  |  |  |                 |  |              |             |  |  |  |         |         |         |                     |                    |                     |         |         |         |         |                       |    |      |       |       |       |      |     |        |      |      |      |       |                                      |       |       |       |       |      |     |        |      |      |      |      |                                |      |       |       |       |      |     |        |      |      |      |      |       |  |  |  |  |  |  |       |      |  |  |  |  |           |  |  |  |  |  |  |       |      |  |  |  |  |
| CDCP=0.05                            |   |  |         |         |                     |                    | 48.74               | 4.02         |             |         |         |         |  |                   |                    |  |  |  |  |                 |  |              |             |  |  |  |         |         |         |                     |                    |                     |         |         |         |         |                       |    |      |       |       |       |      |     |        |      |      |      |       |                                      |       |       |       |       |      |     |        |      |      |      |      |                                |      |       |       |       |      |     |        |      |      |      |      |       |  |  |  |  |  |  |       |      |  |  |  |  |           |  |  |  |  |  |  |       |      |  |  |  |  |

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**B. Results with Table and good quality photographs in jpg.**

Thematic area	Technology options with detailed treatments	Area (in ha)		Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Proposed	Actual					
Varietal Trial	<b>FP</b> - Nasik-53 (N-53).	0.30	0.30	205.32	105000	410640	305640	3.91
	<b>TO<sub>1</sub></b> – Agrifound Dark Red	0.30	0.30	285.16	122500	570320	447820	4.65
	<b>TO<sub>2</sub></b> – Arka Kalyan.	0.30	0.30	305.24	12550	610480	484980	4.86



- | 1.   | <b>Title of On farm Trial (OFT)</b>                               | <b>Evaluation of organic cultivation package in cauliflower</b>  |                    |                 |                    |              |               |                    |             |  |                   |                   |                                |                 |  |                    |              |              |                    |     |                    |                 |  |           |  |              |              |               |              |               |               |             |
|--|---|--|--------------------|-----------------|--------------------|--------------|---------------|--------------------|-------------|--|-------------------|-------------------|--------------------------------|-----------------|--|--------------------|--------------|--------------|--------------------|-----|--------------------|-----------------|--|-----------|--|--------------|--------------|---------------|--------------|---------------|---------------|-------------|
| 2.   | <b>Problem diagnosed</b>  | Excessive use of fertilizer in cauliflower   |                    |                 |                    |              |               |                    |             |  |                   |                   |                                |                 |  |                    |              |              |                    |     |                    |                 |  |           |  |              |              |               |              |               |               |             |
| 3.   | <b>Details of technologies selected for assessment/refinement</b> | <p><b>FP</b> - Application of 5 MT FYM/ha. + 32 kg N+23 kg P<sub>2</sub>O<sub>5</sub> +15 kg K<sub>2</sub>O/ha through inorganic source.</p> <p><b>TO<sub>1</sub></b> - Application of 5 MT FYM/ha. + 25% of RDF (NPK) through organic source. <b>(RDF 200:150:100)</b>, for 50kg N supply through organic sources 625 kg Karanj cake and 2500 kg Vermicompost.</p> <p><b>TO<sub>2</sub></b> - Seed and seedling treatment with Beejamrit + 3 Spray of Jeevamrit at 21 days interval + application Ghanjeevamrit @ 1q./ha as basal application and 30DAS.</p> <ul style="list-style-type: none"> <li>• Calculation of RDF on the basis of N only.</li> <li>• 25% RDF with be applied through karanj cake and vermicompost.</li> </ul> <p>(N in Karanj cake 4.0% and N in Vermicompost 1.0%)</p>  |                    |                 |                    |              |               |                    |             |  |                   |                   |                                |                 |  |                    |              |              |                    |     |                    |                 |  |           |  |              |              |               |              |               |               |             |
| 4.   | <b>Source of Technology</b>                                       | RKM KVK Ranchi & National centre on organic farming, Gaziabad.   |                    |                 |                    |              |               |                    |             |  |                   |                   |                                |                 |  |                    |              |              |                    |     |                    |                 |  |           |  |              |              |               |              |               |               |             |
| 5.   | <b>Production system and thematic area</b>                        | Maize/Black gram based production system and organic cultivation   |                    |                 |                    |              |               |                    |             |  |                   |                   |                                |                 |  |                    |              |              |                    |     |                    |                 |  |           |  |              |              |               |              |               |               |             |
| 6.   | <b>Performance of the Technology with performance indicators</b>  | <p><b>Table- Evaluation of organic cultivation package in cauliflower</b></p> <table border="1"> <thead> <tr> <th rowspan="2">Technology option</th><th rowspan="2">No of replication</th><th rowspan="2">Data related problem addressed</th><th colspan="2">Yield component</th><th rowspan="2">Curd yield (q/ha.)</th><th rowspan="2">C.C. (Rs.ha)</th><th rowspan="2">Gross income</th><th rowspan="2">Net Return (Rs/ha)</th><th rowspan="2">B:C</th></tr> <tr> <th>Curd diameter (cm)</th><th>Curd weight (g)</th></tr> </thead> <tbody> <tr> <td><b>FP</b> - Application of 5 MT FYM/ha. + 32 kg N +23 kg P<sub>2</sub>O<sub>5</sub> +15 kg K<sub>2</sub>O/ha through inorganic source</td><td><b>10</b></td><td></td><td><b>12.46</b></td><td><b>0.625</b></td><td><b>156.47</b></td><td><b>82946</b></td><td><b>312940</b></td><td><b>229994</b></td><td><b>3.77</b></td></tr> </tbody> </table> |                    |                 |                    |              |               |                    |             |  | Technology option | No of replication | Data related problem addressed | Yield component |  | Curd yield (q/ha.) | C.C. (Rs.ha) | Gross income | Net Return (Rs/ha) | B:C | Curd diameter (cm) | Curd weight (g) | <b>FP</b> - Application of 5 MT FYM/ha. + 32 kg N +23 kg P <sub>2</sub> O <sub>5</sub> +15 kg K <sub>2</sub> O/ha through inorganic source | <b>10</b> |  | <b>12.46</b> | <b>0.625</b> | <b>156.47</b> | <b>82946</b> | <b>312940</b> | <b>229994</b> | <b>3.77</b> |
| Technology option  | No of replication   | Data related problem addressed   | Yield component    |                 | Curd yield (q/ha.) | C.C. (Rs.ha) | Gross income  | Net Return (Rs/ha) | B:C         |  |                   |                   |                                |                 |  |                    |              |              |                    |     |                    |                 |  |           |  |              |              |               |              |               |               |             |
|  |   |  | Curd diameter (cm) | Curd weight (g) |                    |              |               |                    |             |  |                   |                   |                                |                 |  |                    |              |              |                    |     |                    |                 |  |           |  |              |              |               |              |               |               |             |
| <b>FP</b> - Application of 5 MT FYM/ha. + 32 kg N +23 kg P <sub>2</sub> O <sub>5</sub> +15 kg K <sub>2</sub> O/ha through inorganic source | <b>10</b>   |  | <b>12.46</b>       | <b>0.625</b>    | <b>156.47</b>      | <b>82946</b> | <b>312940</b> | <b>229994</b>      | <b>3.77</b> |  |                   |                   |                                |                 |  |                    |              |              |                    |     |                    |                 |  |           |  |              |              |               |              |               |               |             |

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**B. Results with Table and good quality photographs in jpg.**

Thematic area	Technology options with detailed treatments	Area (ha in crop & Fodder)/ Nos (in livestock)		Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Proposed	Actual					
Organic Cultivation	<b>FP</b> - Application of 5 MT FYM/ha. + 32 kg N +23 kg P <sub>2</sub> O <sub>5</sub> +15 kg K <sub>2</sub> O/ha through inorganic source	0.2	0.2	156.47	82946	312940	229994	3.77
	<b>TO<sub>1</sub></b> - Application of 5 MT FYM/ha.+25% of RDF (NPK) through organic source	0.2	0.2	181.36	90500	362720	272220	4.01
	<b>TO<sub>2</sub></b> - Seed and seedling treatment with Beejamrit + 3 Spray of Jeevamrit at 21 days interval + application Ghanjeevamrit @ 1q./ha as basal application and 30DAS	0.2	0.2	133.16	75350	266320	190970	3.53

**Balance Sheet**

Sampling Time	OC%	pH	Av. N kg/ha	Av. P <sub>2</sub> O <sub>5</sub> kg/ha	Av. K <sub>2</sub> O kg/ha
Before Transplanting	0.59	5.87	295.76	10.05	244.13
<b>After harvesting</b>					
FP	0.58	5.85	307.57	11.56	245.18
T <sub>1</sub>	0.62	5.90	312.58	13.29	250.15
T <sub>2</sub>	0.60	5.88	303..36	12.05	247.53



## Activities Photos



- | 1.  | Title of On farm Trial (OFT)                                 | <b>Improvement of Nitrogen use efficiency in rice</b>  |                       |                         |                      |                    |                    |                             |              |                    |      |  |                   |                   |                 |  |  |  |                    |                    |                             |              |                    |     |  |                       |                         |                      |                                   |    |        |       |       |        |       |       |       |          |          |      |  |        |       |       |        |       |       |       |          |          |      |   |        |       |       |        |       |       |       |          |          |      |              |  |             |             |             |             |             |             |  |  |  |  |             |  |             |             |             |             |             |             |  |  |  |  |
|---|--|--|-----------------------|-------------------------|----------------------|--------------------|--------------------|-----------------------------|--------------|--------------------|------|--|-------------------|-------------------|-----------------|--|--|--|--------------------|--------------------|-----------------------------|--------------|--------------------|-----|--|-----------------------|-------------------------|----------------------|-----------------------------------|----|--------|-------|-------|--------|-------|-------|-------|----------|----------|------|--|--------|-------|-------|--------|-------|-------|-------|----------|----------|------|---|--------|-------|-------|--------|-------|-------|-------|----------|----------|------|--------------|--|-------------|-------------|-------------|-------------|-------------|-------------|--|--|--|--|-------------|--|-------------|-------------|-------------|-------------|-------------|-------------|--|--|--|--|
| 2.  | Problem diagnosed  | Excessive use of chemical fertilizers and spiraling price of urea leads to increase in cost of cultivation   |                       |                         |                      |                    |                    |                             |              |                    |      |  |                   |                   |                 |  |  |  |                    |                    |                             |              |                    |     |  |                       |                         |                      |                                   |    |        |       |       |        |       |       |       |          |          |      |  |        |       |       |        |       |       |       |          |          |      |   |        |       |       |        |       |       |       |          |          |      |              |  |             |             |             |             |             |             |  |  |  |  |             |  |             |             |             |             |             |             |  |  |  |  |
| 3.  | Details of technologies selected for assessment/refinement   | <b>FP :</b> NPK :: 64:46:15kg/ha. (Urea 100kg, DAP 100kg and MOP)<br><b>TO<sub>1</sub>:</b> 50% of RDN & 100% PK + Nano urea @ 4 ml/Lt. water (Single spray of pre flowering stage)<br><b>TO<sub>2</sub>:</b> 50% of RDN & 100% PK + 2 sprays of Nano urea at (25 to 30 days) and (60-65 days) 4 ml/Lt. water  |                       |                         |                      |                    |                    |                             |              |                    |      |  |                   |                   |                 |  |  |  |                    |                    |                             |              |                    |     |  |                       |                         |                      |                                   |    |        |       |       |        |       |       |       |          |          |      |  |        |       |       |        |       |       |       |          |          |      |   |        |       |       |        |       |       |       |          |          |      |              |  |             |             |             |             |             |             |  |  |  |  |             |  |             |             |             |             |             |             |  |  |  |  |
| 4.  | Source of Technology (ICAR/ AICRP/SAU/other, please specify) | BAU Sabour / BAU Ranchi.   |                       |                         |                      |                    |                    |                             |              |                    |      |  |                   |                   |                 |  |  |  |                    |                    |                             |              |                    |     |  |                       |                         |                      |                                   |    |        |       |       |        |       |       |       |          |          |      |  |        |       |       |        |       |       |       |          |          |      |   |        |       |       |        |       |       |       |          |          |      |              |  |             |             |             |             |             |             |  |  |  |  |             |  |             |             |             |             |             |             |  |  |  |  |
| 5.  | Production system and thematic area                          | Rice based production system & INM   |                       |                         |                      |                    |                    |                             |              |                    |      |  |                   |                   |                 |  |  |  |                    |                    |                             |              |                    |     |  |                       |                         |                      |                                   |    |        |       |       |        |       |       |       |          |          |      |  |        |       |       |        |       |       |       |          |          |      |   |        |       |       |        |       |       |       |          |          |      |              |  |             |             |             |             |             |             |  |  |  |  |             |  |             |             |             |             |             |             |  |  |  |  |
| 6.  | Performance of the Technology with performance indicators    | <b>Table- Improvement of Nitrogen use efficiency in rice</b> <table border="1"> <thead> <tr> <th rowspan="2">Technology option</th><th rowspan="2">No of replication</th><th colspan="4">Yield component</th><th rowspan="2">Grain Yield (q/ha)</th><th rowspan="2">Straw Yield (q/ha)</th><th rowspan="2">Cost of cultivation (Rs.ha)</th><th rowspan="2">Gross income</th><th rowspan="2">Net Return (Rs/ha)</th><th rowspan="2">B:C</th></tr> <tr> <th>No of effective tillers/m<sup>2</sup></th><th>Test weight (in gram)</th><th>Panicle length (in cm).</th><th>No. of Grain/panicle</th></tr> </thead> <tbody> <tr> <td><b>FP :</b> RDF (100:40:20)kg/ha.</td><td rowspan="3">10</td><td>315.47</td><td>21.09</td><td>16.62</td><td>163.03</td><td>31.94</td><td>46.73</td><td>34500</td><td>70356.48</td><td>35856.48</td><td>2.04</td></tr> <tr> <td><b>TO<sub>1</sub>:</b> 50% of RDN &amp; 100% PK + Nano urea @ 4 ml/Lt. water (Single spray of pre flowering stage)</td><td>321.83</td><td>22.44</td><td>18.06</td><td>174.13</td><td>34.31</td><td>50.42</td><td>35500</td><td>75573.92</td><td>40073.92</td><td>2.13</td></tr> <tr> <td><b>TO<sub>2</sub>:</b> 50% of RDN &amp; 100% PK + 2 sprays of Nano urea at (25 to 30 days) and (60-65 days) 4 ml/Lt. water.</td><td>332.07</td><td>23.60</td><td>18.86</td><td>181.57</td><td>37.10</td><td>55.23</td><td>36500</td><td>81734.97</td><td>45234.97</td><td>2.24</td></tr> <tr> <td><b>SE(m)</b></td><td></td><td><b>1.24</b></td><td><b>0.13</b></td><td><b>0.16</b></td><td><b>1.33</b></td><td><b>0.35</b></td><td><b>0.53</b></td><td></td><td></td><td></td><td></td></tr> <tr> <td><b>C.D.</b></td><td></td><td><b>3.71</b></td><td><b>0.40</b></td><td><b>0.48</b></td><td><b>3.99</b></td><td><b>1.06</b></td><td><b>1.57</b></td><td></td><td></td><td></td><td></td></tr> </tbody> </table> |                       |                         |                      |                    |                    |                             |              |                    |      |  | Technology option | No of replication | Yield component |  |  |  | Grain Yield (q/ha) | Straw Yield (q/ha) | Cost of cultivation (Rs.ha) | Gross income | Net Return (Rs/ha) | B:C | No of effective tillers/m <sup>2</sup> | Test weight (in gram) | Panicle length (in cm). | No. of Grain/panicle | <b>FP :</b> RDF (100:40:20)kg/ha. | 10 | 315.47 | 21.09 | 16.62 | 163.03 | 31.94 | 46.73 | 34500 | 70356.48 | 35856.48 | 2.04 | <b>TO<sub>1</sub>:</b> 50% of RDN & 100% PK + Nano urea @ 4 ml/Lt. water (Single spray of pre flowering stage) | 321.83 | 22.44 | 18.06 | 174.13 | 34.31 | 50.42 | 35500 | 75573.92 | 40073.92 | 2.13 | <b>TO<sub>2</sub>:</b> 50% of RDN & 100% PK + 2 sprays of Nano urea at (25 to 30 days) and (60-65 days) 4 ml/Lt. water. | 332.07 | 23.60 | 18.86 | 181.57 | 37.10 | 55.23 | 36500 | 81734.97 | 45234.97 | 2.24 | <b>SE(m)</b> |  | <b>1.24</b> | <b>0.13</b> | <b>0.16</b> | <b>1.33</b> | <b>0.35</b> | <b>0.53</b> |  |  |  |  | <b>C.D.</b> |  | <b>3.71</b> | <b>0.40</b> | <b>0.48</b> | <b>3.99</b> | <b>1.06</b> | <b>1.57</b> |  |  |  |  |
| Technology option   | No of replication  | Yield component  |                       |                         |                      | Grain Yield (q/ha) | Straw Yield (q/ha) | Cost of cultivation (Rs.ha) | Gross income | Net Return (Rs/ha) | B:C  |  |                   |                   |                 |  |  |  |                    |                    |                             |              |                    |     |  |                       |                         |                      |                                   |    |        |       |       |        |       |       |       |          |          |      |  |        |       |       |        |       |       |       |          |          |      |   |        |       |       |        |       |       |       |          |          |      |              |  |             |             |             |             |             |             |  |  |  |  |             |  |             |             |             |             |             |             |  |  |  |  |
|   |  | No of effective tillers/m <sup>2</sup>   | Test weight (in gram) | Panicle length (in cm). | No. of Grain/panicle |                    |                    |                             |              |                    |      |  |                   |                   |                 |  |  |  |                    |                    |                             |              |                    |     |  |                       |                         |                      |                                   |    |        |       |       |        |       |       |       |          |          |      |  |        |       |       |        |       |       |       |          |          |      |   |        |       |       |        |       |       |       |          |          |      |              |  |             |             |             |             |             |             |  |  |  |  |             |  |             |             |             |             |             |             |  |  |  |  |
| <b>FP :</b> RDF (100:40:20)kg/ha.   | 10   | 315.47   | 21.09                 | 16.62                   | 163.03               | 31.94              | 46.73              | 34500                       | 70356.48     | 35856.48           | 2.04 |  |                   |                   |                 |  |  |  |                    |                    |                             |              |                    |     |  |                       |                         |                      |                                   |    |        |       |       |        |       |       |       |          |          |      |  |        |       |       |        |       |       |       |          |          |      |   |        |       |       |        |       |       |       |          |          |      |              |  |             |             |             |             |             |             |  |  |  |  |             |  |             |             |             |             |             |             |  |  |  |  |
| <b>TO<sub>1</sub>:</b> 50% of RDN & 100% PK + Nano urea @ 4 ml/Lt. water (Single spray of pre flowering stage)          |  | 321.83   | 22.44                 | 18.06                   | 174.13               | 34.31              | 50.42              | 35500                       | 75573.92     | 40073.92           | 2.13 |  |                   |                   |                 |  |  |  |                    |                    |                             |              |                    |     |  |                       |                         |                      |                                   |    |        |       |       |        |       |       |       |          |          |      |  |        |       |       |        |       |       |       |          |          |      |   |        |       |       |        |       |       |       |          |          |      |              |  |             |             |             |             |             |             |  |  |  |  |             |  |             |             |             |             |             |             |  |  |  |  |
| <b>TO<sub>2</sub>:</b> 50% of RDN & 100% PK + 2 sprays of Nano urea at (25 to 30 days) and (60-65 days) 4 ml/Lt. water. |  | 332.07   | 23.60                 | 18.86                   | 181.57               | 37.10              | 55.23              | 36500                       | 81734.97     | 45234.97           | 2.24 |  |                   |                   |                 |  |  |  |                    |                    |                             |              |                    |     |  |                       |                         |                      |                                   |    |        |       |       |        |       |       |       |          |          |      |  |        |       |       |        |       |       |       |          |          |      |   |        |       |       |        |       |       |       |          |          |      |              |  |             |             |             |             |             |             |  |  |  |  |             |  |             |             |             |             |             |             |  |  |  |  |
| <b>SE(m)</b>  |  | <b>1.24</b>  | <b>0.13</b>           | <b>0.16</b>             | <b>1.33</b>          | <b>0.35</b>        | <b>0.53</b>        |                             |              |                    |      |  |                   |                   |                 |  |  |  |                    |                    |                             |              |                    |     |  |                       |                         |                      |                                   |    |        |       |       |        |       |       |       |          |          |      |  |        |       |       |        |       |       |       |          |          |      |   |        |       |       |        |       |       |       |          |          |      |              |  |             |             |             |             |             |             |  |  |  |  |             |  |             |             |             |             |             |             |  |  |  |  |
| <b>C.D.</b>   |  | <b>3.71</b>  | <b>0.40</b>           | <b>0.48</b>             | <b>3.99</b>          | <b>1.06</b>        | <b>1.57</b>        |                             |              |                    |      |  |                   |                   |                 |  |  |  |                    |                    |                             |              |                    |     |  |                       |                         |                      |                                   |    |        |       |       |        |       |       |       |          |          |      |  |        |       |       |        |       |       |       |          |          |      |   |        |       |       |        |       |       |       |          |          |      |              |  |             |             |             |             |             |             |  |  |  |  |             |  |             |             |             |             |             |             |  |  |  |  |

7.	<b>Final recommendation for micro level situation</b>	The experiment was conducted on 10 farmers field in village Luto Bartoli of Gumla block during kharif season 2024-25. The variety used was Sahbhagi. The data collected during the trial clearly indicated that the maximum grain yield (36.28 q/ha), net return (Rs. 34978/ha) and B:C ratio (2.24) was found under Technology option 2 i'e 50% of RDN & 100% PK + 2 sprays of Nano urea at (25 to 30 days) and (60-65 days) 4 ml/Lt. water. The percent yield enhancement was 13.87 and 5.96 over FP and TO <sub>1</sub> . The variety used was Sahbhagi dhan.
8.	<b>Constraints identified and feedback for research</b>	Nano urea is not available everywhere in Gumla district. Problems were faced in motivating people to use it. And farmers are not trusting nano urea as much as they trust granular urea.
9.	<b>Process of farmers participation and their reaction</b>	1.Participatory and interactive 2.On field training 3.Regular field visit and feedback 4.By seeing the result in term of plant establishment minimum weed infestation and yield farmers' showed happiness and encouragement

#### B. Results with Table and good quality photographs in jpg.

Thematic area	Technology options with detailed treatments	Area (ha in crop & Fodder)/ Nos (in livestock)		Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Proposed	Actual					
Integrated Nutrient Management	FP : RDF (100:40:20)kg/ha.	0.4	0.4	31.94	34500	70356.48	35856.48	2.04
	TO1: 50% of RDN & 100% PK + Nano urea @ 4 ml/Lt. water (Single spray of pre flowering stage)	0.4	0.4	34.31	35500	75573.92	40073.92	2.13
	TO2 : 50% of RDN & 100% PK + 2 sprays of Nano urea at (25 to 30 days) and (60-65 days) 4 ml/Lt. water.	0.4	0.4	37.10	36500	81734.97	45234.97	2.24

#### Balance Sheet

Soil Sampling time		pH	OC%	Available in kg/ha		
				N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
Before transplanting		6.05	0.56	284.45	16.35	237.85
After transplanting	FP	5.99	0.58	294.62	17.05	235.54
	TO <sub>1</sub>	6.13	0.60	309.83	19.65	241.75
	TO <sub>2</sub>	6.15	0.61	314.57	20.05	243.64



## Activities Photos



**OFT – 06 (Plant Protection)**  
**(Rabi 2023-24)**

- **Thematic area: IPM**
- **Problem definition/Name of OFT:** Assessment of bio-intensive management practices for major pests in Tomato.

1.	Title of On farm Trial (OFT)	Assessment of bio-intensive management practices for major pests in Tomato.																																																																														
2.	Problem diagnosed	Wilt disease and fruit borer																																																																														
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	<b>Farmer Practice:</b> Use of chemical pesticides Imidacloprid @1gm/liter of water at 60 DAT <b>TO1</b> <ul style="list-style-type: none"><li>• Application of Bio consortia (Soil application)</li><li>• Seed treatment by P. fluorescens@10 g/kg</li><li>• Nursery bed treatment by P. fluorescens@20 g/ m2</li><li>• Soil application P. fluorescens@5 kg/ha mixed with 500 kg vermi-compost/ha at 30 days after transplanting</li><li>• Spray of HaNPV @ 250 LE /ha</li></ul> <b>TO2</b> <ul style="list-style-type: none"><li>• Soil application of Bio consortia (Soil application)</li><li>• Seed treatment by Trichoderma viride @10 g/kg</li><li>• Nursery bed treatment by Trichoderma viride @50 g/ m2</li><li>• Soil application Trichoderma viride @5 kg/ha mixed with 500 kg vermi-compost/ha at 30 days after transplanting</li><li>• Spray of HaNPV@ 250 LE /ha</li></ul>																																																																														
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	BAU Sabour																																																																														
5.	Production system and thematic area	Integrated Pest Management																																																																														
6.	Performance of the Technology with performance indicators	<table><tr><th rowspan="2">Technology option</th><th rowspan="2">No of trials</th><th rowspan="2">% wilted plant in nursery</th><th colspan="2">% wilted plants</th><th colspan="2">% fruit damage through borer</th><th colspan="2">No of larvae /10 plants</th><th rowspan="2">% larvae population reduction after 2 end spray</th><th rowspan="2">Yield (q/ha)</th><th rowspan="2">Gross cost (Rs/ha)</th><th rowspan="2">Gross Return (Rs/ha)</th><th rowspan="2">Net Return (Rs/ha)</th><th rowspan="2">B:C</th></tr><tr><th>30 D A T</th><th>90 D A T</th><th>60 D A T</th><th>90 D A T</th><th>Before spray</th><th>10 day after II end spray</th></tr><tr><td>FP</td><td rowspan="3">10</td><td>9.4</td><td>10.83</td><td>12.97</td><td>16.8</td><td>27.1</td><td>5.4</td><td>8.5</td><td>0</td><td>163.83</td><td>40500</td><td>114681</td><td>74181</td><td>2.83</td></tr><tr><td>TO1</td><td>4.57</td><td>4.07</td><td>5.13</td><td>8.4</td><td>8.7</td><td>6.0</td><td>2.8</td><td>67.44</td><td>285.80</td><td>45800</td><td>200060</td><td>154260</td><td>4.37</td></tr><tr><td>TO2</td><td>3.37</td><td>6.47</td><td>8.46</td><td>8.2</td><td>11.4</td><td>5.9</td><td>4.9</td><td>44.07</td><td>246.6</td><td>46500</td><td>172620</td><td>126120</td><td>3.71</td></tr></table>															Technology option	No of trials	% wilted plant in nursery	% wilted plants		% fruit damage through borer		No of larvae /10 plants		% larvae population reduction after 2 end spray	Yield (q/ha)	Gross cost (Rs/ha)	Gross Return (Rs/ha)	Net Return (Rs/ha)	B:C	30 D A T	90 D A T	60 D A T	90 D A T	Before spray	10 day after II end spray	FP	10	9.4	10.83	12.97	16.8	27.1	5.4	8.5	0	163.83	40500	114681	74181	2.83	TO1	4.57	4.07	5.13	8.4	8.7	6.0	2.8	67.44	285.80	45800	200060	154260	4.37	TO2	3.37	6.47	8.46	8.2	11.4	5.9	4.9	44.07	246.6	46500	172620	126120	3.71
Technology option	No of trials	% wilted plant in nursery	% wilted plants		% fruit damage through borer		No of larvae /10 plants		% larvae population reduction after 2 end spray	Yield (q/ha)	Gross cost (Rs/ha)	Gross Return (Rs/ha)	Net Return (Rs/ha)	B:C																																																																		
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7.	<b>Final recommendation for micro level situation</b>	<p>On farm trial was conducted on 10 farmers' field of village Shivrajpur, Totambi, Jargatoli and Gunia during Rabi 2024 to find out suitable package of bio-intensive management practices against wilt disease and fruit borer. The data collected during the trial clearly indicated that the minimum wilted plants in 30 DAT (4.07%) and minimum fruit damage through borer 90 DAT (5.13%) was found under Technology option TO<sub>1</sub> but wilted plant in nursery was found minimum (3.37%) in Technology option TO<sub>2</sub>. In same Technology option (TO<sub>1</sub>) maximum yield (285.80 q/ha), net income (Rs. 200060) and B:C ratio (4.37) was found. Which is significantly superior over FP and TO<sub>2</sub>. The percent yield enhancement 74.44 and 15.89 over FP and TO<sub>2</sub>.</p> <p>Hence <b>TO<sub>1</sub></b> i.e Application of Bio consortia (Soil application), Seed treatment by <i>P. fluorescens</i>@10 g/kg, Nursery bed treatment by <i>P. fluorescens</i>@20 g/ m<sup>2</sup>, Soil application <i>P. fluorescens</i>@5 kg/ha mixed with 500 kg vermi-compost/ha at 30 days after transplanting , Spray of HaNPV @ 250 LE /ha is being recommended for better management for major pests in Tomato.</p>
8.	<b>Constraints identified and feedback for research</b>	<p>a. Lack of awareness about commercial Tomato farming and their management practices.</p> <p>b. More no. of awareness cum skill training is required for better fruit harvest.</p>
9.	<b>Process of farmers participation and their reaction</b>	<p>c. Farmers meeting, interaction &amp; field day</p> <p>d. Un-availability of bio inputs in local market</p>

### B. Results with Table and good quality photographs in jpg.

Thematic area	Technology options with detailed treatments	Area (ha in crop )		Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Proposed	Actual					
IPM	<b>Farmers Practices</b>	1.0	1.0	163.83	40500	114681	74181	2.83
	<b>TO<sub>1</sub></b>			285.80	45800	200060	154260	4.37
	<b>TO<sub>2</sub></b>			246.60	46500	172620	126120	3.71



[illegible]

- [illegible]

[illegible]



9.	<b>Process of farmers participation and their reaction</b>	a. Farmers meeting, interaction & field day b. Un-availability of bio inputs in local market
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**B. Results with Table and good quality photographs in jpg.**

Thematic area	Technology options with detailed treatments	Area (ha in crop )		Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Proposed	Actual					
IPM	Farmers Practices	1.5	1.5	88.12	55500	176260	120760	3.17
	TO1			116.40	59300	232800	173500	3.92
	TO2			137.04	61500	274120	212620	4.45





**OFT – 08 (Agricultural Engineering)**  
**(Rabi 2023-24) 2<sup>nd</sup> Year**

- **Thematic area:** Water Management
- **Problem definition/Name of OFT:** More no. of irrigation and bed making resulted cost of cultivation

1.	Title of On farm Trial (OFT)	Assessment of different methods irrigation on productivity of tomato in medium land.																																			
2.	Problem diagnosed	More no. of irrigation and bed making resulted high cost of cultivation																																			
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Drip irrigation with crop residue mulch Drip irrigation with plastic mulching																																			
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	RPCAU, Pusa 2022																																			
5.	Production system and thematic area	Vegetable based production system and water management																																			
6.	Performance of the Technology with performance indicators	<table><tr><th rowspan="2">Technology option</th><th rowspan="2">No. of replication</th><th colspan="2">Data related problem addresses</th><th>Yield components</th></tr><tr><th>No of irrigation</th><th>Number of fruits per plant</th><th>Fruits weight per plant</th></tr><tr><td>FP : Furrow/bed irrigation</td><td rowspan="3">10</td><td>13.9</td><td>13.41</td><td>1391</td></tr><tr><td>TO<sub>1</sub> : Drip irrigation with crop residue mulch</td><td>12.00</td><td>15.81</td><td>1630</td></tr><tr><td>TO<sub>2</sub> : Drip irrigation with plastic mulching</td><td>11.40</td><td>16.23</td><td>1729</td></tr><tr><td>SEm±</td><td></td><td></td><td></td><td></td></tr><tr><td>CD(P=0.05)</td><td></td><td></td><td></td><td></td></tr></table>					Technology option	No. of replication	Data related problem addresses		Yield components	No of irrigation	Number of fruits per plant	Fruits weight per plant	FP : Furrow/bed irrigation	10	13.9	13.41	1391	TO <sub>1</sub> : Drip irrigation with crop residue mulch	12.00	15.81	1630	TO <sub>2</sub> : Drip irrigation with plastic mulching	11.40	16.23	1729	SEm±					CD(P=0.05)				
Technology option	No. of replication	Data related problem addresses		Yield components																																	
		No of irrigation	Number of fruits per plant	Fruits weight per plant																																	
FP : Furrow/bed irrigation	10	13.9	13.41	1391																																	
TO <sub>1</sub> : Drip irrigation with crop residue mulch		12.00	15.81	1630																																	
TO <sub>2</sub> : Drip irrigation with plastic mulching		11.40	16.23	1729																																	
SEm±																																					
CD(P=0.05)																																					
7.	Final recommendation for micro level situation	On farm trial was conducted on 10 farmers' field of village Choridhi, Hesrag & Bishunpur during Rabi 2023-24 to find out the cost effective weeding method in tomato. The data collected during the trial clearly indicated that the minimum <b>No of irrigation</b> (11.40), maximum <b>Number of fruits per plant</b> (16.23) and maximum <b>No. of fruits weight per plant</b> (1729 gms) was found under Technology option 2 i'e Use of Drip irrigation with plastic mulching. In same Technology option (TO <sub>2</sub> ) maximum yield ( <b>275.64</b> q/ha), net income (Rs. <b>155212</b> ) and B:C ratio ( <b>3.38</b> ) was found. Which is significantly superior over FP and TO <sub>1</sub> . The percent yield enhancement 38.83 and 4.27 over FP and TO <sub>1</sub>																																			

8.	<b>Constraints identified and feedback for research</b>	Unavailability of drip and plastic mulching sheet in locality.
9.	<b>Process of farmers participation and their reaction</b>	Participatory and interactive, Regular field visit, Field day & Farmers' reaction was satisfactory

**B. Results with Table and good quality photographs in jpg.**

Thematic area	Technology options with detailed treatments	Area (ha in crop)		Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Proposed	Actual					
Water Management	<b>FP</b> : Furrow/bed irrigation	0.133	0.133	198.54	72500	158832	86332	2.19
	<b>TO<sub>1</sub></b> : Drip irrigation with crop residue mulch	0.133	0.133	264.35	68600	211480	142880	3.08
	<b>TO<sub>2</sub></b> : Drip irrigation with plastic mulching	0.133	0.133	275.64	65300	220512	155212	3.38
	<b>SEm<sub>+</sub></b>							
	<b>CD(P=0.05)</b>							



**FP** : Furrow/bed irrigation



**TO<sub>1</sub>** : Drip irrigation with crop residue mulch



**TO<sub>2</sub>** : Drip irrigation with plastic mulching

## **OFT – 09 (Agricultural Engineering)** **(Kharif 2024) 1<sup>st</sup> Year**

- **Thematic area:** Weed Management
- **Problem definition/Name of OFT:** Low yield due to high weed population.

1.	Title of On farm Trial (OFT)	Assessment of Manual low cost weeding tools in Niger																																			
2.	Problem diagnosed	Low yield due to high weed population.																																			
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	T <sub>2</sub> : Three Tyne hoe (Grubber) T <sub>3</sub> : Rotary tiller (Manual)																																			
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	CIAE, Bhopal																																			
5.	Production system and thematic area	Rice based production system and Weed Management																																			
6.	Performance of the Technology with performance indicators	<table><tr><th rowspan="2">Technology option</th><th rowspan="2">No. of replication</th><th colspan="3">Data related problem addresses</th></tr><tr><th>Field Capacity (ha/hr)</th><th>Field efficiency (%)</th><th>Weeding efficiency (%)</th></tr><tr><td>T<sub>1</sub>: No weeding</td><td rowspan="3">10</td><td>0</td><td>0</td><td>0</td></tr><tr><td>T<sub>2</sub>: Three Tyne hoe (Grubber)</td><td>0.021</td><td>45.03</td><td>73.52</td></tr><tr><td>T<sub>3</sub>: Rotary tiller (Manual)</td><td>0.022</td><td>60.17</td><td>75.65</td></tr><tr><td>SEm±</td><td></td><td></td><td></td><td></td></tr><tr><td>CD(P=0.05)</td><td></td><td></td><td></td><td></td></tr></table>	Technology option	No. of replication	Data related problem addresses			Field Capacity (ha/hr)	Field efficiency (%)	Weeding efficiency (%)	T <sub>1</sub> : No weeding	10	0	0	0	T <sub>2</sub> : Three Tyne hoe (Grubber)	0.021	45.03	73.52	T <sub>3</sub> : Rotary tiller (Manual)	0.022	60.17	75.65	SEm±					CD(P=0.05)								
Technology option	No. of replication	Data related problem addresses																																			
		Field Capacity (ha/hr)	Field efficiency (%)	Weeding efficiency (%)																																	
T <sub>1</sub> : No weeding	10	0	0	0																																	
T <sub>2</sub> : Three Tyne hoe (Grubber)		0.021	45.03	73.52																																	
T <sub>3</sub> : Rotary tiller (Manual)		0.022	60.17	75.65																																	
SEm±																																					
CD(P=0.05)																																					
7.	Final recommendation for micro level situation	On farm trial was conducted on 10 farmers' field of village Tetra and Lasdar during kharif 2024 to assessment of manual low cost weeding tools in niger. The data collected during the trial clearly indicated that the maximum <b>Field Capacity (0.022 ha/hr)</b> , maximum <b>Field efficiency</b> (60.17%) and maximum <b>Weeding efficiency(75.65%)</b> was found under Technology option 3i'e Use of Rotary tiller (Manual). In same																																			

		Technology option (T3) maximum yield (4.71q/ha), net income (Rs.21470.16) and B:C ratio (2.10) was found. Which is significantly superior over T1 and T2. The percent yield enhancement 58.58 and 1.5 over T1 and T2.
8.	Constraints identified and feedback for research	Unavailability of Rotary tiller (Manual) and Three Tyne hoe (Grubber) in locality.
9.	Process of farmers participation and their reaction	Participatory and interactive, Regular field visit, Field day & Farmers' reaction was satisfactory

### B. Results with Table and good quality photographs in jpg.

Thematic area	Technology options with detailed treatments	Area (ha in crop)		Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Proposed	Actual					
Weed Management	T <sub>1</sub> : No weeding	0.03	0.03	2.97	14760.00	25889.49	11129.49	1.75
	T <sub>2</sub> : Three Tyne hoe (Grubber)	0.03	0.03	4.64	20246.91	40446.88	20199.97	2.00
	T <sub>3</sub> : Rotary tiller (Manual)	0.03	0.03	4.71	19586.91	41057.07	21470.16	2.10
	<b>SEm<sub>+</sub></b>							
	<b>CD(P=0.05)</b>							



T<sub>2</sub>: Three Tyne hoe (Grubber)



T<sub>2</sub>: Three Tyne hoe (Grubber)



T<sub>3</sub>: Rotary tiller (Manual)

**OFT- 10 ( (Home Science))**  
**Rabi 2023**

- **Thematic area:** Value addition
- **Problem definition/Name of OFT:** Spoilage of mushroom due to poor shelf life

i.	<b>Title of OFT</b>	<b>Assessment of different treatment preservation methods on preparation of oyster mushroom powder for enhancing the shelf-life.</b>	
ii.	<b>Problem diagnose</b>	Spoilage of mushroom due to poor shelf life.	
iii.	<b>Details of technology selected for assessment/refinement</b>	<b>FP</b>	Drying & Powdering of mushroom without any treatment.
		<b>TO<sub>1</sub></b>	Drying & Powdering of mushroom by pre-treating with 0.5% citric acid.
		<b>TO<sub>2</sub></b>	Drying & Powdering of mushroom by pre-treating with 1% KMS
iv.	<b>Source of technology</b>	DRPCA, Pusa	
v.	<b>Production system and thematic area</b>	Value addition	
vi.	<b>Performance of technology with performance indicator</b>	<b>Technical Indicator :</b> <ul style="list-style-type: none"> <li>➤ Organoleptic evaluation <ul style="list-style-type: none"> <li>• Taste</li> <li>• Clour</li> <li>• Shelf-life</li> </ul> </li> </ul>	<b>Economic Indicator:</b> <ul style="list-style-type: none"> <li>➤ Benefit Cost Ratio</li> </ul>

**Table.1 Assessment of different treatment preservation methods on preparation of oyster mushroom powder for enhancing the shelf-life after 6 months**

<b>Technological options</b>	<b>No. of trials</b>	<b>Shelf Life (Days)</b>	<b>Colour</b>	<b>Texture</b>	<b>Taste</b>
FP: Drying & Powdering of mushroom without any treatment.	10	94	Dull	Semi soft	Average
TO <sub>1</sub> : Drying & Powdering of mushroom by pre-treating with 0.5% citric acid.	10	131	Good	Soft	Good
TO <sub>2</sub> : Drying & Powdering of mushroom by pre-treating with 1% KMS	10	163	Very Good	Soft	Very Good

Result compared at 5-point hedonic scale: Dislike extremely (1), Dislike slightly (2), Neither like nor dislike (3), Like Slightly (4), Like extremely (5)

**Table 2 Economics of preparing oyster mushroom powder prepared through different treatment methods**

The trial was conducted in helta, kubbatoli and bendi village. The farm women were grouped into 3 categories that is Farmer's practice, Technology option 1 and Technology option 2. The mushroom was blanched for 2 minutes with specified amount of citric acid and KMS respectively, dried for 7 to 10 days and powdered. The powder was kept for 6 months for its quality analysis.

The mushroom powder under TO<sub>2</sub> was found very good in color and taste and the texture of dried mushroom was found soft. So Mushroom powder treated with KMS was having good shelf life and recommended for storing dehydrated mushroom long period.

**vii. Final Recommendation at micro level situation:**

The mushroom powder under TO<sub>2</sub> was found very good in color and taste and the texture of dried mushroom was found soft. So Mushroom powder treated with KMS was having good shelf life and recommended for storing dehydrated mushroom long period.

**viii. Constraints identified and feedback for research**

Technological options	No. of trials	Cost of Preparation (Rs/Kg)	Gross return (Rs/kg)	Net return	B:C ratio
FP: Drying & Powdering of mushroom without any treatment.	10	1000	1200	200	1.20
TO <sub>1</sub> : Drying & Powdering of mushroom by pre-treating with 0.5% citric acid.	10	1250	1500	250	1.20
TO <sub>2</sub> : Drying & Powdering of mushroom by pre-treating with 1% KMS	10	1250	1550	300	1.20

Spoilage of mushroom due to poor shelf life.

**ix. Process of farmer's participation and their reaction**

- Group Meetings with mushroom growers
- Need Assessment
- Problem Diagnosed
- Trail was conducted
- Follow up
- Feedback

## B. Results with Tables

Thematic Area: Food Preservation

**Table.1 Assessment of different treatment preservation methods on preparation of oyster mushroom powder for enhancing the shelf-life after 6 months**

Technological options	No. of trials	Shelf Life (Days)	Colour	Texture	Taste
FP: Drying & Powdering of mushroom without any treatment.	10	94	Dull	Semi soft	Average
TO <sub>1</sub> : Drying & Powdering of mushroom by pre-treating with 0.5% citric acid.	10	131	Good	Soft	Good
TO <sub>2</sub> : Drying & Powdering of mushroom by pre-treating with 1% KMS	10	163	Very Good	Soft	Very Good

Result compared at 5-point hedonic scale: Dislike extremely (1), Dislike slightly (2), Neither like nor dislike (3), Like Slightly (4), Like extremely (5)

**Table 2 Economics of preparing oyster mushroom powder prepared through different treatment methods**

Technological options	No. of trials	Cost of Preparation (Rs/Kg)	Gross return (Rs/kg)	Net return	B:C ratio
FP: Drying & Powdering of mushroom without any treatment.	10	1000	1200	200	1.20
TO <sub>1</sub> : Drying & Powdering of mushroom by pre-treating with 0.5% citric acid.	10	1250	1500	250	1.20
TO <sub>2</sub> : Drying & Powdering of mushroom by pre-treating with 1% KMS	10	1250	1550	300	1.20

The mushroom powder under TO<sub>2</sub> was found very good in color and taste and the texture of dried mushroom was found soft. So Mushroom powder treated with KMS was having good shelf life and recommended for storing dehydrated mushroom long period.

### OFT-11 (Animal Science)

- **Thematic area: Livestock production and management**
- **Problem definition/Name of OFT: Low body weight gain in goat**

1.	<b>Title of On farm Trial (OFT)</b>	:	<b>Assessment of Saccharmyces and Lactobacillus based probiotics as growth promoters in goats</b>			
2.	<b>Problem diagnosed</b>	:	Low body weight gain in goat			
3.	<b>Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)</b>	:	<b>FP- Natural grazing with use of anthelmintics (Oxyclozanide@ 10 mg/kg body weight and Fenbendazole @ 7.5 mg/kg body weight) at pre and post rainy season</b>  <b>TO<sub>1</sub> – FP + use of probiotics @ 5 gm daily</b>  <b>TO<sub>2</sub> – Natural grazing with use of probiotics @ 5 gm daily and anthelmintics (Oxyclozanide@ 10 mg/kg body weight and Fenbendazole @ 7.5 mg/kg body weight) at 3 months interval</b>			
4.	<b>Source of Technology (ICAR/ AICRP/SAU/other, please specify)</b>	:	W.B.U.A.F.S. Kolkata			
5.	<b>Production system and thematic area</b>	:	Livestock production and management			
6.	<b>Performance of the Technology with performance indicators</b>	:	<b>Technical Options</b>	<b>Parameters</b>		
				<b>Initial body weight (kg)</b>	<b>Initial body weight (kg)</b>	<b>Initial body weight (kg)</b>
			Open grazing	4.5	4.5	4.5
				5.0	5.0	5.0
				5.0	5.0	5.0
7.	<b>Final recommendation for micro level situation</b>	:	Natural foraging with use of probiotics @ 5 gm daily and anthelmintics (Oxyclozanide @ 10 mg/kg body weight and Fenbendazole @ 7.5 mg/kg body weight) at 3 months interval give better performance as compared to farmer's practices.			
8.	<b>Constraints identified and feedback for research</b>	:	This type of trial is not successful because goat keeper is illiterate, they do not follow timely drugs supplementary			
9.	<b>Process of farmers participation and their reaction</b>	:	Farmers reaction is positive dur to drastic change in body weight gain in goats.			



**B. Results with Table and good quality photographs in jpg.**

Thematic area	Technology options with detailed treatments	Area (ha in crop & Fodder)/ Nos (in livestock)		Yield (kg/goat )	Cost of cultivation (Rs./year)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Proposed	Actual					
Livestock production and management	FP- Natural grazing with use of anthelmintics (Oxyclozanide@ 10 mg/kg body weight and Fenbendazole @ 7.5 mg/kg body weight) at pre and post rainy season	10	10	12.60	3660	10080	6480	2.8
	FP + use of probiotics @ 5 gm daily	10	10	14.50	3720	11600	7880	3.12
	Natural grazing with use of probiotics @ 5 gm daily and anthelmintics (Oxyclozanide@ 10 mg/kg body weight and Fenbendazole @ 7.5 mg/kg body weight) at 3 months interval	10	10	16.30	3880	13040	9160	3.36



### **OFT-12 (Animal Science)**

- **Thematic area: Animal Disease management**
- **Problem definition/Name of OFT: Repeat breeding**

Problem definition/Name of OFT: Repeat breeding																																																	
1.	Title of On farm Trial (OFT)	Effect of herbal mixture on repeat breeding in Dairy animal																																															
2.	Problem diagnosed	Repeat breeding																																															
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	FP- Deworming & Mineral mixture TO <sub>1</sub> –FP + 1 <sup>st</sup> injection of Buserelin 20 ug (5ml) I/M, 6 h before the AI and 2 <sup>nd</sup> on day 12 after last insemination TO <sub>2</sub> – FP + Curry leaves (50 g), Turmeric powder 95 g), Radish (1), Moringa leaves (100 g), Alovera pulp (100 g), Cissus stem (100 g), Jaggery 9100 g) and salt (25 g)																																															
4.	Source of Technology	DR. RPCAU Pusa																																															
5.	Production system and thematic area	Livestock production and management																																															
6.	Performance of the Technology with performance indicators	<table><tr><td colspan="7">Table :</td></tr><tr><td>Treatment</td><td>No. of animal coceived</td><td>Milk production (in lit)</td><td>Total cost of food treatment, animal</td><td>Gross income</td><td>Net income</td><td>B:C</td></tr><tr><td>FP- Deworming &amp; Mineral mixture</td><td>5</td><td>1260</td><td>18000</td><td>63000</td><td>45000</td><td>3.5</td></tr><tr><td>TO<sub>1</sub> –FP + 1<sup>st</sup> injection of Buserelin 20 ug (5ml) I/M, 6 h before the AI and 2<sup>nd</sup> on day 12 after last insemination</td><td>7</td><td>1470</td><td>19200</td><td>73500</td><td>54300</td><td>3.82</td></tr><tr><td>TO<sub>2</sub> – FP + Curry leaves (50 g), Turmeric powder 95 g), Radish (1), Moringa leaves (100 g), Alovera pulp (100 g), Cissus stem (100 g), Jaggery 9100 g) and salt (25 g</td><td>9</td><td>1722</td><td>20100</td><td>86100</td><td>66000</td><td>4.28</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>						Table :							Treatment	No. of animal coceived	Milk production (in lit)	Total cost of food treatment, animal	Gross income	Net income	B:C	FP- Deworming & Mineral mixture	5	1260	18000	63000	45000	3.5	TO <sub>1</sub> –FP + 1 <sup>st</sup> injection of Buserelin 20 ug (5ml) I/M, 6 h before the AI and 2 <sup>nd</sup> on day 12 after last insemination	7	1470	19200	73500	54300	3.82	TO <sub>2</sub> – FP + Curry leaves (50 g), Turmeric powder 95 g), Radish (1), Moringa leaves (100 g), Alovera pulp (100 g), Cissus stem (100 g), Jaggery 9100 g) and salt (25 g	9	1722	20100	86100	66000	4.28							
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Treatment	No. of animal coceived	Milk production (in lit)	Total cost of food treatment, animal	Gross income	Net income	B:C																																											
FP- Deworming & Mineral mixture	5	1260	18000	63000	45000	3.5																																											
TO <sub>1</sub> –FP + 1 <sup>st</sup> injection of Buserelin 20 ug (5ml) I/M, 6 h before the AI and 2 <sup>nd</sup> on day 12 after last insemination	7	1470	19200	73500	54300	3.82																																											
TO <sub>2</sub> – FP + Curry leaves (50 g), Turmeric powder 95 g), Radish (1), Moringa leaves (100 g), Alovera pulp (100 g), Cissus stem (100 g), Jaggery 9100 g) and salt (25 g	9	1722	20100	86100	66000	4.28																																											
7.	Final recommendation for micro level situation	FP + Curry leaves (50 g), Turmeric powder 95 g), Radish (1), Moringa leaves (100 g), Alovera pulp (100 g), Cissus stem (100 g), Jaggery 9100 g) and salt (25 g) better performance as compared to farmers practices.																																															
8.	Constraints identified and feedback for research	1. Knowledge gap 2.Difficulties in accessing the animal hospital/ Doctor																																															
9.	Process of farmers participation and their reaction	1. Participatory and interactive 2. On field training 3. Regular field visit and feedback																																															

**B. Results with Table and good quality photographs in jpg.**

Thematic area	Technology options with detailed treatments	Area (ha in crop & Fodder)/ Nos (in livestock)		Yield (lit)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Proposed	Actual					
<b>Animal Disease management</b>	<b>FP-</b> Deworming & Mineral mixture	10	10	1260	18000	63000	45000	3.5
	<b>TO<sub>1</sub></b> –FP + 1 <sup>st</sup> injection of Buserelin 20 ug (5ml) I/M, 6 h before the AI and 2 <sup>nd</sup> on day 12 after last insemination	10	10	1470	19200	73500	54300	3.82
	<b>TO<sub>2</sub></b> – FP + Curry leaves (50 g), Turmeric powder 95 g), Radish (1), Moringa leaves (100 g), Alovera pulp (100 g), Cissus stem (100 g), Jaggery 9100 g) and salt (25 g	10	10	1722	20100	86100	66000	4.28



### 3.3 ACHIEVEMENTS OF FRONTLINE DEMONSTRATIONS (FLD)

#### A. Overall achievements of FLDs conducted during the year 2024

S.No	Crop category	No. of FLD	Area	No of beneficiaries	Yield in Demo (q/ha)	Yield in check (q/ha)
1.	<b>Cereals 2024</b>					
	Paddy	15	4.9	15	36.81	33.08
	Finger millet	40	16	82	19.7	17.3
	Wheat	15	5.6	15	Growth stage	
2.	Oil Seed					
3.	<b>CFLD OLS Rabi 2023-24</b>					
	Mustard	75	30	65	14.94	10.72
	Linseed	25	10	21	10.35	7.49
	Sunflower	50	20	104	12.05	5.50
4.	<b>DRMR Mustard Rabi 2023-24</b>	100	40	110	16.54	11.95
5.	<b>DRMR Mustard Rabi 2024-25</b>	100	40	100	Growth stage	
6.	<b>CFLD OLS Kharif 2024-25</b>					
	Groundnut	113	45	158	17.64	14.23
	Niger	205	82	153	4.68	3.54
	Sesame	100	40	91	7.79	5.18
7.	<b>AICRP Niger Kharif 2024-25</b>	50	20	50	4.37	3.39
8.	<b>CFLD OLS Rabi 2024-25</b>					
	Mustard	500	200	376	Growth stage	
	Linseed	100	40	114	Growth stage	
	Sunflower	50	20	105	Growth stage	
9.	<b>Model Village Oilseed Rabi 2024-25</b>					
	Mustard	500	200	372	Growth stage	
10.	Pulses					
11.	<b>CFLD PLS Kharif 2023-24</b>					
	Redgram	125	50	167	14.63	10.82
12.	<b>CFLD PLS Rabi 2023-24</b>					
	Lentil	50	20	109	12.52	8.15
13.	<b>ICAR-IIPR Pulses Rabi 2024-25</b>					
	Lentil	25	10	24	Growth stage	

S.No	Crop category	No. of FLD	Area	No of beneficiaries	Yield in Demo (q/ha)	Yield in check (q/ha)
14.	<b>Horticulture Crops</b>					
	Tomato	03	1.0	07	308.36	203.49
	Brinjal	01	0.091	13	209.06	123.92
	Chilli	01	0.065	13	86.08	55.33
	Potato	80	32	80	145.29	102.15
	Papaya	01	0.2	20	375.94	246.72
	Marigold	01	0.4	03	170.60	108.26
15.	<b>Other crops</b>					
	Natural farming Rabi 2023-24	12	4.8	12	-	-
	Natural Farming 2024-25	12	4.8	12	-	-
16.	<b>Hybrid crop</b>					
	Paddy DRH-2	1075	300	430	42.6	32.30
	Maize DKC-9149	13	5.0	24	46.7	40.5
	Sunflower Rabi 2023-24 under CFLD	50	20	104	12.05	5.50
17.	<b>Livestock</b>					
	Forage crop	08	03	55	242.6	176.5
	Backyard poultry	03	03 unit	03	168	126
	Duck farming	10	10 unit	10	114	58
18.	<b>Fisheries</b>	10	10	10	8.3	5.2
19.	<b>Other enterprises</b>					
	Apiculture	04	04	04	48 kg	25 kg
	Lac	27	10.8	27	9.5	7.3
20.	<b>Women empowerment</b>					
	Mushroom cultivation 2023	25	25 unit	25	-	648 kg
	Mushroom cultivation 2024	30	30 unit	30	-	Pin head stage
	Nutritional security	20		20	Growth stage	
	Nutri garden 2023	20	20 unit	20		164.6 q
	Nutri garden Kharif 2024	20	20 unit	20		192 q
	Nutri garden Rabi 2024	20	20 unit	20	Growth stage	
21.	<b>Farm Machinery</b>					
	Drip irrigation (Tomato)	01	0.2	01		
	Spray through Agri drone	133	53.4	102		
	<b>Grand Total</b>					



## 2. Oilseeds

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
CFLD Rabi 2023-24															
Mustard	ICM	Improve variety PM-30+ICM	65	30	14.94	10.72	39.36	36525.00	84411.00	47886.00	2.31	32800.00	60568.00	27768.00	1.85
Linseed	ICM	ICM+Priyam	9	06	10.20	7.39	38.02	28775.00	61655.00	32880.00	2.14	26375.00	40642.00	14270.00	1.54
		ICM+Birsa Tisi-2	12	04	10.50	7.59	38.34	28775.00	57750.00	28975.00	2.00	26375.00	41745.00	15370.00	1.54
Sunflower	ICM	ICM+LSFH-171	104	20	12.05	5.50	119.09	32420.00	81458.00	49038.00	2.51	29280.00	37180.00	7900.00	1.27
Total			190	60											
DRMR Mustard Rabi 2023-24															
Mustard	ICM	Variety BBM-1	110	40	16.54	11.95	37.66	36750	93451	56701	2.54	32250	67815	35565	2.09
DRMR Mustard Rabi 2024-25															
Mustard	ICM	Variety BBM-1	100	40	Flowering stage										
CFLD Kharif 2024-25															
Groundnut	ICM	K-1812+ICM	136	40	19.12	14.25	34.17	50900	122043	71173	2.39	48950	96657	47707	1.97
	ICM	K-6 +INM	22	05	16.17	14.21	13.79	55120	109681	56561	2.06	48800	96386	48386	1.97
Sesame	ICM	GT-6+ICM	91	40	7.79	5.18	50.38	26950	72190	45240	2.67	26450	48003	21553	1.81
Niger	ICM	Birsa Niger-1 + ICM	54	29.8	4.67	3.42	36.55	22100	40708	18608	1.84	18900	29812	10912	1.57
		Birsa Niger-3 + ICM	99	52.2	4.70	3.66	28.41	22200	40970	18770	1.84	19100	31904	12804	1.67
Total			402	167											
CFLD Rabi 2024-25															
Mustard	ICM	BBM-1+ICM	376	200				Flowering stage							
Linseed	ICM	Priyam & Divya +ICM	114	40											
Sunflower	ICM	KBSH-78+ICM	105	20											
Total			595	260											
Model Village Oilseed Rabi 2024-25															
Mustard	ICM	BBM-1+ICM	372	200				Flowering Stage							

[illegible]







#### 4. Other crops

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Natural Farming (Rabi 2023-24)															
Wheat + Chickpea (DBW-187 & GNG 1958)	Natural farming	Natural farming component	02	0.8	26.08	33.0	(-) 20.97	35750	57376	21626	1.60	39500	21626	33100	1.83
Potato (Kufri Sindoori)			05	2.0	113	134.0	(-) 15.67	75650	169500	93850	2.24	85400	93850	115600	2.35
Onion (Nasik Red)			03	1.2	101	127.0	(-) 20.47	56275	181800	125525	3.23	67500	125525	161100	3.38
Pea (GS-10)			02	0.8	74.65	82.5	(-) 9.51	52650	186625	133975	3.54	65500	133975	140750	3.15
Natural Farming (Kharif 2024-25)															
Maize + Cowpea	Natural farming	Natural farming component	10	4.0	56.437	58.562	(-) 3.63	43650	125572	81922	2.88	48500	130300	81800	2.69
Ragi			01	0.4	14.27	13.85	(+) 3.03	27087	61218	34131	2.26	27381	59417	32036	2.17
Lady finger			01	0.4	92.67	87.25	(+) 6.21	52450	185340	132890	3.53	56500	174500	118000	3.09
Natural Farming (Rabi 2024-25)															
Potato	Natural farming	Natural farming component	05	2.0	Growth stage										
Pea			01	0.4											
Onion			03	1.2											
Wheat			02	0.8											
Chickpea			01	0.4											
Total			36	14.4											
Maize	Fodder production	Variety J-1006	55	3.0	242.6	176.5	37.45	33500	97040	62540	2.90	30700	70600	39900	2.30









### 10. Women empowerment

Name of technology	No. of demonstrations	Name of technology	Observations		No. of Beneficiaries
			Check	Demonstration	
<b>Women</b>					
Drudgery Reduction					
Enterprises	25 (2023) 30 (2024)	Scientific cultivation of oyster mushroom	--	648 kg (Pin head stage)	25 30
Farming System					
Health and nutrition	20 (2024)	Biofortified wheat DBW-187	-	Growth stage	20
Kitchen Garden					
Nutrigarden	20(2023) 20 (Aug,2024) 20 (Nov.2024)	Scientific Cultivation of Nutri Garden		164.6 q/h (2023) 192 q/h (2024) (Growth stage)	20 20 20
Storage Technique					
Value addition					
Women Empowerment					
Others					
<b>Total - Women</b>					
<b>Children</b>					
Health and nutrition					
Others					
<b>Total - Children</b>					
Other if any					
<b>Total others</b>					
<b>Grand Total</b>					<b>135</b>



### 11. Farm implements and machinery

Category	No. of FLDs	Name of the implement	Crop	No. of Farmer	Area (ha)	Filed observation (output/man hour)		% change in major parameter	Labor reduction (man days)	Cost reduction (Rs./ha or Rs./Unit)
						Demonstration	Check			
Sowing and planting tools and machineries										
Total Sowing and planting Machineries										
Intercultural operation tools and machineries										
Irrigation management tools and machineries	01	Drip irrigation in	Tomato	01	0.2	0.0333	0.0083	301.20	15	4050.00
Plant protection tools and machineries										
Harvesting tools and machineries										
Postharvest processing tools and machineries										
Total mechanization tools and machineries										
Others										
Spray	01	Agri Drone	Mustard (BBM-1)	87	32.4	2.4	0.25	860	0.448	121.06
Spray	01	Agri Drone	Watermelon (Hybrid)	1	4.4	2.4	0.25	860	0.448	121.06
Spray	01	Agri Drone	Rice (Sonseriya)	14	16.6	2.4	0.25	860	0.448	121.06
<b>Total</b>	<b>04</b>			<b>103</b>	<b>53.6</b>	<b>7.2333</b>	<b>0.7583</b>	<b>2881.2</b>	<b>16.344</b>	<b>4413.18</b>

### Extension and Training activities under FLD

Sl.No.	Activity	Date	No. of activities organized	Number of participants	Remarks
	<b>Other than OLS &amp; PLS</b>				
1.	Field days	19/04/24, 18/09/24, 19/09/24, 26/09/24, 05/10/24, 08/10/24, 17/10/24, 03/11/24, 03/11/24, 07/11/24	10	150	
2.	Farmers Training	21/06/24, 22/06/24, 26/11/24, 25/05/24, 26/05/24, 27/05/24, 19/06/24	07	103	
3.	Media coverage				
4.	Training for extension functionaries				
	<b>Oilseeds</b>				
1.	Field days	15/04/24, 08/08/24, 30/09/24, 15/10/24, 16/10/24, 01/11/24, 06/11/24, 15/11/24, 06/01/24, 18/01/24, 18/01/24, 18/01/24, 19/01/24, 19/01/24, 19/01/24, 20/01/24, 20/01/24	17	203	
2.	Farmers Training	10/06/24, 11/06/24, 12/06/24, 17/06/24, 18/06/24, 20/06/24, 21/06/24, 26/06/24, 27/06/24, 01/07/24, 02/07/24, 17/08/24, 21/08/24, 24/08/24,, 28/08/24,, 30/08/24, 02/09/24, 03/09/24, 05/09/24, 07/09/24, 09/11/24, 12/11/24, 04/11/24, 05/11/24, 08/11/24, 21/11/24, 29/11/24, 05/11/24, 07/11/24, 07/11/24, 08/11/24, 09/11/24, 04/11/24, 14/11/24, 14/11/24, 16/11/24, 26/11/24, 10/11/24, 19/11/24, 21/11/24, 27/11/24, 09/11/24, 09/11/24, 09/11/24, 19/11/24, 19/11/24, 22/11/24, 23/11/24, 24/11/24, 28/11/24,	51	1097	
3.	Media coverage				
4.	Training for extension functionaries				
	<b>Pulses</b>				
1.	Field days	20/03/21	01	41	
2.	Farmers Training	05/12/24	01	26	
3.	Media coverage				
4.	Training for extension functionaries				

**Technical Feedback on the demonstrated technologies (if any)**

Sl. No	Crop	Feed Back
1	Paddy	Good response towards Aerobic rice variety Anjali
2	Wheat	Demonstration on wheat thresher machine creating awareness about safe gain recovery as well as feed security of animal
3	Maize	Good response towards Suwan-1
4	Rabi season crops	Water conservation through low cost methodology “Bora Bandi” under NICRA Project is emerging as boom for enhancing area under Rabi as well as summer crop
5	Paddy	Good response towards var. Sahbhagi dhan in respect of drought tolerant.
6	Wheat	Encouragement towards use of Improved and high yielding variety.
7	Mustard	Appreciation for Var.-PM-30
8	Agri Drone	Flying time and tank capacity should be more

## PERFORMANCE OF THE DEMONSTRATION UNDER CFLD ON PULSE AND OILSEED CROPS (CFLD)

(During Kharif, Rabi and Summer)

### A. Technical Parameters:

Sl. No.	Crop demonstrated	Existing (Farmer's) variety name	Existing yield (q/ha)	Yield gap (Kg/ha) w.r.to			Name of Variety + Technology demonstrated	Number of farmers	Area in ha	Yield obtained (q/ha)			Yield gap minimized (%)		
				District yield (D)	State yield (S)	Potential yield (P)				Max.	Min.	Av.	D	S	P
01	Linseed	Neelam	7.39	215	435	(-)980	ICM+Priyam	09	06	13.10	10.20	10.20	28.19	47.19	(-)43.95
02			7.59	245	465	(-)920	ICM+Birsa Tisi-2	12	04	12.06	9.63	10.50	23.33	43.39	(-)46.70

### B. Economic parameters

Sl. No.	Variety demonstrated & Technology demonstrated	Farmer's Existing plot				Demonstration plot			
		Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C ratio	Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C Ratio
01	Priyam & ICM	26375.00	40642.00	14270.00	1.54	28775.00	61655.00	32880.00	2.14
	Birsa Tisi-2 & ICM	26375.00	41745.00	15370.00	1.54	28775.00	57750.00	28975.00	2.00

### C. Socio-economic impact parameter

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
1.	Linseed & Priyam	1048	973	55.00	25	50	Additional income	40
2.	Linseed & Priyam	816	766	55.00	20	30	Additional income	40
3.	Linseed & Priyam	648	568	55.00	30	50	Additional income	30

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
4.	Linseed & Priyam	920	840	55.00	40	40	Additional income	40
5.	Linseed & Priyam	452	402	55.00	25	25	Additional income	20
6.	Linseed & Priyam	864	809	55.00	20	35	Additional income	40
7.	Linseed & Priyam	436	376	55.00	20	40	Additional income	20
8.	Linseed & Priyam	880	830	55.00	25	25	Additional income	40
9.	Linseed & Priyam	678	633	55.00	25	20	Additional income	30
10.	Linseed & Birsa Alsi-2	642	587	55.00	30	25	Additional income	30
11.	Linseed & Birsa Alsi-2	199.4	144.4	55.00	25	30	Additional income	10
12.	Linseed & Birsa Alsi-2	964.8	879.8	55.00	30	55	Additional income	40
13.	Linseed & Birsa Alsi-2	385.2	337.2	55.00	25	23	Additional income	20
14.	Linseed & Birsa Alsi-2	200	170	55.00	30	0	Additional income	10
15.	Linseed & Birsa Alsi-2	400	355	55.00	25	20	Additional income	20
16.	Linseed & Birsa Alsi-2	202	162	55.00	20	20	Additional income	10
17.	Linseed & Birsa Alsi-2	218	188	55.00	20	10	Additional income	10
18.	Linseed & Birsa Alsi-2	210	180	55.00	20	10	Additional income	10
19.	Linseed & Birsa Alsi-2	218.6	175.6	55.00	23	20	Additional income	10
20.	Linseed & Birsa Alsi-2	200	170	55.00	20	10	Additional income	10
21.	Linseed & Birsa Alsi-2	448	413	55.00	25	10	Additional income	20

#### D. Oil seeds Farmers' perception of the intervention demonstrated

Sl. No.	Technologies demonstrated	Farmers' Perception parameters					
		Suitability to their farming system	Likings (Preference)	Affordability	Any negative effect	Is Technology acceptable to all in the group/village	Suggestions, for change/improvement.
1	ICM	Yes	Less water requiring crop	Yes	Crop yield affected by rust	Yes	Required high yielding crop variety
2	ICM	Yes	Less water requiring crop	Yes	No	Yes	Required high yielding crop variety

#### E. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
Moderately resistant to <i>Alternaria blight</i> , Powdery mildew & bud fly	Good	More no of capsules & branches is more than local variety	Overall good performance
Moderately resistant to <i>Alternaria blight</i> , Powdery mildew & rust	Good	More no of capsules & branches is more than local variety	Overall good performance

#### F. Extension activities under FLD conducted till dates:

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
01	Training (04)	17,18,20/10/2023	52
02	Field day	15/04/2024	13

## 8. Sequential good quality photographs (as per crop stages i.e. growth & development)



**Germination Stage**



**Growth Stage**



**Flowering Stage**



**Pod formation Stage**



**Pod mature stage**





## 9. Farmers' training photographs



## 10. Quality Photographs of field visits/field days and technology demonstrated.



Field visit



Field day



### 11. Details of budget utilization

Crop (Provide crop wise information)	Items	Area (ha) allotted	Area (ha) achieved	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Linseed	i) Critical input	10	10	50000.00	46850.00	
	ii) TA/DA/POL etc. for monitoring					
	iii) Extension Activities (Field Day)					
	iv) Publication of literature					
	<b>Total</b>	<b>10</b>	<b>10</b>	<b>50000.00</b>	<b>46850.00</b>	

**A. Technical Parameters:**

Sl. No.	Crop demonstrated	Existing (Farmer's) variety name	Existing yield (q/ha)	Yield gap (Kg/ha) w.r.to			Name of Variety + Technology demonstrated	Number of farmers	Area in ha	Yield obtained (q/ha)			Yield gap minimized (%)		
				District yield (D)	State yield (S)	Potential yield (P)				Max.	Min.	Av.	D	S	P
01	Mustard	Shivani	10.72	502	507	(-) 768	PM-30+ICM	65	30	17.07	12.9	14.94	35.20	36.21	(-) 33.34

**B. Economic parameters**

Sl. No.	Variety demonstrated & Technology demonstrated	Farmer's Existing plot				Demonstration plot			
		Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C ratio	Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C Ratio
01	PM-30 and ICM (Improved variety, INM & IPM)	32800.00	60568.00	27768.00	1.85	36525.00	84411.00	47886.00	2.31

**C. Socio-economic impact parameter**

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
1.	Mustard & PM-30	612	594	56.50	10	8	Strengthening of livelihood	21
2.	Mustard & PM-30	601.2	583.2	56.50	12	6	Strengthening of livelihood	21
3.	Mustard & PM-30	594.8	569.8	56.50	15	10	Strengthening of livelihood	21
4.	Mustard & PM-30	608	578	56.50	10	20	Strengthening of livelihood	21
5.	Mustard & PM-30	626.8	608.8	56.50	8	10	Strengthening of livelihood	21

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
6.	Mustard & PM-30	596	575	56.50	6	15	Strengthening of livelihood	21
7.	Mustard & PM-30	622.8	602.8	56.50	10	10	Strengthening of livelihood	21
8.	Mustard & PM-30	574.8	547.8	56.50	12	15	Strengthening of livelihood	21
9.	Mustard & PM-30	596	571	56.50	15	10	Strengthening of livelihood	21
10.	Mustard & PM-30	642.8	622.8	56.50	10	10	Strengthening of livelihood	21
11.	Mustard & PM-30	585.2	558.2	56.50	12	15	Strengthening of livelihood	21
12.	Mustard & PM-30	662.8	630.8	56.50	12	20	Strengthening of livelihood	21
13.	Mustard & PM-30	634.8	602.8	56.50	12	20	Strengthening of livelihood	21
14.	Mustard & PM-30	600	575	56.50	15	10	Strengthening of livelihood	21
15.	Mustard & PM-30	525.2	503.2	56.50	12	10	Strengthening of livelihood	21
16.	Mustard & PM-30	988.2	968.2	56.50	10	10	Strengthening of livelihood	31
17.	Mustard & PM-30	616	593	56.50	10	13	Strengthening of livelihood	21
18.	Mustard & PM-30	640	618	56.50	12	10	Strengthening of livelihood	21
19.	Mustard & PM-30	648	628	56.50	10	10	Strengthening of livelihood	21
20.	Mustard & PM-30	592	562	56.50	15	15	Strengthening of livelihood	21
21.	Mustard & PM-30	628	606	56.50	12	10	Strengthening of livelihood	21
22.	Mustard & PM-30	612	577	56.50	10	25	Strengthening of livelihood	21
23.	Mustard & PM-30	556	534	56.50	12	10	Strengthening of livelihood	21

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
24.	Mustard & PM-30	644	629	56.50	15	0	Strengthening of livelihood	21
25.	Mustard & PM-30	616	591	56.50	15	10	Strengthening of livelihood	21
26.	Mustard & PM-30	552	522	56.50	20	10	Strengthening of livelihood	21
27.	Mustard & PM-30	644	624	56.50	10	10	Strengthening of livelihood	21
28.	Mustard & PM-30	786	759	56.50	12	15	Strengthening of livelihood	31
29.	Mustard & PM-30	978	955	56.50	15	8	Strengthening of livelihood	31
30.	Mustard & PM-30	616	602	56.50	6	8	Strengthening of livelihood	21
31.	Mustard & PM-30	1202.4	1188.4	56.50	8	6	Strengthening of livelihood	42
32.	Mustard & PM-30	638.8	618.8	56.50	10	10	Strengthening of livelihood	21
33.	Mustard & PM-30	316	296	56.50	15	5	Strengthening of livelihood	10
34.	Mustard & PM-30	592	576	56.50	10	6	Strengthening of livelihood	21
35.	Mustard & PM-30	620	598	56.50	12	10	Strengthening of livelihood	21
36.	Mustard & PM-30	900	882	56.50	6	12	Strengthening of livelihood	31
37.	Mustard & PM-30	548	518	56.50	15	15	Strengthening of livelihood	21
38.	Mustard & PM-30	943.8	923.8	56.50	10	10	Strengthening of livelihood	31
39.	Mustard & PM-30	1240	1220	56.50	10	10	Strengthening of livelihood	42
40.	Mustard & PM-30	624	602	56.50	12	10	Strengthening of livelihood	21
41.	Mustard & PM-30	632	609	56.50	15	8	Strengthening of livelihood	21

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
42.	Mustard & PM-30	1410	1385	56.50	10	15	Strengthening of livelihood	52
43.	Mustard & PM-30	1430	1397	56.50	8	25	Strengthening of livelihood	52
44.	Mustard & PM-30	1570	1544	56.50	6	20	Strengthening of livelihood	52
45.	Mustard & PM-30	1540	1524	56.50	6	10	Strengthening of livelihood	52
46.	Mustard & PM-30	576	560	56.50	6	10	Strengthening of livelihood	21
47.	Mustard & PM-30	1144	1129	56.50	5	10	Strengthening of livelihood	42
48.	Mustard & PM-30	617.2	599.2	56.50	6	12	Strengthening of livelihood	21
49.	Mustard & PM-30	613.2	591.2	56.50	10	12	Strengthening of livelihood	21
50.	Mustard & PM-30	584	559	56.50	10	15	Strengthening of livelihood	21
51.	Mustard & PM-30	572	552	56.50	10	10	Strengthening of livelihood	21
52.	Mustard & PM-30	552	530	56.50	12	10	Strengthening of livelihood	21
53.	Mustard & PM-30	748	728	56.50	10	10	Strengthening of livelihood	21
54.	Mustard & PM-30	540	518	56.50	12	10	Strengthening of livelihood	21
55.	Mustard & PM-30	556	531	56.50	10	15	Strengthening of livelihood	21
56.	Mustard & PM-30	600	580	56.50	10	10	Strengthening of livelihood	21
57.	Mustard & PM-30	524	504	56.50	10	10	Strengthening of livelihood	21
58.	Mustard & PM-30	517.2	495.2	56.50	10	12	Strengthening of livelihood	21
59.	Mustard & PM-30	272	242	56.50	15	15	Strengthening of livelihood	10

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
60.	Mustard & PM-30	302	274	56.50	10	18	Strengthening of livelihood	10
61.	Mustard & PM-30	624	604	56.50	10	10	Strengthening of livelihood	21
62.	Mustard & PM-30	516	489	56.50	12	15	Strengthening of livelihood	21
63.	Mustard & PM-30	520	500	56.50	10	10	Strengthening of livelihood	21
64.	Mustard & PM-30	548	526	56.50	10	12	Strengthening of livelihood	21
65.	Mustard & PM-30	520	496	56.50	12	12	Strengthening of livelihood	21

#### D. Oil seeds Farmers' perception of the intervention demonstrated

Sl. No.	Technologies demonstrated	Farmers' Perception parameters					
		Suitability to their farming system	Likings (Preference)	Affordability	Any negative effect	Is Technology acceptable to all in the group/village	Suggestions, for change/improvement.
1	Mustard (PM-30) + ICM (Improve variety, INM & IPM)	Less erucic acid and more pungent	High return and high oil content (37.7%) and better test	Yes	Yield loss due to <i>Alternaria blight</i> and <i>White blister</i>	Yes	Short duration variety

#### E. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
<b>PM-30 variety</b> : Plant height about 165-185 cm & maturity 135-154 Days	High yielding variety Suitable for irrigated	High yielding variety Suitable for irrigated	Resist to high temp and high yielding variety

**F. Extension activities under FLD conducted till dates:**

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
01	Training	30/10/2023 & KVK	10
02	Training	01/11/2023 & KVK	07
03	Training	03/11/2023 & KVK	20
03	Training	06/11/2023 & KVK	20
04	Field day	02/01/2023 & Gunia	24

**8. Sequential good quality photographs (as per crop stages i.e. growth & development)**



**Germination Stage**



**Growth Stage**



**Flowering Stage**



**Siliqua formation Stage**



**Field day**



**Siliqua mature stage**



### 9. Farmers' training photographs



Training & seed distribution

### 10. Quality Photographs of field visits/field days and technology demonstrated.



Field visit & Field day on Mustard



### 11. Details of budget utilization

Crop (Provide crop wise information)	Items	Area (ha) allotted	Area (ha) achieved	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Mustard	i) Critical input	30	30	1,80,000.00	96,276.00	
	ii) TA/DA/POL etc. for monitoring					
	iii) Extension Activities (Field Day)					
	iv) Publication of literature					
	<b>Total</b>	<b>30</b>	<b>30</b>	<b>1,80,000.00</b>	<b>96,276.00</b>	

**B. Technical Parameters:**

Sl. No.	Crop demonstrated	Existing (Farmer's) variety name	Existing yield (q/ha)	Yield gap (Kg/ha) w.r.to			Name of Variety + Technology demonstrated	Number of farmers	Area in ha	Yield obtained (q/ha)			Yield gap minimized (%)		
				District yield (D)	State yield (S)	Potential yield (P)				Max.	Min.	Av.	D	S	P
01	Sunflower	KBSH-53	5.50	975	842	(-)995	LSFH-171+ICM	104	20	14.10	10.53	12.05	243.91	231.95	(-) 45.22

**G. Economic parameters**

Sl. No.	Variety demonstrated & Technology demonstrated	Farmer's Existing plot				Demonstration plot			
		Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C ratio	Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C Ratio
01	LSFH-171 & ICM	29280.00	37180.00	7900.00	1.27	32420.00	81458.00	49038.00	2.51

**H. Socio-economic impact parameter**

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
1.	Sunflower & LSFH-171	385	385	67.60	0	0	Strengthening of livelihood	16
2.	Sunflower & LSFH-171	377	377	67.60	0	0	Strengthening of livelihood	16
3.	Sunflower & LSFH-171	421	421	67.60	0	0	Strengthening of livelihood	22
4.	Sunflower & LSFH-171	538	538	67.60	0	0	Strengthening of livelihood	22
5.	Sunflower & LSFH-171	518	518	67.60	0	0	Strengthening of livelihood	22
6.	Sunflower & LSFH-171	476	476	67.60	0	0	Strengthening of livelihood	22

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
7.	Sunflower & LSFH-171	476	476	67.60	0	0	Strengthening of livelihood	22
8.	Sunflower & LSFH-171	114	114	67.60	0	0	Strengthening of livelihood	6
9.	Sunflower & LSFH-171	520	520	67.60	0	0	Strengthening of livelihood	22
10.	Sunflower & LSFH-171	477	477	67.60	0	0	Strengthening of livelihood	22
11.	Sunflower & LSFH-171	238	238	67.60	0	0	Strengthening of livelihood	9
12.	Sunflower & LSFH-171	254	254	67.60	0	0	Strengthening of livelihood	9
13.	Sunflower & LSFH-171	941	941	67.60	0	0	Strengthening of livelihood	43
14.	Sunflower & LSFH-171	456	456	67.60	0	0	Strengthening of livelihood	22
15.	Sunflower & LSFH-171	452	452	67.60	0	0	Strengthening of livelihood	22
16.	Sunflower & LSFH-171	481	481	67.60	0	0	Strengthening of livelihood	22
17.	Sunflower & LSFH-171	920	920	67.60	0	0	Strengthening of livelihood	43
18.	Sunflower & LSFH-171	441	441	67.60	0	0	Strengthening of livelihood	22
19.	Sunflower & LSFH-171	469	469	67.60	0	0	Strengthening of livelihood	22
20.	Sunflower & LSFH-171	514	514	67.60	0	0	Strengthening of livelihood	22
21.	Sunflower & LSFH-171	282	282	67.60	0	0	Strengthening of livelihood	11
22.	Sunflower & LSFH-171	236	236	67.60	0	0	Strengthening of livelihood	11
23.	Sunflower & LSFH-171	228	228	67.60	0	0	Strengthening of livelihood	11
24.	Sunflower & LSFH-171	705	705	67.60	0	0	Strengthening of livelihood	32

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
25.	Sunflower & LSFH-171	482	482	67.60	0	0	Strengthening of livelihood	22
26.	Sunflower & LSFH-171	465	465	67.60	0	0	Strengthening of livelihood	22
27.	Sunflower & LSFH-171	444	444	67.60	0	0	Strengthening of livelihood	22
28.	Sunflower & LSFH-171	708	708	67.60	0	0	Strengthening of livelihood	32
29.	Sunflower & LSFH-171	121	121	67.60	0	0	Strengthening of livelihood	6
30.	Sunflower & LSFH-171	236	236	67.60	0	0	Strengthening of livelihood	11
31.	Sunflower & LSFH-171	121	121	67.60	0	0	Strengthening of livelihood	6
32.	Sunflower & LSFH-171	115	115	67.60	0	0	Strengthening of livelihood	6
33.	Sunflower & LSFH-171	119	119	67.60	0	0	Strengthening of livelihood	6
34.	Sunflower & LSFH-171	234	234	67.60	0	0	Strengthening of livelihood	11
35.	Sunflower & LSFH-171	248	248	67.60	0	0	Strengthening of livelihood	11
36.	Sunflower & LSFH-171	57	57	67.60	0	0	Strengthening of livelihood	3
37.	Sunflower & LSFH-171	100	100	67.60	0	0	Strengthening of livelihood	4
38.	Sunflower & LSFH-171	59	59	67.60	0	0	Strengthening of livelihood	3
39.	Sunflower & LSFH-171	149	149	67.60	0	0	Strengthening of livelihood	7
40.	Sunflower & LSFH-171	65	65	67.60	0	0	Strengthening of livelihood	3
41.	Sunflower & LSFH-171	97	97	67.60	0	0	Strengthening of livelihood	4
42.	Sunflower & LSFH-171	37	37	67.60	0	0	Strengthening of livelihood	2

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
43.	Sunflower & LSFH-171	37	37	67.60	0	0	Strengthening of livelihood	2
44.	Sunflower & LSFH-171	62	62	67.60	0	0	Strengthening of livelihood	3
45.	Sunflower & LSFH-171	101	101	67.60	0	0	Strengthening of livelihood	4
46.	Sunflower & LSFH-171	125	125	67.60	0	0	Strengthening of livelihood	6
47.	Sunflower & LSFH-171	74	74	67.60	0	0	Strengthening of livelihood	4
48.	Sunflower & LSFH-171	96	96	67.60	0	0	Strengthening of livelihood	4
49.	Sunflower & LSFH-171	62	62	67.60	0	0	Strengthening of livelihood	3
50.	Sunflower & LSFH-171	59	59	67.60	0	0	Strengthening of livelihood	3
51.	Sunflower & LSFH-171	63	63	67.60	0	0	Strengthening of livelihood	3
52.	Sunflower & LSFH-171	46	46	67.60	0	0	Strengthening of livelihood	2
53.	Sunflower & LSFH-171	37	37	67.60	0	0	Strengthening of livelihood	2
54.	Sunflower & LSFH-171	35	35	67.60	0	0	Strengthening of livelihood	2
55.	Sunflower & LSFH-171	59	59	67.60	0	0	Strengthening of livelihood	3
56.	Sunflower & LSFH-171	118	118	67.60	0	0	Strengthening of livelihood	6
57.	Sunflower & LSFH-171	46	46	67.60	0	0	Strengthening of livelihood	2
58.	Sunflower & LSFH-171	51	51	67.60	0	0	Strengthening of livelihood	2
59.	Sunflower & LSFH-171	484	484	67.60	0	0	Strengthening of livelihood	22
60.	Sunflower & LSFH-171	449	449	67.60	0	0	Strengthening of livelihood	22

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
61.	Sunflower & LSFH-171	377	377	67.60	0	0	Strengthening of livelihood	16
62.	Sunflower & LSFH-171	369	369	67.60	0	0	Strengthening of livelihood	16
63.	Sunflower & LSFH-171	381	381	67.60	0	0	Strengthening of livelihood	16
64.	Sunflower & LSFH-171	454	454	67.60	0	0	Strengthening of livelihood	22
65.	Sunflower & LSFH-171	722	722	67.60	0	0	Strengthening of livelihood	32
66.	Sunflower & LSFH-171	315	315	67.60	0	0	Strengthening of livelihood	15
67.	Sunflower & LSFH-171	116	116	67.60	0	0	Strengthening of livelihood	6
68.	Sunflower & LSFH-171	124	124	67.60	0	0	Strengthening of livelihood	6
69.	Sunflower & LSFH-171	95	95	67.60	0	0	Strengthening of livelihood	4
70.	Sunflower & LSFH-171	115	115	67.60	0	0	Strengthening of livelihood	6
71.	Sunflower & LSFH-171	85	85	67.60	0	0	Strengthening of livelihood	4
72.	Sunflower & LSFH-171	112	112	67.60	0	0	Strengthening of livelihood	6
73.	Sunflower & LSFH-171	48	48	67.60	0	0	Strengthening of livelihood	2
74.	Sunflower & LSFH-171	45	45	67.60	0	0	Strengthening of livelihood	2
75.	Sunflower & LSFH-171	47	47	67.60	0	0	Strengthening of livelihood	2
76.	Sunflower & LSFH-171	138	138	67.60	0	0	Strengthening of livelihood	7
77.	Sunflower & LSFH-171	64	64	67.60	0	0	Strengthening of livelihood	3
78.	Sunflower & LSFH-171	124	124	67.60	0	0	Strengthening of livelihood	6

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
79.	Sunflower & LSFH-171	60	60	67.60	0	0	Strengthening of livelihood	3
80.	Sunflower & LSFH-171	61	61	67.60	0	0	Strengthening of livelihood	3
81.	Sunflower & LSFH-171	56	56	67.60	0	0	Strengthening of livelihood	3
82.	Sunflower & LSFH-171	116	116	67.60	0	0	Strengthening of livelihood	6
83.	Sunflower & LSFH-171	62	62	67.60	0	0	Strengthening of livelihood	3
84.	Sunflower & LSFH-171	120	120	67.60	0	0	Strengthening of livelihood	5
85.	Sunflower & LSFH-171	57	57	67.60	0	0	Strengthening of livelihood	3
86.	Sunflower & LSFH-171	63	63	67.60	0	0	Strengthening of livelihood	3
87.	Sunflower & LSFH-171	117	117	67.60	0	0	Strengthening of livelihood	5
88.	Sunflower & LSFH-171	121	121	67.60	0	0	Strengthening of livelihood	5
89.	Sunflower & LSFH-171	121	121	67.60	0	0	Strengthening of livelihood	5
90.	Sunflower & LSFH-171	65.5	65.5	67.60	0	0	Strengthening of livelihood	3
91.	Sunflower & LSFH-171	65	65	67.60	0	0	Strengthening of livelihood	3
92.	Sunflower & LSFH-171	122	122	67.60	0	0	Strengthening of livelihood	6
93.	Sunflower & LSFH-171	65	65	67.60	0	0	Strengthening of livelihood	3
94.	Sunflower & LSFH-171	123	123	67.60	0	0	Strengthening of livelihood	6
95.	Sunflower & LSFH-171	57	57	67.60	0	0	Strengthening of livelihood	3
96.	Sunflower & LSFH-171	123	123	67.60	0	0	Strengthening of livelihood	6

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
97.	Sunflower & LSFH-171	253	253	67.60	0	0	Strengthening of livelihood	11
98.	Sunflower & LSFH-171	186	186	67.60	0	0	Strengthening of livelihood	9
99.	Sunflower & LSFH-171	144	144	67.60	0	0	Strengthening of livelihood	7
100.	Sunflower & LSFH-171	242	242	67.60	0	0	Strengthening of livelihood	11
101.	Sunflower & LSFH-171	290	290	67.60	0	0	Strengthening of livelihood	14
102.	Sunflower & LSFH-171	253	253	67.60	0	0	Strengthening of livelihood	11
103.	Sunflower & LSFH-171	240	240	67.60	0	0	Strengthening of livelihood	11
104.	Sunflower & LSFH-171	248	248	67.60	0	0	Strengthening of livelihood	11

### I. Oil seeds Farmers' perception of the intervention demonstrated

Sl. No.	Technologies demonstrated	Farmers' Perception parameters					
		Suitability to their farming system	Likings (Preference)	Affordability	Any negative effect	Is Technology acceptable to all in the group/village	Suggestions, for change/improvement.
1	Mustard (PM-30) + ICM (Improve variety, INM & IPM)	Less erucic acid and more pungent	High return and high oil content (37.7%) and better test	Yes	Yield loss due to <i>Alternaria blight</i> and <i>White blister</i>	Yes	Short duration variety



### J. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
<b>PM-30 variety</b> : Plant height about 165-185 cm & maturity 135-154 Days	High yielding variety Suitable for irrigated	High yielding variety Suitable for irrigated	Resist to high temp and high yielding variety

### K. Extension activities under FLD conducted till dates:

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
01	Training	30/10/2023 & KVK	10
02	Training	01/11/2023 & KVK	07
03	Training	03/11/2023 & KVK	20
03	Training	06/11/2023 & KVK	20
04	Field day	02/01/2023 & Gunia	24

### 8. Sequential good quality photographs (as per crop stages i.e. growth & development)



Growth Stage



Flowering Stage



Mature stage



Standing crop



News

## 9. Farmers' training photographs



### 11. Details of budget utilization

Crop (Provide crop wise information)	Items	Area (ha) allotted	Area (ha) achieved	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Sunflower	i) Critical input	20	20	1,20,000.00	89,008.00	
	ii) TA/DA/POL etc. for monitoring					
	iii) Extension Activities (Field Day)					
	iv) Publication of literature					
	<b>Total</b>	<b>20</b>	<b>20</b>	<b>1,20,000.00</b>	<b>89,008.00</b>	

**A. Technical Parameters:**

Sl. No	Crop demonstrated	Existing (Farmer's) variety name	Existing yield (q/ha)	Yield gap (Kg/ha) w.r.to			Name of Variety + Technology demonstrated	Number of farmers	Area in ha	Yield obtained (q/ha)			Yield gap minimized (%)		
				District yield (D)	State yield (S)	Potential yield (P)				Max .	Min .	Av.	D	S	P
01	Lentil	Local	8.15	517	357	(-) 498	IPL-220+ICM	109	20	14.0	11.0	12.52	41.29	29.88	(-) 28.46

**B. Economic parameters**

Sl. No.	Variety demonstrated & Technology demonstrated	Farmer's Existing plot				Demonstration plot			
		Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C ratio	Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C ratio
01	IPL-220 & ICM	36800.00	52363.00	15563.00	1.42	40385.00	80441.00	40056.00	1.99

**C. Socio-economic impact parameter**

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/household)
1	Lentil & IPL-220	159.9	139.9	64.25	10	10	Additional Income	6
2	Lentil & IPL-220	217.6	192.6	64.25	15	10	Additional Income	7
3	Lentil & IPL-220	246.6	221.6	64.25	20	5	Additional Income	9
4	Lentil & IPL-220	215.22	155.22	64.25	10	50	Additional Income	7
5	Lentil & IPL-220	522.4	487.4	64.25	20	15	Additional Income	17
6	Lentil & IPL-220	252	217	64.25	25	10	Additional Income	9

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
7	Lentil & IPL-220	157.3	127.3	64.25	20	10	Additional Income	6
8	Lentil & IPL-220	226.1	206.1	64.25	20	0	Additional Income	7
9	Lentil & IPL-220	215.9	190.9	64.25	25	0	Additional Income	7
10	Lentil & IPL-220	516	491	64.25	10	15	Additional Income	17
11	Lentil & IPL-220	165.1	140.1	64.25	15	10	Additional Income	6
12	Lentil & IPL-220	209.61	179.61	64.25	20	10	Additional Income	7
13	Lentil & IPL-220	248	213	64.25	15	20	Additional Income	9
14	Lentil & IPL-220	493.2	468.2	64.25	15	10	Additional Income	17
15	Lentil & IPL-220	256	236	64.25	10	10	Additional Income	9
16	Lentil & IPL-220	252	237	64.25	15	0	Additional Income	9
17	Lentil & IPL-220	268.6	248.6	64.25	20	0	Additional Income	9
18	Lentil & IPL-220	488	458	64.25	20	10	Additional Income	17
19	Lentil & IPL-220	59.15	24.15	64.25	20	15	Additional Income	2
20	Lentil & IPL-220	82.6	52.6	64.25	20	10	Additional Income	3
21	Lentil & IPL-220	276	251	64.25	15	10	Additional Income	9
22	Lentil & IPL-220	163.8	128.8	64.25	25	10	Additional Income	6
23	Lentil & IPL-220	63	43	64.25	20	0	Additional Income	2
24	Lentil & IPL-220	274	244	64.25	20	10	Additional Income	9
25	Lentil & IPL-220	224.91	189.91	64.25	25	10	Additional Income	7
26	Lentil & IPL-220	92.12	77.12	64.25	10	5	Additional Income	3

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
27	Lentil & IPL-220	221	196	64.25	15	10	Additional Income	7
28	Lentil & IPL-220	382.8	352.8	64.25	20	10	Additional Income	14
29	Lentil & IPL-220	160.68	135.68	64.25	15	10	Additional Income	6
30	Lentil & IPL-220	266	231	64.25	15	20	Additional Income	9
31	Lentil & IPL-220	485.2	455.2	64.25	10	20	Additional Income	17
32	Lentil & IPL-220	492	457	64.25	15	20	Additional Income	17
33	Lentil & IPL-220	474.4	444.4	64.25	20	10	Additional Income	17
34	Lentil & IPL-220	488	458	64.25	20	10	Additional Income	17
35	Lentil & IPL-220	492	462	64.25	20	10	Additional Income	17
36	Lentil & IPL-220	508	471	64.25	25	12	Additional Income	17
37	Lentil & IPL-220	520	500	64.25	10	10	Additional Income	17
38	Lentil & IPL-220	508	478	64.25	15	15	Additional Income	17
39	Lentil & IPL-220	497.2	467.2	64.25	20	10	Additional Income	17
40	Lentil & IPL-220	469.2	446.2	64.25	15	8	Additional Income	17
41	Lentil & IPL-220	480	452	64.25	20	8	Additional Income	17
42	Lentil & IPL-220	497.2	467.2	64.25	20	10	Additional Income	17
43	Lentil & IPL-220	217.6	188.6	64.25	25	4	Additional Income	7
44	Lentil & IPL-220	476	456	64.25	10	10	Additional Income	17

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
45	Lentil & IPL-220	251.2	226.2	64.25	15	10	Additional Income	9
46	Lentil & IPL-220	200.6	170.6	64.25	20	10	Additional Income	7
47	Lentil & IPL-220	100.24	80.24	64.25	15	5	Additional Income	3
48	Lentil & IPL-220	101.6	81.6	64.25	15	5	Additional Income	3
49	Lentil & IPL-220	202.3	187.3	64.25	10	5	Additional Income	7
50	Lentil & IPL-220	189.21	164.21	64.25	15	10	Additional Income	7
51	Lentil & IPL-220	425.7	400.7	64.25	20	5	Additional Income	14
52	Lentil & IPL-220	161.2	136.2	64.25	20	5	Additional Income	6
53	Lentil & IPL-220	77	57	64.25	15	5	Additional Income	3
54	Lentil & IPL-220	239.7	229.7	64.25	10	0	Additional Income	7
55	Lentil & IPL-220	207.4	192.4	64.25	15	0	Additional Income	7
56	Lentil & IPL-220	87.5	67.5	64.25	20	0	Additional Income	3
57	Lentil & IPL-220	235.11	205.11	64.25	20	10	Additional Income	7
58	Lentil & IPL-220	86.1	66.1	64.25	20	0	Additional Income	3
59	Lentil & IPL-220	301.3	271.3	64.25	20	10	Additional Income	10
60	Lentil & IPL-220	79.52	64.52	64.25	15	0	Additional Income	3
61	Lentil & IPL-220	87.22	72.22	64.25	15	0	Additional Income	3
62	Lentil & IPL-220	88.9	68.9	64.25	20	0	Additional Income	3

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
63	Lentil & IPL-220	95.9	75.9	64.25	20	0	Additional Income	3
64	Lentil & IPL-220	118	93	64.25	25	0	Additional Income	4
65	Lentil & IPL-220	85.4	80.4	64.25	5	0	Additional Income	3
66	Lentil & IPL-220	34.08	24.08	64.25	10	0	Additional Income	1
67	Lentil & IPL-220	86.8	71.8	64.25	15	0	Additional Income	3
68	Lentil & IPL-220	37.5	27.5	64.25	10	0	Additional Income	1
69	Lentil & IPL-220	250	240	64.25	10	0	Additional Income	9
70	Lentil & IPL-220	83.3	73.3	64.25	10	0	Additional Income	3
71	Lentil & IPL-220	889	849	64.25	20	20	Additional Income	30
72	Lentil & IPL-220	36.3	26.3	64.25	10	0	Additional Income	1
73	Lentil & IPL-220	36.6	26.6	64.25	10	0	Additional Income	1
74	Lentil & IPL-220	208	198	64.25	10	0	Additional Income	7
75	Lentil & IPL-220	124	99	64.25	20	5	Additional Income	4
76	Lentil & IPL-220	134	119	64.25	10	5	Additional Income	4
77	Lentil & IPL-220	63	53	64.25	10	0	Additional Income	2
78	Lentil & IPL-220	64	54	64.25	10	0	Additional Income	2
79	Lentil & IPL-220	91	86	64.25	5	0	Additional Income	3
80	Lentil & IPL-220	114	104	64.25	10	0	Additional Income	4



Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
81	Lentil & IPL-220	260	240	64.25	10	10	Additional Income	9
82	Lentil & IPL-220	258	233	64.25	15	10	Additional Income	9
83	Lentil & IPL-220	260	235	64.25	15	10	Additional Income	9
84	Lentil & IPL-220	121	111	64.25	10	0	Additional Income	4
85	Lentil & IPL-220	252	237	64.25	10	5	Additional Income	9
86	Lentil & IPL-220	129	119	64.25	10	0	Additional Income	4
87	Lentil & IPL-220	238	213	64.25	15	10	Additional Income	9
88	Lentil & IPL-220	121.3	111.3	64.25	10	0	Additional Income	4
89	Lentil & IPL-220	120	100	64.25	10	10	Additional Income	4
90	Lentil & IPL-220	120	105	64.25	10	5	Additional Income	4
91	Lentil & IPL-220	262	242	64.25	10	10	Additional Income	9
92	Lentil & IPL-220	468	438	64.25	20	10	Additional Income	17
93	Lentil & IPL-220	227.12	212.12	64.25	15	0	Additional Income	7
94	Lentil & IPL-220	161.2	151.2	64.25	10	0	Additional Income	6
95	Lentil & IPL-220	256	236	64.25	10	10	Additional Income	9
96	Lentil & IPL-220	151.19	136.19	64.25	10	5	Additional Income	6
97	Lentil & IPL-220	91	86	64.25	5	0	Additional Income	3
98	Lentil & IPL-220	232.9	222.9	64.25	10	0	Additional Income	7

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
99	Lentil & IPL-220	89.6	84.6	64.25	5	0	Additional Income	3
100	Lentil & IPL-220	210.12	190.12	64.25	10	10	Additional Income	7
101	Lentil & IPL-220	209.1	204.1	64.25	5	0	Additional Income	7
102	Lentil & IPL-220	198.9	178.9	64.25	10	10	Additional Income	7
103	Lentil & IPL-220	147.29	137.29	64.25	10	0	Additional Income	6
104	Lentil & IPL-220	138	128	64.25	10	0	Additional Income	4
105	Lentil & IPL-220	146.9	136.9	64.25	10	0	Additional Income	6
106	Lentil & IPL-220	221	206	64.25	10	5	Additional Income	7
107	Lentil & IPL-220	158.6	143.6	64.25	10	5	Additional Income	6
108	Lentil & IPL-220	140	125	64.25	10	5	Additional Income	4
109	Lentil & IPL-220	39.6	34.6	64.25	5	0	Additional Income	1

#### D. Pulses Farmers' perception of the intervention demonstrated

Sl. No.	Technologies demonstrated	Farmers' Perception parameters					
		Suitability to their farming system	Likings (Preference)	Affordability	Any negative effect	Is Technology acceptable to all in the group/village	Suggestions, for change/improvement.
01	ICM	Minimum wilt disease	Better test	Yes	Poor yield	Yes	Need flood tolerant and high yielding variety

### E. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a-vis Local Check	Farmers Feedback
Resistant to wilt disease	Good	Demo plot better than local	Overall good performance

### F. Extension activities under FLD conducted till dates:

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
01	Training	31/10/2023, 8/11/2023	50
02	Field day	25/03/2024	22

### 8. Sequential good quality photographs (as per crop stages i.e. growth & development)



Germination stage



Growth stage



Field day on ripening stage



Ripening stage



Crop cutting

## 9. Farmers' training photographs





### 10. Quality Photographs of field visits/field days and technology demonstrated.



### 11. Details of budget utilization

Crop (Provide crop wise information)	Items	Area (ha) allotted	Area (ha) achieved	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Lentil	i) Critical input	20	20	180000.00	167081.00	(-) 167081.00
	ii) TA/DA/POL etc. for monitoring					
	iii) Extension Activities (Field Day)					
	iv) Publication of literature					
	<b>Total</b>	<b>20</b>	<b>20</b>	<b>180000.00</b>	<b>167081.00</b>	<b>(-)167081.00</b>

**A. Technical Parameters:**

Sl. No.	Crop demonstrated	Existing (Farmer's ) variety name	Existin g yield (q/ha)	Yield gap (Kg/ha) w.r.to			Name of Variety + Technology demonstrated	Numbe r of farmer s	Are a in ha	Yield obtained (q/ha)			Yield gap minimized (%)		
				Distric t yield (D)	Stat e yiel d (S)	Potentia l yield (P)				Max .	Min.	Av.	D	S	P
01	Red gram	Asha	10.66	58	289	(-) 462	Rajeev lochan+ ICM	140	35.50	15.86	12.83	14.38	4.03	25.15	(-) 24.31
02	Red gram		11.02	220	451	(-) 346	IPA 203+ICM	11	4.50	17.03	14.43	16.00	13.75	28.19	(-) 17.78
03	Redgram		10.79	(-)28	203	(-)548	Component demonstration	16	10.00	14.60	12.46	13.52	(-) 2.02	15.01	-

**B. Economic parameters**

Sl. No.	Variety demonstrated & Technology demonstrated	Farmer's Existing plot				Demonstration plot			
		Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C ratio	Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C ratio
01	Rajeev lochan & ICM	34330.00	74620.00	40290.00	2.17	37383.00	100660.00	63277.00	2.69
02	IPA 203 & ICM	34330.00	77140.00	42810.00	2.25	37703.00	112000.00	74297.00	2.97
03	Rajeev lochan (Component)	34330.00	75530.00	41200.00	2.20	35800.00	94640.00	58840.00	2.64

### C. Socio-economic impact parameter

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
1	Redgram & Rajeev Lochan	919.8	889.8	70.00	20	10	Additional income	
2	Redgram & Rajeev Lochan	284.6	254.6	70.00	20	10	Additional income	
3	Redgram & Rajeev Lochan	140	100	70.00	25	15	Additional income	
4	Redgram & Rajeev Lochan	149.6	104.6	70.00	25	20	Additional income	
5	Redgram & Rajeev Lochan	430.8	400.8	70.00	20	10	Additional income	
6	Redgram & Rajeev Lochan	312.6	282.6	70.00	15	15	Additional income	
7	Redgram & Rajeev Lochan	282	252	70.00	10	20	Additional income	
8	Redgram & Rajeev Lochan	260.6	230.6	70.00	10	20	Additional income	
9	Redgram & Rajeev Lochan	276.6	253.6	70.00	8	15	Additional income	
10	Redgram & Rajeev Lochan	290	270	70.00	10	10	Additional income	
11	Redgram & Rajeev Lochan	143.3	123.3	70.00	10	10	Additional income	
12	Redgram & Rajeev Lochan	299	274	70.00	10	15	Additional income	
13	Redgram & Rajeev Lochan	292	260	70.00	12	20	Additional income	
14	Redgram & Rajeev Lochan	280.6	245.6	70.00	15	20	Additional income	
15	Redgram & Rajeev Lochan	148	113	70.00	10	25	Additional income	
16	Redgram & Rajeev Lochan	148	118	70.00	10	20	Additional income	
17	Redgram & Rajeev Lochan	148	123	70.00	15	10	Additional income	
18	Redgram & Rajeev Lochan	300	280	70.00	10	10	Additional income	
19	Redgram & Rajeev Lochan	453.9	433.9	70.00	10	10	Additional income	
20	Redgram & Rajeev Lochan	154.6	132.6	70.00	10	12	Additional income	
21	Redgram & Rajeev Lochan	149	119	70.00	15	15	Additional income	

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
22	Redgram & Rajeev Lochan	1152	1122	70.00	10	20	Additional income	
23	Redgram & Rajeev Lochan	594.4	564.4	70.00	10	20	Additional income	
24	Redgram & Rajeev Lochan	645	622	70.00	8	15	Additional income	
25	Redgram & Rajeev Lochan	576	551	70.00	10	15	Additional income	
26	Redgram & Rajeev Lochan	1218.4	1188.4	70.00	10	20	Additional income	
27	Redgram & Rajeev Lochan	554.4	524.4	70.00	10	20	Additional income	
28	Redgram & Rajeev Lochan	537	515	70.00	12	10	Additional income	
29	Redgram & Rajeev Lochan	825.6	800.6	70.00	15	10	Additional income	
30	Redgram & Rajeev Lochan	1100.8	1065.8	70.00	10	25	Additional income	
31	Redgram & Rajeev Lochan	947	925	70.00	12	10	Additional income	
32	Redgram & Rajeev Lochan	733	698	70.00	15	20	Additional income	
33	Redgram & Rajeev Lochan	605	575	70.00	15	15	Additional income	
34	Redgram & Rajeev Lochan	966	936	70.00	10	20	Additional income	
35	Redgram & Rajeev Lochan	616	591	70.00	10	15	Additional income	
36	Redgram & Rajeev Lochan	630.4	612.4	70.00	8	10	Additional income	
37	Redgram & Rajeev Lochan	577	554	70.00	11	12	Additional income	
38	Redgram & Rajeev Lochan	1212.8	1180.8	70.00	10	22	Additional income	
39	Redgram & Rajeev Lochan	565	540	70.00	10	15	Additional income	



Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
40	Redgram & Rajeev Lochan	590.4	563.4	70.00	12	15	Additional income	
41	Redgram & Rajeev Lochan	634.4	599.4	70.00	15	20	Additional income	
42	Redgram & Rajeev Lochan	536	504	70.00	12	20	Additional income	
43	Redgram & Rajeev Lochan	608	588	70.00	10	10	Additional income	
44	Redgram & Rajeev Lochan	634.4	609.4	70.00	15	10	Additional income	
45	Redgram & Rajeev Lochan	596	576	70.00	10	10	Additional income	
46	Redgram & Rajeev Lochan	557	537	70.00	10	10	Additional income	
47	Redgram & Rajeev Lochan	930	898	70.00	12	20	Additional income	
48	Redgram & Rajeev Lochan	280	250	70.00	15	15	Additional income	
49	Redgram & Rajeev Lochan	540	505	70.00	15	20	Additional income	
50	Redgram & Rajeev Lochan	548	523	70.00	10	15	Additional income	
51	Redgram & Rajeev Lochan	585	565	70.00	10	10	Additional income	
52	Redgram & Rajeev Lochan	630.4	608.4	70.00	10	12	Additional income	
53	Redgram & Rajeev Lochan	588	561	70.00	12	15	Additional income	
54	Redgram & Rajeev Lochan	1202.4	1167.4	70.00	15	20	Additional income	
55	Redgram & Rajeev Lochan	260	220	70.00	20	20	Additional income	
56	Redgram & Rajeev Lochan	275	255	70.00	10	10	Additional income	
57	Redgram & Rajeev Lochan	609	589	70.00	10	10	Additional income	
58	Redgram & Rajeev Lochan	580	560	70.00	10	10	Additional income	

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
59	Redgram & Rajeev Lochan	605	575	70.00	20	10	Additional income	
60	Redgram & Rajeev Lochan	566.4	536.4	70.00	10	20	Additional income	
61	Redgram & Rajeev Lochan	556	521	70.00	20	15	Additional income	
62	Redgram & Rajeev Lochan	568	538	70.00	10	20	Additional income	
63	Redgram & Rajeev Lochan	576	551	70.00	10	15	Additional income	
64	Redgram & Rajeev Lochan	616	596	70.00	10	10	Additional income	
65	Redgram & Rajeev Lochan	614.4	582.4	70.00	20	12	Additional income	
66	Redgram & Rajeev Lochan	562.4	537.4	70.00	10	15	Additional income	
67	Redgram & Rajeev Lochan	601	571	70.00	10	20	Additional income	
68	Redgram & Rajeev Lochan	622.4	582.4	70.00	20	20	Additional income	
69	Redgram & Rajeev Lochan	588	558	70.00	20	10	Additional income	
70	Redgram & Rajeev Lochan	578.4	558.4	70.00	10	10	Additional income	
71	Redgram & Rajeev Lochan	939.6	904.6	70.00	20	15	Additional income	
72	Redgram & Rajeev Lochan	75.3	55.3	70.00	10	10	Additional income	
73	Redgram & Rajeev Lochan	68	48	70.00	10	10	Additional income	
74	Redgram & Rajeev Lochan	72	47	70.00	10	15	Additional income	
75	Redgram & Rajeev Lochan	73.8	33.8	70.00	20	20	Additional income	
76	Redgram & Rajeev Lochan	69	44	70.00	10	15	Additional income	
77	Redgram & Rajeev Lochan	71.5	41.5	70.00	20	10	Additional income	

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
78	Redgram & Rajeev Lochan	72	50	70.00	10	12	Additional income	
79	Redgram & Rajeev Lochan	71.8	36.8	70.00	20	15	Additional income	
80	Redgram & Rajeev Lochan	70.65	35.65	70.00	15	20	Additional income	
81	Redgram & Rajeev Lochan	66.8	34.8	70.00	12	20	Additional income	
82	Redgram & Rajeev Lochan	69.6	47.6	70.00	12	10	Additional income	
83	Redgram & Rajeev Lochan	75.5	45.5	70.00	20	10	Additional income	
84	Redgram & Rajeev Lochan	70	50	70.00	10	10	Additional income	
85	Redgram & Rajeev Lochan	69	39	70.00	20	10	Additional income	
86	Redgram & Rajeev Lochan	71.6	41.6	70.00	10	20	Additional income	
87	Redgram & Rajeev Lochan	109.8	74.8	70.00	20	15	Additional income	
88	Redgram & Rajeev Lochan	111.4	92.4	70.00	11	8	Additional income	
89	Redgram & Rajeev Lochan	64	49	70.00	15	0	Additional income	
90	Redgram & Rajeev Lochan	69	54	70.00	15	0	Additional income	
91	Redgram & Rajeev Lochan	71.5	49.5	70.00	10	12	Additional income	
92	Redgram & Rajeev Lochan	68.65	51.65	70.00	12	5	Additional income	
93	Redgram & Rajeev Lochan	67.5	37.5	70.00	10	20	Additional income	
94	Redgram & Rajeev Lochan	66.5	35.5	70.00	11	20	Additional income	
95	Redgram & Rajeev Lochan	69.65	44.65	70.00	15	10	Additional income	
96	Redgram & Rajeev Lochan	65.15	45.15	70.00	10	10	Additional income	

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
97	Redgram & Rajeev Lochan	64.65	44.65	70.00	10	10	Additional income	
98	Redgram & Rajeev Lochan	135	113	70.00	12	10	Additional income	
99	Redgram & Rajeev Lochan	70.6	40.6	70.00	10	20	Additional income	
100	Redgram & Rajeev Lochan	66	41	70.00	10	15	Additional income	
101	Redgram & Rajeev Lochan	114.6	82.6	70.00	12	20	Additional income	
102	Redgram & Rajeev Lochan	64.15	34.15	70.00	20	10	Additional income	
103	Redgram & Rajeev Lochan	70	50	70.00	10	10	Additional income	
104	Redgram & Rajeev Lochan	71	39	70.00	20	12	Additional income	
105	Redgram & Rajeev Lochan	72.8	54.8	70.00	10	8	Additional income	
106	Redgram & Rajeev Lochan	279	239	70.00	20	20	Additional income	
107	Redgram & Rajeev Lochan	1088	1047	70.00	11	30	Additional income	
108	Redgram & Rajeev Lochan	1120	1085	70.00	15	20	Additional income	
109	Redgram & Rajeev Lochan	198	173	70.00	15	10	Additional income	
110	Redgram & Rajeev Lochan	128	108	70.00	10	10	Additional income	
111	Redgram & Rajeev Lochan	216.4	194.4	70.00	12	10	Additional income	
112	Redgram & Rajeev Lochan	260.6	230.6	70.00	10	20	Additional income	
113	Redgram & Rajeev Lochan	203	176	70.00	12	15	Additional income	
114	Redgram & Rajeev Lochan	210.4	170.4	70.00	20	20	Additional income	
115	Redgram & Rajeev Lochan	136.3	109.3	70.00	12	15	Additional income	

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
116	Redgram & Rajeev Lochan	146.6	116.6	70.00	20	10	Additional income	
117	Redgram & Rajeev Lochan	133.6	111.6	70.00	10	12	Additional income	
118	Redgram & Rajeev Lochan	234	204	70.00	20	10	Additional income	
119	Redgram & Rajeev Lochan	210.4	179.4	70.00	11	20	Additional income	
120	Redgram & Rajeev Lochan	219	184	70.00	15	20	Additional income	
121	Redgram & Rajeev Lochan	218.4	191.4	70.00	15	12	Additional income	
122	Redgram & Rajeev Lochan	146	126	70.00	10	10	Additional income	
123	Redgram & Rajeev Lochan	137.6	115.6	70.00	12	10	Additional income	
124	Redgram & Rajeev Lochan	229	209	70.00	10	10	Additional income	
125	Redgram & Rajeev Lochan	212	182	70.00	10	20	Additional income	
126	Redgram & Rajeev Lochan	223	188	70.00	20	15	Additional income	
127	Redgram & Rajeev Lochan	221.4	191.4	70.00	10	20	Additional income	
128	Redgram & Rajeev Lochan	203	168	70.00	20	15	Additional income	
129	Redgram & Rajeev Lochan	221.4	201.4	70.00	10	10	Additional income	
130	Redgram & Rajeev Lochan	159	127	70.00	20	12	Additional income	
131	Redgram & Rajeev Lochan	285	259	70.00	11	15	Additional income	
132	Redgram & Rajeev Lochan	292.6	257.6	70.00	15	20	Additional income	
133	Redgram & Rajeev Lochan	302	267	70.00	15	20	Additional income	
134	Redgram & Rajeev Lochan	266	246	70.00	10	10	Additional income	

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
135	Redgram & Rajeev Lochan	570.4	548.4	70.00	12	10	Additional income	
136	Redgram & Rajeev Lochan	290.6	270.6	70.00	10	10	Additional income	
137	Redgram & Rajeev Lochan	424	398	70.00	11	15	Additional income	
138	Redgram & Rajeev Lochan	300.6	270.6	70.00	10	20	Additional income	
139	Redgram & Rajeev Lochan	298	271	70.00	12	15	Additional income	
140	Redgram & Rajeev Lochan	307	277	70.00	10	20	Additional income	
1	Redgram & IPA 203	649	625	70.00	12	12	Additional income	
2	Redgram & IPA 203	657	637	70.00	10	10	Additional income	
3	Redgram & IPA 203	601	576	70.00	10	15	Additional income	
4	Redgram & IPA 203	721	696	70.00	10	15	Additional income	
5	Redgram & IPA 203	614	591	70.00	13	10	Additional income	
6	Redgram & IPA 203	641	621	70.00	10	10	Additional income	
7	Redgram & IPA 203	617	585	70.00	12	20	Additional income	
8	Redgram & IPA 203	658	633	70.00	10	15	Additional income	
9	Redgram & IPA 203	681	651	70.00	10	20	Additional income	
10	Redgram & IPA 203	666	636	70.00	10	20	Additional income	
11	Redgram & IPA 203	676	656	70.00	10	10	Additional income	
1	Redgram & farmers variety	1140.8	1128.8		12	0	Additional income	

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
2	Redgram & farmers variety	1068.8	1048.8		10	10	Additional income	
3	Redgram & farmers variety	801.6	791.6		10	0	Additional income	
4	Redgram & farmers variety	1128	1102		11	15	Additional income	
5	Redgram & farmers variety	1120	1097		13	10	Additional income	
6	Redgram & farmers variety	853.8	833.8		10	10	Additional income	
7	Redgram & farmers variety	805.8	795.8		10	0	Additional income	
8	Redgram & farmers variety	1072	1052		10	10	Additional income	
9	Redgram & farmers variety	1052.8	1042.8		10	0	Additional income	
10	Redgram & farmers variety	498.4	488.4		10	0	Additional income	
11	Redgram & farmers variety	518.4	498.4		10	10	Additional income	
12	Redgram & farmers variety	750	730		10	10	Additional income	
13	Redgram & farmers variety	1060.8	1050.8		10	0	Additional income	
14	Redgram & farmers variety	544	524		10	10	Additional income	
15	Redgram & farmers variety	584	569		10	5	Additional income	
16	Redgram & farmers variety	549.2	529.2		12	8	Additional income	

**D. Pulses Farmers' perception of the intervention demonstrated**

Sl. No.	Technologies demonstrated	Farmers' Perception parameters					
		Suitability to their farming system	Likings (Preference)	Affordability	Any negative effect	Is Technology acceptable to all in the group/village	Suggestions, for change/improvement.
01	Rajeev Lochan + ICM & IPM	Resistant to SMD & wilt	Bold seeded	Yes	Pod borer & pod fly	Yes	Short duration variety
02	IPA 203 + ICM & IPM	Resistant to Phytophthora blight & wilt	Good cooking quality	Yes	Pod borer	Yes	Short duration variety

**E. Specific Characteristics of Technology and Performance**

Specific Characteristic	Performance	Performance of Technology vis-a-vis Local Check	Farmers Feedback
Wilt resistant	Good	Demo plot plant growth and no of pod is better than local	Overall good performance
Wilt resistant	Good	Demo plot plant growth and no of pod is better than local	Overall good performance

**F. Extension activities under FLD conducted till dates:**

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
01	Training	24/06/23, 4,8,14,18 & 29/07/2023	128
02	Field day	03/03/2024	16



### 8. Sequential good quality photographs (as per crop stages i.e. growth & development)



### 9. Farmers' training photographs



### 10. Quality Photographs of field visits/field days and technology demonstrated.



### 11. Details of budget utilization

Crop (Provide crop wise information)	Items	Area (ha) allotted	Area (ha) achieved	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Redgram	i) Critical input	50	50	0.00	255072.00	(-) 255072.00
	ii) TA/DA/POL etc. for monitoring					
	iii) Extension Activities (Field Day)					
	iv) Publication of literature					
	<b>Total</b>	<b>50</b>	<b>50</b>	<b>0.00</b>	<b>255072.00</b>	<b>(-) 255072.00</b>

**A. Technical Parameters:**

Sl. No.	Crop demonstrated	Existing (Farmer's) variety name	Existing yield (q/ha)	Yield gap (Kg/ha) w.r.to			Name of Variety + Technology demonstrated	Number of farmers	Area in ha	Yield obtained (q/ha)			Yield gap minimized (%)		
				District yield (D)	State yield (S)	Potential yield (P)				Max.	Min.	Av.	D	S	P
01	Groundnut	K-6	14.25	517	705	1588	K-1812+ICM	136	40	22.70	17.10	19.12	27.04	36.87	(-) (45.37)
02			14.21	222	410	-	K-6+ICM	22	05	15.60	13.00	16.17	13.73	25.35	(-) (23.00)

**B. Economic parameters**

Sl. No.	Variety demonstrated & Technology demonstrated	Farmer's Existing plot				Demonstration plot			
		Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C ratio	Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C Ratio
01	Seed variety-K-1812, 100 kg/ ha, Line sowing (30x10 cm), RDF (25:50:20 ), weedicides (Pendiamethalin @ 1.2 li/ha) & ICM	48950	96657	47707	1.97	50900	122043	71173	2.39
02	Seed variety-K-6, 100 kg/ ha, Line sowing (30x10 cm), RDF (25:50:20 ), Gypsum 300kg/ha, weedicides (Pendiamethalin @ 3 lit/ha) & ICM	48800	96386	48386	1.97	55120	109681	56561	2.06

### C. Socio-economic impact parameter

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
1.	Groundnut & K-1812	1218	1128	67.83	60	30	Strengthening of livelihood	62
2.	Groundnut & K-1812	363	298	67.83	40	25	Strengthening of livelihood	21
3.	Groundnut & K-1812	345	285	67.83	40	20	Strengthening of livelihood	21
4.	Groundnut & K-1812	1154	1069	67.83	60	25	Strengthening of livelihood	62
5.	Groundnut & K-1812	576	516	67.83	30	30	Strengthening of livelihood	31
6.	Groundnut & K-1812	820	740	67.83	40	40	Strengthening of livelihood	42
7.	Groundnut & K-1812	712	622	67.83	50	40	Strengthening of livelihood	42
8.	Groundnut & K-1812	1102	1022	67.83	60	20	Strengthening of livelihood	62
9.	Groundnut & K-1812	729	664	67.83	40	25	Strengthening of livelihood	42
10.	Groundnut & K-1812	940	860	67.83	50	30	Strengthening of livelihood	52
11.	Groundnut & K-1812	643	593	67.83	30	20	Strengthening of livelihood	31
12.	Groundnut & K-1812	564	509	67.83	30	25	Strengthening of livelihood	31
13.	Groundnut & K-1812	395	345	67.83	50	0	Strengthening of livelihood	21
14.	Groundnut & K-1812	588	538	67.83	30	20	Strengthening of livelihood	31
15.	Groundnut & K-1812	372	307	67.83	40	25	Strengthening of livelihood	21
16.	Groundnut & K-1812	612	562	67.83	30	20	Strengthening of livelihood	31

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
17.	Groundnut & K-1812	551	521	67.83	30	0	Strengthening of livelihood	31
18.	Groundnut & K-1812	811	771	67.83	40	0	Strengthening of livelihood	42
19.	Groundnut & K-1812	387	342	67.83	20	25	Strengthening of livelihood	21
20.	Groundnut & K-1812	744	674	67.83	40	30	Strengthening of livelihood	42
21.	Groundnut & K-1812	390	310	67.83	40	40	Strengthening of livelihood	21
22.	Groundnut & K-1812	549	494	67.83	30	25	Strengthening of livelihood	31
23.	Groundnut & K-1812	385	315	67.83	40	30	Strengthening of livelihood	21
24.	Groundnut & K-1812	396	356	67.83	20	20	Strengthening of livelihood	21
25.	Groundnut & K-1812	406	306	67.83	40	60	Strengthening of livelihood	21
26.	Groundnut & K-1812	1280	1195	67.83	60	25	Strengthening of livelihood	62
27.	Groundnut & K-1812	1166	1076	67.83	60	30	Strengthening of livelihood	62
28.	Groundnut & K-1812	600	550	67.83	30	20	Strengthening of livelihood	31
29.	Groundnut & K-1812	804	744	67.83	40	20	Strengthening of livelihood	42
30.	Groundnut & K-1812	396	331	67.83	40	25	Strengthening of livelihood	21
31.	Groundnut & K-1812	186	126	67.83	40	20	Strengthening of livelihood	10
32.	Groundnut & K-1812	387	312	67.83	50	25	Strengthening of livelihood	21
33.	Groundnut & K-1812	788	723	67.83	40	25	Strengthening of livelihood	42
34.	Groundnut & K-1812	769	709	67.83	40	20	Strengthening of livelihood	42

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
35.	Groundnut & K-1812	392	307	67.83	85	0	Strengthening of livelihood	21
36.	Groundnut & K-1812	1362	1252	67.83	60	50	Strengthening of livelihood	62
37.	Groundnut & K-1812	804	734	67.83	40	30	Strengthening of livelihood	42
38.	Groundnut & K-1812	567	517	67.83	30	20	Strengthening of livelihood	31
39.	Groundnut & K-1812	844	754	67.83	40	50	Strengthening of livelihood	42
40.	Groundnut & K-1812	721	651	67.83	40	30	Strengthening of livelihood	42
41.	Groundnut & K-1812	587	537	67.83	30	20	Strengthening of livelihood	31
42.	Groundnut & K-1812	547	497	67.83	30	20	Strengthening of livelihood	31
43.	Groundnut & K-1812	360	280	67.83	50	30	Strengthening of livelihood	21
44.	Groundnut & K-1812	388	248	67.83	100	40	Strengthening of livelihood	21
45.	Groundnut & K-1812	579	499	67.83	30	50	Strengthening of livelihood	31
46.	Groundnut & K-1812	379	279	67.83	40	60	Strengthening of livelihood	21
47.	Groundnut & K-1812	389	279	67.83	60	50	Strengthening of livelihood	21
48.	Groundnut & K-1812	367	297	67.83	20	50	Strengthening of livelihood	21
49.	Groundnut & K-1812	724	644	67.83	40	40	Strengthening of livelihood	42
50.	Groundnut & K-1812	796	756	67.83	40	0	Strengthening of livelihood	42
51.	Groundnut & K-1812	381	311	67.83	20	50	Strengthening of livelihood	21
52.	Groundnut & K-1812	399	339	67.83	20	40	Strengthening of livelihood	21

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
53.	Groundnut & K-1812	350	280	67.83	40	30	Strengthening of livelihood	21
54.	Groundnut & K-1812	384	284	67.83	50	50	Strengthening of livelihood	21
55.	Groundnut & K-1812	1262	1152	67.83	70	40	Strengthening of livelihood	73
56.	Groundnut & K-1812	380	360	67.83	20	0	Strengthening of livelihood	21
57.	Groundnut & K-1812	386	306	67.83	40	40	Strengthening of livelihood	21
58.	Groundnut & K-1812	383	313	67.83	20	50	Strengthening of livelihood	21
59.	Groundnut & K-1812	381	291	67.83	50	40	Strengthening of livelihood	21
60.	Groundnut & K-1812	400	330	67.83	20	50	Strengthening of livelihood	21
61.	Groundnut & K-1812	395	325	67.83	20	50	Strengthening of livelihood	21
62.	Groundnut & K-1812	376	296	67.83	40	40	Strengthening of livelihood	21
63.	Groundnut & K-1812	715	625	67.83	40	50	Strengthening of livelihood	42
64.	Groundnut & K-1812	364	284	67.83	40	40	Strengthening of livelihood	21
65.	Groundnut & K-1812	379	319	67.83	20	40	Strengthening of livelihood	21
66.	Groundnut & K-1812	380	270	67.83	60	50	Strengthening of livelihood	21
67.	Groundnut & K-1812	385	295	67.83	40	50	Strengthening of livelihood	21
68.	Groundnut & K-1812	378	318	67.83	20	40	Strengthening of livelihood	21
69.	Groundnut & K-1812	194	114	67.83	30	50	Strengthening of livelihood	10
70.	Groundnut & K-1812	376	246	67.83	80	50	Strengthening of livelihood	21



Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
71.	Groundnut & K-1812	1453	1333	67.83	80	40	Strengthening of livelihood	83
72.	Groundnut & K-1812	342	297	67.83	20	25	Strengthening of livelihood	21
73.	Groundnut & K-1812	760	370	67.83	40	350	Strengthening of livelihood	42
74.	Groundnut & K-1812	543	473	67.83	30	40	Strengthening of livelihood	31
75.	Groundnut & K-1812	593	513	67.83	30	50	Strengthening of livelihood	31
76.	Groundnut & K-1812	564	474	67.83	30	60	Strengthening of livelihood	31
77.	Groundnut & K-1812	560	490	67.83	30	40	Strengthening of livelihood	31
78.	Groundnut & K-1812	564	484	67.83	30	50	Strengthening of livelihood	31
79.	Groundnut & K-1812	395	275	67.83	80	40	Strengthening of livelihood	21
80.	Groundnut & K-1812	374	274	67.83	40	60	Strengthening of livelihood	21
81.	Groundnut & K-1812	416	316	67.83	20	80	Strengthening of livelihood	21
82.	Groundnut & K-1812	405	345	67.83	20	40	Strengthening of livelihood	21
83.	Groundnut & K-1812	362	272	67.83	40	50	Strengthening of livelihood	21
84.	Groundnut & K-1812	390	300	67.83	40	50	Strengthening of livelihood	21
85.	Groundnut & K-1812	375	295	67.83	20	60	Strengthening of livelihood	21
86.	Groundnut & K-1812	391	301	67.83	50	40	Strengthening of livelihood	21
87.	Groundnut & K-1812	378	298	67.83	20	60	Strengthening of livelihood	21
88.	Groundnut & K-1812	406	296	67.83	60	50	Strengthening of livelihood	21



Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
89.	Groundnut & K-1812	379	299	67.83	40	40	Strengthening of livelihood	21
90.	Groundnut & K-1812	739	649	67.83	40	50	Strengthening of livelihood	42
91.	Groundnut & K-1812	362	312	67.83	20	30	Strengthening of livelihood	21
92.	Groundnut & K-1812	361	271	67.83	40	50	Strengthening of livelihood	21
93.	Groundnut & K-1812	348	288	67.83	20	40	Strengthening of livelihood	21
94.	Groundnut & K-1812	364	289	67.83	40	35	Strengthening of livelihood	21
95.	Groundnut & K-1812	384	309	67.83	20	55	Strengthening of livelihood	21
96.	Groundnut & K-1812	185	85	67.83	40	60	Strengthening of livelihood	10
97.	Groundnut & K-1812	402	287	67.83	75	40	Strengthening of livelihood	21
98.	Groundnut & K-1812	376	276	67.83	20	80	Strengthening of livelihood	21
99.	Groundnut & K-1812	375	305	67.83	30	40	Strengthening of livelihood	21
100.	Groundnut & K-1812	382	337	67.83	20	25	Strengthening of livelihood	21
101.	Groundnut & K-1812	362	292	67.83	40	30	Strengthening of livelihood	21
102.	Groundnut & K-1812	395	340	67.83	20	35	Strengthening of livelihood	21
103.	Groundnut & K-1812	370	290	67.83	40	40	Strengthening of livelihood	21
104.	Groundnut & K-1812	576	466	67.83	30	80	Strengthening of livelihood	31
105.	Groundnut & K-1812	609	539	67.83	30	40	Strengthening of livelihood	31
106.	Groundnut & K-1812	576	496	67.83	30	50	Strengthening of livelihood	31

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
107.	Groundnut & K-1812	585	505	67.83	30	50	Strengthening of livelihood	31
108.	Groundnut & K-1812	752	672	67.83	40	40	Strengthening of livelihood	42
109.	Groundnut & K-1812	555	465	67.83	30	60	Strengthening of livelihood	31
110.	Groundnut & K-1812	588	516	67.83	30	42	Strengthening of livelihood	31
111.	Groundnut & K-1812	571	491	67.83	30	50	Strengthening of livelihood	31
112.	Groundnut & K-1812	554	484	67.83	30	40	Strengthening of livelihood	31
113.	Groundnut & K-1812	570	490	67.83	30	50	Strengthening of livelihood	31
114.	Groundnut & K-1812	591	521	67.83	30	40	Strengthening of livelihood	31
115.	Groundnut & K-1812	563	483	67.83	30	50	Strengthening of livelihood	31
116.	Groundnut & K-1812	552	472	67.83	30	50	Strengthening of livelihood	31
117.	Groundnut & K-1812	763	683	67.83	40	40	Strengthening of livelihood	42
118.	Groundnut & K-1812	564	424	67.83	80	60	Strengthening of livelihood	31
119.	Groundnut & K-1812	807	725	67.83	40	42	Strengthening of livelihood	42
120.	Groundnut & K-1812	821	731	67.83	40	50	Strengthening of livelihood	42
121.	Groundnut & K-1812	684	604	67.83	40	40	Strengthening of livelihood	42
122.	Groundnut & K-1812	764	674	67.83	40	50	Strengthening of livelihood	42
123.	Groundnut & K-1812	800	720	67.83	40	40	Strengthening of livelihood	42
124.	Groundnut & K-1812	797	757	67.83	40	0	Strengthening of livelihood	42

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
125.	Groundnut & K-1812	603	523	67.83	30	50	Strengthening of livelihood	31
126.	Groundnut & K-1812	593	523	67.83	30	40	Strengthening of livelihood	31
127.	Groundnut & K-1812	603	518	67.83	30	55	Strengthening of livelihood	31
128.	Groundnut & K-1812	732	632	67.83	40	60	Strengthening of livelihood	42
129.	Groundnut & K-1812	390	290	67.83	60	40	Strengthening of livelihood	21
130.	Groundnut & K-1812	556	496	67.83	30	30	Strengthening of livelihood	31
131.	Groundnut & K-1812	380	260	67.83	80	40	Strengthening of livelihood	21
132.	Groundnut & K-1812	739	679	67.83	40	20	Strengthening of livelihood	42
133.	Groundnut & K-1812	784	704	67.83	40	40	Strengthening of livelihood	42
134.	Groundnut & K-1812	732	652	67.83	40	40	Strengthening of livelihood	42
135.	Groundnut & K-1812	768	708	67.83	40	20	Strengthening of livelihood	42
136.	Groundnut & K-1812	535	455	67.83	30	50	Strengthening of livelihood	31
137.	Groundnut & K-6	326	326	67.83	-	-	Strengthening of livelihood	21
138.	Groundnut & K-6	313	313	67.83	-	-	Strengthening of livelihood	21
139.	Groundnut & K-6	327	327	67.83	-	-	Strengthening of livelihood	21
140.	Groundnut & K-6	477	477	67.83	-	-	Strengthening of livelihood	31
141.	Groundnut & K-6	327	327	67.83	-	-	Strengthening of livelihood	21
142.	Groundnut & K-6	330	330	67.83	-	-	Strengthening of livelihood	21

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
143.	Groundnut & K-6	320	320	67.83	-	-	Strengthening of livelihood	21
144.	Groundnut & K-6	499	499	67.83	-	-	Strengthening of livelihood	31
145.	Groundnut & K-6	328	328	67.83	-	-	Strengthening of livelihood	21
146.	Groundnut & K-6	317	317	67.83	-	-	Strengthening of livelihood	21
147.	Groundnut & K-6	338	338	67.83	-	-	Strengthening of livelihood	21
148.	Groundnut & K-6	333	333	67.83	-	-	Strengthening of livelihood	21
149.	Groundnut & K-6	323	323	67.83	-	-	Strengthening of livelihood	21
150.	Groundnut & K-6	665	665	67.83	-	-	Strengthening of livelihood	42
151.	Groundnut & K-6	333	333	67.83	-	-	Strengthening of livelihood	21
152.	Groundnut & K-6	311	311	67.83	-	-	Strengthening of livelihood	21
153.	Groundnut & K-6	323	323	67.83	-	-	Strengthening of livelihood	21
154.	Groundnut & K-6	672	672	67.83	-	-	Strengthening of livelihood	42
155.	Groundnut & K-6	307	307	67.83	-	-	Strengthening of livelihood	21
156.	Groundnut & K-6	320	320	67.83	-	-	Strengthening of livelihood	21
157.	Groundnut & K-6	299	299	67.83	-	-	Strengthening of livelihood	21
158.	Groundnut & K-6	323	323	67.83	-	-	Strengthening of livelihood	21

### D. Oil seeds Farmers' perception of the intervention demonstrated

Sl. No.	Technologies demonstrated	Farmers' Perception parameters					
		Suitability to their farming system	Likings (Preference)	Affordability	Any negative effect	Is Technology acceptable to all in the group/village	Suggestions, for change/improvement.
1	Seed variety-K-1812, 100 kg/ ha, Line sowing (30x10 cm), RDF (25:50:20 ), weedicides (Pendiamethalin @ 1.2 li/ha) & ICM	High yielding, profuse bearing, Spanish variety Multiple resistant for drought, pests and diseases.	High-yielding, resistant to pests and diseases, and can produce stable yields even during droughts	Yes	N	Yes	
2	Seed variety-K-6, 100 kg/ ha, Line sowing (30x10 cm), RDF (25:50:20 ), Gypsum 300kg/ha, weedicides (Pendiamethalin @ 3 lit/ha) & ICM	Suitable for rainfed condition	Zypsum maintain the availability of nutrient	Yes	N	Yes	Ensure easy availability of gypsum

### E. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
<b>K-1812 variety</b> : Profuse bearing, & maturity 110-112 Days	High yielding variety Suitable for rainfed	High yielding variety Suitable for rainfed	Resist to pest and disease This variety is easier to uproot than others variety
<b>K-6 variety</b> :- Drought tolerant, and has light tan kernels & Gypsum provides calcium and sulfur, which are important for groundnut growth	Applying gypsum during the flowering stage can improve pod filling and increase the yield.	Gypsum can improve the quality of the seeds produced by groundnut plants.	More no of pods in gypsum field

**F. Extension activities under FLD conducted till dates:**

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
01	Training	10,11,12,17,18,20,21/06/2024 at KVK HQ	134
02	Field day	5,10.10.2024 & Kaira, Kulabira, Lutobertoli	103

**8. Sequential good quality photographs (as per crop stages i.e. growth & development)**



**Germination Stage**



**Growth Stage**



**Pod formation Stage**



**Field day**



**Field day on Groundnut var-K-1812**



## 9. Farmers' training photographs



Training & technology product distribution

## 10. Quality Photographs of field visits/field days and technology demonstrated



Field visit & Field day on Groundnut

### 11. Details of budget utilization

Crop (Provide crop wise information)	Items	Area (ha) allotted	Area (ha) achieved	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Groundnut	i) Critical input	60	45	14,40,000.00	5,09,563.00	-
	ii) TA/DA/POL etc. for monitoring					
	iii) Extension Activities (Field Day)					
	iv) Publication of literature					
	<b>Total</b>	<b>60</b>	<b>45</b>	<b>14,40,000.00</b>	<b>5,09,563.00</b>	<b>-</b>



**A. Technical Parameters:**

Sl. No.	Crop demonstrated	Existing (Farmer's) variety name	Existing yield (q/ha)	Yield gap (Kg/ha) w.r.to			Name of Variety + Technology demonstrated	Number of farmers	Area in ha	Yield obtained (q/ha)			Yield gap minimized (%)		
				District yield (D)	State yield (S)	Potential yield (P)				Max.	Min.	Av.	D	S	P
01	Niger	GA-10	3.42	369	132	(-)133	Birsa Niger-1 + ICM	54	29.8	4.03	5.23	4.67			
02			3.66	372	135	(-)130	Birsa Niger-3 + ICM	99	52.2	4.10	5.13	4.70			

**B. Economic parameters**

Sl. No.	Variety demonstrated & Technology demonstrated	Farmer's Existing plot				Demonstration plot			
		Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C ratio	Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C Ratio
01	Improved seed BN-1 (Seed 5kg/ha), Line sowing (30x10 cm), Fertilizer (20:20:20:15 NPKS) & pest management (Quinolphos 30%EC @750ml/ha	18900	29812	10912	1.57	22100	40708	18608	1.84
	Improved seed BN-3 (Seed 5kg/ha), Line sowing (30x10 cm), Fertilizer (20:20:20:15 NPKS) & pest management (Quinolphos 30%EC @750ml/ha	19100	31904	12804	1.67	22200	40970	18770	1.84

### C. Socio-economic impact parameter

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
1.	Niger & Birsa Niger-1	180	171	87.17	5	4	Additional income for livelihood	14
2.	Niger & Birsa Niger-1	192	180	87.17	6	6	Additional income for livelihood	14
3.	Niger & Birsa Niger-1	172	158	87.17	4	10	Additional income for livelihood	14
4.	Niger & Birsa Niger-1	197	174	87.17	8	15	Additional income for livelihood	14
5.	Niger & Birsa Niger-1	403	388	87.17	5	10	Additional income for livelihood	28
6.	Niger & Birsa Niger-1	180	174	87.17	6	0	Additional income for livelihood	14
7.	Niger & Birsa Niger-1	373	348	87.17	10	15	Additional income for livelihood	28
8.	Niger & Birsa Niger-1	419	404	87.17	5	10	Additional income for livelihood	28
9.	Niger & Birsa Niger-1	363	353	87.17	5	5	Additional income for livelihood	28
10.	Niger & Birsa Niger-1	195	177	87.17	8	10	Additional income for livelihood	14
11.	Niger & Birsa Niger-1	188	170	87.17	6	12	Additional income for livelihood	14
12.	Niger & Birsa Niger-1	179	156	87.17	8	15	Additional income for livelihood	14
13.	Niger & Birsa Niger-1	189	174	87.17	5	10	Additional income for livelihood	14
14.	Niger & Birsa Niger-1	169	151	87.17	6	12	Additional income for livelihood	14
15.	Niger & Birsa Niger-1	192	173	87.17	4	15	Additional income for livelihood	14
16.	Niger & Birsa Niger-1	183	168	87.17	5	10	Additional income for livelihood	14
17.	Niger & Birsa Niger-1	188	174	87.17	4	10	Additional income for livelihood	14

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
18.	Niger & Birsa Niger-1	191	176	87.17	5	10	Additional income for livelihood	14
19.	Niger & Birsa Niger-1	192	174	87.17	6	12	Additional income for livelihood	14
20.	Niger & Birsa Niger-1	176	162	87.17	4	10	Additional income for livelihood	14
21.	Niger & Birsa Niger-1	93	72	87.17	6	15	Additional income for livelihood	7
22.	Niger & Birsa Niger-1	197	177	87.17	5	15	Additional income for livelihood	14
23.	Niger & Birsa Niger-1	90	68	87.17	10	12	Additional income for livelihood	7
24.	Niger & Birsa Niger-1	368	353	87.17	5	10	Additional income for livelihood	28
25.	Niger & Birsa Niger-1	314	309	87.17	5	0	Additional income for livelihood	21
26.	Niger & Birsa Niger-1	357	344	87.17	3	10	Additional income for livelihood	28
27.	Niger & Birsa Niger-1	397	380	87.17	5	12	Additional income for livelihood	28
28.	Niger & Birsa Niger-1	360	344	87.17	6	10	Additional income for livelihood	28
29.	Niger & Birsa Niger-1	384	359	87.17	10	15	Additional income for livelihood	28
30.	Niger & Birsa Niger-1	347	329	87.17	6	12	Additional income for livelihood	28
31.	Niger & Birsa Niger-1	352	337	87.17	5	10	Additional income for livelihood	28
32.	Niger & Birsa Niger-1	355	345	87.17	5	5	Additional income for livelihood	28
33.	Niger & Birsa Niger-1	371	356	87.17	5	10	Additional income for livelihood	28
34.	Niger & Birsa Niger-1	278	258	87.17	8	12	Additional income for livelihood	21
35.	Niger & Birsa Niger-1	349	333	87.17	6	10	Additional income for livelihood	28

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
36.	Niger & Birsa Niger-1	276	255	87.17	6	15	Additional income for livelihood	21
37.	Niger & Birsa Niger-1	373	352	87.17	6	15	Additional income for livelihood	28
38.	Niger & Birsa Niger-1	395	375	87.17	8	12	Additional income for livelihood	28
39.	Niger & Birsa Niger-1	395	379	87.17	6	10	Additional income for livelihood	28
40.	Niger & Birsa Niger-1	196	192	87.17	4	0	Additional income for livelihood	14
41.	Niger & Birsa Niger-1	189	173	87.17	6	10	Additional income for livelihood	14
42.	Niger & Birsa Niger-1	181	164	87.17	5	12	Additional income for livelihood	14
43.	Niger & Birsa Niger-1	161	155	87.17	6	0	Additional income for livelihood	14
44.	Niger & Birsa Niger-1	188	167	87.17	6	15	Additional income for livelihood	14
45.	Niger & Birsa Niger-1	208	190	87.17	6	12	Additional income for livelihood	14
46.	Niger & Birsa Niger-1	184	170	87.17	4	10	Additional income for livelihood	14
47.	Niger & Birsa Niger-1	188	173	87.17	5	10	Additional income for livelihood	14
48.	Niger & Birsa Niger-1	181	170	87.17	6	5	Additional income for livelihood	14
49.	Niger & Birsa Niger-1	201	189	87.17	6	6	Additional income for livelihood	14
50.	Niger & Birsa Niger-1	195	180	87.17	7	8	Additional income for livelihood	14
51.	Niger & Birsa Niger-1	201	185	87.17	6	10	Additional income for livelihood	14
52.	Niger & Birsa Niger-1	352	340	87.17	7	5	Additional income for livelihood	28
53.	Niger & Birsa Niger-1	371	360	87.17	7	4	Additional income for livelihood	28

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/household)
54.	Niger & Birsa Niger-1	341	328	87.17	7	6	Additional income for livelihood	28
55.	Niger & Birsa Niger-3	184	169	87.17	5	10	Additional income for livelihood	14
56.	Niger & Birsa Niger-3	184	166	87.17	6	12	Additional income for livelihood	14
57.	Niger & Birsa Niger-3	199	184	87.17	5	10	Additional income for livelihood	14
58.	Niger & Birsa Niger-3	167	149	87.17	6	12	Additional income for livelihood	14
59.	Niger & Birsa Niger-3	199	182	87.17	7	10	Additional income for livelihood	14
60.	Niger & Birsa Niger-3	179	160	87.17	7	12	Additional income for livelihood	14
61.	Niger & Birsa Niger-3	187	169	87.17	8	10	Additional income for livelihood	14
62.	Niger & Birsa Niger-3	188	171	87.17	7	10	Additional income for livelihood	14
63.	Niger & Birsa Niger-3	185	172	87.17	8	5	Additional income for livelihood	14
64.	Niger & Birsa Niger-3	191	175	87.17	8	8	Additional income for livelihood	14
65.	Niger & Birsa Niger-3	187	171	87.17	10	6	Additional income for livelihood	14
66.	Niger & Birsa Niger-3	195	182	87.17	5	8	Additional income for livelihood	14
67.	Niger & Birsa Niger-3	177	167	87.17	6	4	Additional income for livelihood	14
68.	Niger & Birsa Niger-3	188	177	87.17	5	6	Additional income for livelihood	14
69.	Niger & Birsa Niger-3	176	160	87.17	6	10	Additional income for livelihood	14
70.	Niger & Birsa Niger-3	188	175	87.17	8	5	Additional income for livelihood	14
71.	Niger & Birsa Niger-3	195	179	87.17	10	6	Additional income for livelihood	14

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
72.	Niger & Birsa Niger-3	164	144	87.17	10	10	Additional income for livelihood	14
73.	Niger & Birsa Niger-3	205	188	87.17	5	12	Additional income for livelihood	14
74.	Niger & Birsa Niger-3	179	163	87.17	6	10	Additional income for livelihood	14
75.	Niger & Birsa Niger-3	167	154	87.17	8	5	Additional income for livelihood	14
76.	Niger & Birsa Niger-3	200	190	87.17	10	0	Additional income for livelihood	14
77.	Niger & Birsa Niger-3	180	162	87.17	10	8	Additional income for livelihood	14
78.	Niger & Birsa Niger-3	200	190	87.17	5	5	Additional income for livelihood	14
79.	Niger & Birsa Niger-3	197	185	87.17	6	6	Additional income for livelihood	14
80.	Niger & Birsa Niger-3	274	256	87.17	8	10	Additional income for livelihood	21
81.	Niger & Birsa Niger-3	191	169	87.17	10	12	Additional income for livelihood	14
82.	Niger & Birsa Niger-3	196	181	87.17	5	10	Additional income for livelihood	14
83.	Niger & Birsa Niger-3	188	176	87.17	6	6	Additional income for livelihood	14
84.	Niger & Birsa Niger-3	290	277	87.17	5	8	Additional income for livelihood	21
85.	Niger & Birsa Niger-3	193	182	87.17	6	5	Additional income for livelihood	14
86.	Niger & Birsa Niger-3	191	180	87.17	5	6	Additional income for livelihood	14
87.	Niger & Birsa Niger-3	328	312	87.17	6	10	Additional income for livelihood	28
88.	Niger & Birsa Niger-3	205	187	87.17	6	12	Additional income for livelihood	14
89.	Niger & Birsa Niger-3	357	342	87.17	5	10	Additional income for livelihood	28

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
90.	Niger & Birsa Niger-3	333	322	87.17	6	5	Additional income for livelihood	28
91.	Niger & Birsa Niger-3	405	389	87.17	6	10	Additional income for livelihood	28
92.	Niger & Birsa Niger-3	360	349	87.17	6	5	Additional income for livelihood	28
93.	Niger & Birsa Niger-3	400	388	87.17	6	6	Additional income for livelihood	28
94.	Niger & Birsa Niger-3	395	379	87.17	6	10	Additional income for livelihood	28
95.	Niger & Birsa Niger-3	373	362	87.17	5	6	Additional income for livelihood	28
96.	Niger & Birsa Niger-3	381	371	87.17	5	5	Additional income for livelihood	28
97.	Niger & Birsa Niger-3	392	380	87.17	6	6	Additional income for livelihood	28
98.	Niger & Birsa Niger-3	191	176	87.17	5	10	Additional income for livelihood	14
99.	Niger & Birsa Niger-3	189	177	87.17	6	6	Additional income for livelihood	14
100.	Niger & Birsa Niger-3	196	181	87.17	5	10	Additional income for livelihood	14
101.	Niger & Birsa Niger-3	191	178	87.17	8	5	Additional income for livelihood	14
102.	Niger & Birsa Niger-3	164	152	87.17	6	6	Additional income for livelihood	14
103.	Niger & Birsa Niger-3	411	396	87.17	7	8	Additional income for livelihood	28
104.	Niger & Birsa Niger-3	357	341	87.17	9	7	Additional income for livelihood	28
105.	Niger & Birsa Niger-3	333	318	87.17	10	5	Additional income for livelihood	28
106.	Niger & Birsa Niger-3	400	389	87.17	5	6	Additional income for livelihood	28
107.	Niger & Birsa Niger-3	360	350	87.17	6	4	Additional income for livelihood	28

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
108.	Niger & Birsa Niger-3	397	381	87.17	6	10	Additional income for livelihood	28
109.	Niger & Birsa Niger-3	395	380	87.17	10	5	Additional income for livelihood	28
110.	Niger & Birsa Niger-3	365	354	87.17	5	6	Additional income for livelihood	28
111.	Niger & Birsa Niger-3	381	370	87.17	6	5	Additional income for livelihood	28
112.	Niger & Birsa Niger-3	392	381	87.17	5	6	Additional income for livelihood	28
113.	Niger & Birsa Niger-3	376	363	87.17	6	7	Additional income for livelihood	28
114.	Niger & Birsa Niger-3	381	365	87.17	6	10	Additional income for livelihood	28
115.	Niger & Birsa Niger-3	232	220	87.17	6	6	Additional income for livelihood	17
116.	Niger & Birsa Niger-3	115	103	87.17	5	7	Additional income for livelihood	8
117.	Niger & Birsa Niger-3	98	85	87.17	5	8	Additional income for livelihood	8
118.	Niger & Birsa Niger-3	246	236	87.17	5	5	Additional income for livelihood	17
119.	Niger & Birsa Niger-3	107	96	87.17	5	6	Additional income for livelihood	8
120.	Niger & Birsa Niger-3	101	92	87.17	5	4	Additional income for livelihood	8
121.	Niger & Birsa Niger-3	240	229	87.17	5	6	Additional income for livelihood	17
122.	Niger & Birsa Niger-3	135	123	87.17	7	5	Additional income for livelihood	11
123.	Niger & Birsa Niger-3	197	184	87.17	7	6	Additional income for livelihood	14
124.	Niger & Birsa Niger-3	148	135	87.17	8	5	Additional income for livelihood	11
125.	Niger & Birsa Niger-3	219	204	87.17	7	8	Additional income for livelihood	17



Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
126.	Niger & Birsa Niger-3	143	127	87.17	8	8	Additional income for livelihood	11
127.	Niger & Birsa Niger-3	229	216	87.17	8	5	Additional income for livelihood	17
128.	Niger & Birsa Niger-3	113	99	87.17	8	6	Additional income for livelihood	8
129.	Niger & Birsa Niger-3	122	107	87.17	10	5	Additional income for livelihood	8
130.	Niger & Birsa Niger-3	116	104	87.17	5	7	Additional income for livelihood	8
131.	Niger & Birsa Niger-3	229	218	87.17	5	6	Additional income for livelihood	17
132.	Niger & Birsa Niger-3	205	194	87.17	6	5	Additional income for livelihood	18
133.	Niger & Birsa Niger-3	247	235	87.17	6	6	Additional income for livelihood	18
134.	Niger & Birsa Niger-3	223	213	87.17	6	4	Additional income for livelihood	18
135.	Niger & Birsa Niger-3	177	161	87.17	10	6	Additional income for livelihood	14
136.	Niger & Birsa Niger-3	250	240	87.17	5	5	Additional income for livelihood	18
137.	Niger & Birsa Niger-3	230	219	87.17	6	5	Additional income for livelihood	18
138.	Niger & Birsa Niger-3	250	237	87.17	8	5	Additional income for livelihood	18
139.	Niger & Birsa Niger-3	395	381	87.17	8	6	Additional income for livelihood	28
140.	Niger & Birsa Niger-3	228	215	87.17	7	6	Additional income for livelihood	18
141.	Niger & Birsa Niger-3	195	186	87.17	5	4	Additional income for livelihood	14
142.	Niger & Birsa Niger-3	245	234	87.17	6	5	Additional income for livelihood	18
143.	Niger & Birsa Niger-3	160	149	87.17	5	6	Additional income for livelihood	12

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
144.	Niger & Birsa Niger-3	146	136	87.17	6	4	Additional income for livelihood	11
145.	Niger & Birsa Niger-3	193	180	87.17	8	5	Additional income for livelihood	14
146.	Niger & Birsa Niger-3	192	179	87.17	7	6	Additional income for livelihood	14
147.	Niger & Birsa Niger-3	187	174	87.17	6	7	Additional income for livelihood	14
148.	Niger & Birsa Niger-3	336	326	87.17	5	5	Additional income for livelihood	28
149.	Niger & Birsa Niger-3	379	363	87.17	10	6	Additional income for livelihood	28
150.	Niger & Birsa Niger-3	187	172	87.17	10	5	Additional income for livelihood	14
151.	Niger & Birsa Niger-3	187	177	87.17	5	5	Additional income for livelihood	14
152.	Niger & Birsa Niger-3	360	348	87.17	6	6	Additional income for livelihood	28
153.	Niger & Birsa Niger-3	242	230	87.17	6	6	Additional income for livelihood	18

#### D. Oil seeds Farmers' perception of the intervention demonstrated

Sl. No.	Technologies demonstrated	Farmers' Perception parameters					
		Suitability to their farming system	Likings (Preference)	Affordability	Any negative effect	Is Technology acceptable to all in the group/village	Suggestions, for change/improvement.
1	ICM	Yes	Less water requiring crop	Yes	Crop yield affected by <i>Cuscuta</i> parasite	Yes	Required high yielding crop variety
2	ICM	Yes	Less water requiring crop	Yes	Crop yield affected by <i>Cuscuta</i> parasite	Yes	Required high yielding crop variety

### E. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
Moderately resistant to <i>Alternaria blight</i> ,	Good	More no of capsules & branches is more than local variety	Overall good performance
Moderately resistant to <i>Alternaria blight</i> ,	Good	More no of capsules & branches is more than local variety	Overall good performance

### F. Extension activities under FLD conducted till dates:

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
01	Training	21,24,28/8/2024,3,5,7,8,9/09/2024 KVK (HQ)	148
02	Field day	15/11/2023	23

### 8. Sequential good quality photographs (as per crop stages i.e. growth & development)



**Germination Stage**



**Growth Stage**



**Flowering Stage**



Capsules formation Stage

Capsule mature stage

## 9. Farmers' training photographs





### 10. Quality Photographs of field visits/field days and technology demonstrated.



Field visit



Field day

### 11. Details of budget utilization

Crop (Provide crop wise information)	Items	Area (ha) allotted	Area (ha) achieved	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Groundnut	i) Critical input	100	80	2,01,200.00	2,01,200.00	-
	ii) TA/DA/POL etc. for monitoring					
	iii) Extension Activities (Field Day)					
	iv) Publication of literature					
	<b>Total</b>	<b>100</b>	<b>80</b>	<b>2,01,200.00</b>	<b>2,01,200.00</b>	<b>-</b>

**A. Technical Parameters:**

Sl. No.	Crop demonstrated	Existing (Farmer's) variety name	Existing yield (q/ha)	Yield gap (Kg/ha) w.r.to			Name of Variety + Technology demonstrated	Number of farmers	Area in ha	Yield obtained (q/ha)			Yield gap minimized (%)		
				District yield (D)	State yield (S)	Potential yield (P)				Max.	Min.	Av.	D	S	P
01	Sesame	Kankey Safed	5.18	574	409	(-) 221	GT-6+ICM	91	40	6.30	10.03	7.79	280	110.54	(-)22.10

**B. Economic parameters**

Sl. No.	Variety demonstrated & Technology demonstrated	Farmer's Existing plot				Demonstration plot			
		Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C ratio	Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C Ratio
01	Improved seed GT-6 (Seed 5 kg/ha), Line sowing (30x15 cm), RDF (50:50:20), weed management (Pendimethalin 2.5 lit/ha)& Trizophos 40% EC@ 500ml/ha	26450	48003	21553	1.81	26950	72190	45240	2.67

**C. Socio-economic impact parameter**

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
1.	Sesame & GT-6	401	9258	92.67	5	4	Strengthening of livelihood	22
2.	Sesame & GT-6	321	9258	92.67	4	5	Strengthening of livelihood	22

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
3.	Sesame & GT-6	363	9255	92.67	6	6	Strengthening of livelihood	22
4.	Sesame & GT-6	168	9254	92.67	8	5	Strengthening of livelihood	11
5.	Sesame & GT-6	365	9260	92.67	5	2	Strengthening of livelihood	22
6.	Sesame & GT-6	353	9263	92.67	4	0	Strengthening of livelihood	22
7.	Sesame & GT-6	331	9261	92.67	6	0	Strengthening of livelihood	22
8.	Sesame & GT-6	147	9254	92.67	8	5	Strengthening of livelihood	11
9.	Sesame & GT-6	156	9257	92.67	6	4	Strengthening of livelihood	11
10.	Sesame & GT-6	339	9261	92.67	6	0	Strengthening of livelihood	22
11.	Sesame & GT-6	305	9256	92.67	5	6	Strengthening of livelihood	22
12.	Sesame & GT-6	160	9256	92.67	5	6	Strengthening of livelihood	11
13.	Sesame & GT-6	146	9251	92.67	6	10	Strengthening of livelihood	11
14.	Sesame & GT-6	156	9255	92.67	7	5	Strengthening of livelihood	11
15.	Sesame & GT-6	147	9262	92.67	5	0	Strengthening of livelihood	11
16.	Sesame & GT-6	579	9263	92.67	4	0	Strengthening of livelihood	45
17.	Sesame & GT-6	165	9262	92.67	5	0	Strengthening of livelihood	11
18.	Sesame & GT-6	311	9259	92.67	3	5	Strengthening of livelihood	22
19.	Sesame & GT-6	165	9257	92.67	4	6	Strengthening of livelihood	11
20.	Sesame & GT-6	588	9260	92.67	2	5	Strengthening of livelihood	34

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
21.	Sesame & GT-6	336	9265	92.67	2	0	Strengthening of livelihood	22
22.	Sesame & GT-6	335	9265	92.67	2	0	Strengthening of livelihood	22
23.	Sesame & GT-6	171	9257	92.67	5	5	Strengthening of livelihood	11
24.	Sesame & GT-6	147	9258	92.67	5	4	Strengthening of livelihood	11
25.	Sesame & GT-6	340	9257	92.67	4	6	Strengthening of livelihood	22
26.	Sesame & GT-6	704	9264	92.67	3	0	Strengthening of livelihood	45
27.	Sesame & GT-6	320	9257	92.67	5	5	Strengthening of livelihood	22
28.	Sesame & GT-6	170	9262	92.67	5	0	Strengthening of livelihood	11
29.	Sesame & GT-6	164	9261	92.67	6	0	Strengthening of livelihood	11
30.	Sesame & GT-6	345	9258	92.67	4	5	Strengthening of livelihood	22
31.	Sesame & GT-6	175	9258	92.67	5	4	Strengthening of livelihood	11
32.	Sesame & GT-6	145	9260	92.67	4	3	Strengthening of livelihood	11
33.	Sesame & GT-6	317	9264	92.67	3	0	Strengthening of livelihood	22
34.	Sesame & GT-6	263	9261	92.67	6	0	Strengthening of livelihood	22
35.	Sesame & GT-6	680	9265	92.67	2	0	Strengthening of livelihood	45
36.	Sesame & GT-6	605	9257	92.67	5	5	Strengthening of livelihood	45
37.	Sesame & GT-6	323	9258	92.67	3	6	Strengthening of livelihood	22
38.	Sesame & GT-6	281	9259	92.67	4	4	Strengthening of livelihood	22



Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
39.	Sesame & GT-6	289	9255	92.67	2	10	Strengthening of livelihood	22
40.	Sesame & GT-6	312	9262	92.67	3	2	Strengthening of livelihood	22
41.	Sesame & GT-6	295	9257	92.67	5	5	Strengthening of livelihood	22
42.	Sesame & GT-6	340	9260	92.67	3	4	Strengthening of livelihood	22
43.	Sesame & GT-6	353	9256	92.67	5	6	Strengthening of livelihood	22
44.	Sesame & GT-6	320	9263	92.67	4	0	Strengthening of livelihood	22
45.	Sesame & GT-6	320	9258	92.67	4	5	Strengthening of livelihood	22
46.	Sesame & GT-6	328	9261	92.67	6	0	Strengthening of livelihood	22
47.	Sesame & GT-6	327	9263	92.67	4	0	Strengthening of livelihood	22
48.	Sesame & GT-6	325	9257	92.67	5	5	Strengthening of livelihood	22
49.	Sesame & GT-6	291	9259	92.67	4	4	Strengthening of livelihood	22
50.	Sesame & GT-6	352	9258	92.67	6	3	Strengthening of livelihood	22
51.	Sesame & GT-6	165	9265	92.67	2	0	Strengthening of livelihood	11
52.	Sesame & GT-6	331	9262	92.67	5	0	Strengthening of livelihood	22
53.	Sesame & GT-6	292	9264	92.67	3	0	Strengthening of livelihood	22
54.	Sesame & GT-6	312	9258	92.67	4	5	Strengthening of livelihood	22
55.	Sesame & GT-6	324	9259	92.67	2	6	Strengthening of livelihood	22
56.	Sesame & GT-6	305	9258	92.67	5	4	Strengthening of livelihood	22

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
57.	Sesame & GT-6	309	9252	92.67	5	10	Strengthening of livelihood	22
58.	Sesame & GT-6	292	9262	92.67	3	2	Strengthening of livelihood	22
59.	Sesame & GT-6	312	9259	92.67	4	4	Strengthening of livelihood	22
60.	Sesame & GT-6	146	9257	92.67	5	5	Strengthening of livelihood	11
61.	Sesame & GT-6	145	9259	92.67	4	4	Strengthening of livelihood	11
62.	Sesame & GT-6	275	9259	92.67	5	3	Strengthening of livelihood	22
63.	Sesame & GT-6	456	9261	92.67	4	2	Strengthening of livelihood	34
64.	Sesame & GT-6	316	9257	92.67	5	5	Strengthening of livelihood	22
65.	Sesame & GT-6	265	9259	92.67	4	4	Strengthening of livelihood	22
66.	Sesame & GT-6	547	9255	92.67	6	6	Strengthening of livelihood	45
67.	Sesame & GT-6	557	9261	92.67	3	3	Strengthening of livelihood	45
68.	Sesame & GT-6	605	9259	92.67	5	3	Strengthening of livelihood	45
69.	Sesame & GT-6	504	9264	92.67	3	0	Strengthening of livelihood	45
70.	Sesame & GT-6	563	9263	92.67	4	0	Strengthening of livelihood	45
71.	Sesame & GT-6	289	9260	92.67	2	5	Strengthening of livelihood	22
72.	Sesame & GT-6	499	9258	92.67	5	4	Strengthening of livelihood	45
73.	Sesame & GT-6	264	9262	92.67	5	0	Strengthening of livelihood	22
74.	Sesame & GT-6	424	9264	92.67	3	0	Strengthening of livelihood	34

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
75.	Sesame & GT-6	291	9257	92.67	5	5	Strengthening of livelihood	22
76.	Sesame & GT-6	289	9258	92.67	5	4	Strengthening of livelihood	22
77.	Sesame & GT-6	312	9260	92.67	4	3	Strengthening of livelihood	22
78.	Sesame & GT-6	295	9260	92.67	4	3	Strengthening of livelihood	22
79.	Sesame & GT-6	336	9263	92.67	4	0	Strengthening of livelihood	22
80.	Sesame & GT-6	352	9258	92.67	5	4	Strengthening of livelihood	22
81.	Sesame & GT-6	640	9262	92.67	5	0	Strengthening of livelihood	45
82.	Sesame & GT-6	611	9257	92.67	5	5	Strengthening of livelihood	45
83.	Sesame & GT-6	303	9259	92.67	4	4	Strengthening of livelihood	22
84.	Sesame & GT-6	327	9260	92.67	4	3	Strengthening of livelihood	22
85.	Sesame & GT-6	472	9251	92.67	6	10	Strengthening of livelihood	34
86.	Sesame & GT-6	291	9255	92.67	4	8	Strengthening of livelihood	22
87.	Sesame & GT-6	579	9257	92.67	4	6	Strengthening of livelihood	45
88.	Sesame & GT-6	743	9258	92.67	5	4	Strengthening of livelihood	56
89.	Sesame & GT-6	376	9259	92.67	3	5	Strengthening of livelihood	34
90.	Sesame & GT-6	253	9259	92.67	4	4	Strengthening of livelihood	22
91.	Sesame & GT-6	563	9257	92.67	4	6	Strengthening of livelihood	45

#### D. Oil seeds Farmers' perception of the intervention demonstrated

Sl. No.	Technologies demonstrated	Farmers' Perception parameters					
		Suitability to their farming system	Likings (Preference)	Affordability	Any negative effect	Is Technology acceptable to all in the group/village	Suggestions, for change/improvement.
1	Improved seed GT-6 (Seed 5 kg/ha), Line sowing (30x15 cm), RDF (50:50:20) , weed management (Pendimethalin 2.5 lit/ha)& Trizophos 40% EC@ 500ml/ha	High yielding variety	High-yielding and white seeded	Yes	N	Yes	

#### E. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
<b>GT-6 variety</b> : White seeded, & maturity 80-82 Days	High yielding variety Suitable for rainfed	High yielding variety Suitable for rainfed	Due to white and big seeds, it gets good rates in the market.

#### F. Extension activities under FLD conducted till dates:

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
01	Training	26/06/2024, 1,7/7/2024 & KVK HQ	78
02	Field day	30/10/2024 & Sikwar	13

## 8. Sequential good quality photographs (as per crop stages i.e. growth & development)



**Germination Stage**



**Growth Stage**



**Pod formation Stage**



**Field day**



### 9. Farmers' training photographs



**Training & technology product distribution**

### 10. Quality Photographs of field visits/field days and technology demonstrated

### 11. Details of budget utilization

Crop (Provide crop wise information)	Items	Area (ha) allotted	Area (ha) achieved	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Sesame	i) Critical input	40	40	47,944.00	47,944.00	-
	ii) TA/DA/POL etc. for monitoring					
	iii) Extension Activities (Field Day)					
	iv) Publication of literature					
	<b>Total</b>	<b>40</b>	<b>40</b>	<b>47,944.00</b>	<b>47,944.00</b>	<b>-</b>

**A. Farmers and farm women including the sponsored training programme (on campus)**

**A. Farmers and farm women including the sponsored training programme (on campus)**

		No. of Participants
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[illegible]

[illegible]



Thematic Area	No. of Courses	No. of Participants											
		Others			SC			ST			Grand Total		
		M	F	T	M	F	T	M	F	T	M	F	T
Production and management technology													
Post-harvest technology and value addition													
Others, if any													
<b>Total (g)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>GT (a-g)</b>	<b>16</b>	<b>8</b>	<b>0</b>	<b>8</b>	<b>8</b>	<b>0</b>	<b>8</b>	<b>282</b>	<b>98</b>	<b>380</b>	<b>298</b>	<b>98</b>	<b>396</b>
<b>III. Soil Health and Fertility Management</b>													
Soil fertility management	1	0	0	0	0	0	0	9	21	30	9	21	30
Soil and Water Conservation													
Integrated Nutrient Management	2	1	0	1	1	0	1	18	17	35	20	17	37
Production and use of organic inputs													
Management of Problematic soils	1	2	0	2	0	0	0	19	3	22	21	3	24
Micro nutrient deficiency in crops	1	2	0	2	0	0	0	16	5	21	18	5	23
Nutrient Use Efficiency													
Soil and Water Testing													
Others, if any													
Liquid fertilizer	2	3	0	3	3	0	3	39	5	44	45	5	50
Natural Farming	3	20	3	23	1	0	1	73	15	88	94	18	112
Integrated Crop Management	5	4	4	8	0	0	0	58	26	84	62	30	92
Soil health management	1	4	0		0	0		10	5	15	14	5	19
<b>Total</b>	<b>16</b>	<b>36</b>	<b>7</b>	<b>39</b>	<b>5</b>	<b>0</b>	<b>5</b>	<b>242</b>	<b>97</b>	<b>339</b>	<b>283</b>	<b>104</b>	<b>387</b>
<b>IV. Livestock Production and Management</b>													
Dairy Management	1	0	0	0	0	0	0	13	11	24	13	11	24
Poultry Management													
Piggery Management													
Rabbit Management													
Disease Management													
Feed management													
Production of quality animal products													
Others													
Vermicompost production	1	0	0	0	1	0	1	13	21	34	14	21	35
Fodder conservation	1	0	1	1	0	0	0	8	15	23	8	16	24
Goatry	1	1	2	3	0	0	0	9	12	21	10	14	24
Vaccination	1	0	0	0	0	0	0	14	10	24	14	10	24
<b>Total</b>	<b>5</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>57</b>	<b>69</b>	<b>126</b>	<b>59</b>	<b>72</b>	<b>131</b>

Thematic Area	No. of Courses	No. of Participants											
		Others			SC			ST			Grand Total		
		M	F	T	M	F	T	M	F	T	M	F	T
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening	4	0	2	2	0	0	0	0	65	65	0	67	67
Design and development of low/minimum cost diet													
Designing and development for high nutrient efficiency diet	2	0	0	0	0	0	0	0	45	45	0	45	45
Minimization of nutrient loss in processing	1	0	0	0	0	0	0	0	25	25	0	25	25
Gender mainstreaming through SHGs													
Storage loss minimization techniques													
Enterprise development													
Value addition	2	0	0	0	0	0	0	0	37	37	0	37	37
Income generation activities for empowerment of rural Women													
Location specific drudgery reduction technologies													
Rural Crafts													
Capacity building													
Women and child care													
Others, if any													
Mushroom production	1	0	3	3	0	0	0	0	15	15	0	18	18
Nutritional garden	1	0	0	0	0	0	0	0	16	16	0	16	16
Nutritious diet	1	0	7		0	0		0	23	23	0	30	30
Nutri cereal	1	0	0		0	0		0	18	18	0	18	18
Total	13	0	12	5	0	0	0	0	244	244	0	256	256
VI. Agril. Engineering													
Installation and maintenance of micro irrigation systems													
Use of Plastics in farming practices													
Production of small tools and implements													
Repair and maintenance of farm machinery and implements	1	0	0	0	0	2	2	6	2	8	6	4	10
Small scale processing and value addition													
Post-Harvest Technology													
Others, if any													
Farm mechanization	2	11	8	19	0	0	0	42	51	93	53	59	112

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Thematic Area	No. of Courses	No. of Participants											
		Others			SC			ST			Grand Total		
		M	F	T	M	F	T	M	F	T	M	F	T
<b>IX. Production of Inputs at site</b>													
Seed Production													
Planting material production													
Bio-agents production													
Bio-pesticides production													
Bio-fertilizer production													
Vermi-compost production													
Organic manures production													
Production of fry and fingerlings													
Production of Bee-colonies and wax sheets													
Small tools and implements													
Production of livestock feed and fodder													
Production of Fish feed													
Others, if any													
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>X. Capacity Building and Group Dynamics</b>													
Leadership development													
Group dynamics													
Formation and Management of SHGs													
Mobilization of social capital													
Entrepreneurial development of farmers/youths													
WTO and IPR issues													
Others, if any													
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>XI Agro-forestry</b>													
Production technologies													
Nursery management													
Integrated Farming Systems													
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL</b>	<b>104</b>	<b>129</b>	<b>84</b>	<b>202</b>	<b>38</b>	<b>2</b>	<b>40</b>	<b>1237</b>	<b>913</b>	<b>2150</b>	<b>1404</b>	<b>999</b>	<b>2403</b>

**B) Rural Youth Including the sponsored training programmes (on campus)**

[illegible]

**C) Extension Personnel Including the sponsored training programmes (on campus)**

[illegible]

[illegible]

Thematic Area	No. of Courses	No. of Participants											
		Others			SC			ST			Grand Total		
		M	F	T	M	F	T	M	F	T	M	F	T
Production of low volume and high value crops	12	20	17	37	2	2	4	179	193	372	201	212	413
Off-season vegetables													
Nursery raising	1	0	0	0	0	0	0	19	11	30	19	11	30
Export potential vegetables													
Grading and standardization													
Protective cultivation (Green Houses, Shade Net etc.)	1	0	0	0	0	0	0	15	18	33	15	18	33
Others, if any (Cultivation of Vegetable)													
Integrated Crop Management	5	29	5	34	0	1	1	125	127	252	154	133	287
Exotic vegetables													
b) Fruits													
Layout and Management of Orchards	1	1	0	1	0	1	1	14	5	19	15	6	21
Cultivation of Fruit	2	0	0	0	0	0	0	50	28	78	50	28	78
Management of young plants/orchards													
Rejuvenation of old orchards													
Export potential fruits													
Micro irrigation systems of orchards													
Plant propagation techniques	1	0	0	0	0	0	0	0	25	25	0	25	25
Others, if any(INM)													
c) Ornamental Plants													
Nursery Management													
Management of potted plants													
Export potential of ornamental plants													
Propagation techniques of Ornamental Plants													
Others, if any													
d) Plantation crops													
Production and Management technology													
Processing and value addition													
Others, if any													
e) Tuber crops													
Production and Management technology													
Processing and value addition													
Others, if any													
f) Spices													
Production and Management technology	1	0	0	0	0	0	0	14	7	21	14	7	21



Thematic Area	No. of Courses	No. of Participants											
		Others			SC			ST			Grand Total		
		M	F	T	M	F	T	M	F	T	M	F	T
Processing and value addition													
Others, if any													
g) Medicinal and Aromatic Plants													
Nursery management													
Production and management technology	1	0	0	0	0	0	0	12	13	25	12	13	25
Post-harvest technology and value addition													
Others, if any													
<b>Total</b>	<b>25</b>	<b>50</b>	<b>22</b>	<b>72</b>			<b>6</b>			<b>855</b>	<b>480</b>	<b>453</b>	<b>933</b>
<b>III. Soil Health and Fertility Management</b>													
Soil fertility management													
Soil and Water Conservation													
Integrated Nutrient Management	3	1	0	1	0	0	0	78	35	113	79	35	114
Production and use of organic inputs	2	1	0	1	0	0	0	51	12	63	52	12	64
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency													
Soil and Water Testing	3	4	2	6	0	0	0	193	29	222	197	31	228
Others, if any													
Organic farming													
Soil health management	11	46	11	57	1	0	1	198	99	297	245	110	355
Natural farming	8	48	33	81	3	5	8	121	110	231	172	148	320
Balance use of fertilizer	2	8	0	8	0	0	0	37	24	61	45	24	69
Liquid fertilizer	1	1	0	1	0	0	0	15	4	19	16	4	20
<b>Total</b>	<b>30</b>	<b>109</b>	<b>46</b>	<b>155</b>	<b>4</b>	<b>5</b>	<b>9</b>	<b>693</b>	<b>313</b>	<b>1006</b>	<b>806</b>	<b>364</b>	<b>1170</b>
<b>IV. Livestock Production and Management</b>													
Dairy Management													
Poultry Management													
Piggery Management													
Rabbit Management													
Disease Management	2	6	5	11	0	0	0	20	17	37	26	22	48
Feed management	2	6	17	23	0	1	1	14	11	25	20	29	49
Production of quality animal products													
Others													
Vaccination	4	12	10	22	3	2	5	63	18	81	78	30	108
Fodder conservation	1	8	0	8	0	0	0	6	10	16	14	10	24

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Thematic Area	No. of Courses	No. of Participants											
		Others			SC			ST			Grand Total		
		M	F	T	M	F	T	M	F	T	M	F	T
Fish processing and value addition													
Others, if any													
IX. Production of Inputs at site													
Seed Production													
Planting material production													
Bio-agents production													
Bio-pesticides production													
Bio-fertilizer production													
Vermi-compost production													
Organic manures production													
Production of fry and fingerlings													
Production of Bee-colonies and wax sheets													
Small tools and implements													
Production of livestock feed and fodder													
Production of Fish feed													
Others, if any													
X. Capacity Building and Group Dynamics													
Leadership development													
Group dynamics													
Formation and Management of SHGs													
Mobilization of social capital													
Entrepreneurial development of farmers/youths													
WTO and IPR issues													
Others, if any													
XI Agro-forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													
XII. Others (Pl. Specify)													
TOTAL													
GRAND TOTAL	141	317	207	524	18	17	41	1626	1342	3823	2391	1997	4388

**E) RURAL YOUTH Including the sponsored training programmes (Off Campus)**

[illegible]

Thematic Area	No. of Courses	No. of Participants											
		Others			SC			ST			Grand Total		
		M	F	T	M	F	T	M	F	T	M	F	T
Tailoring and Stitching													
Rural Crafts													
Others, if any													
Horticulture Training	1	1	7	8	0	0	0	13	30	43	14	37	51
<b>TOTAL</b>	<b>1</b>	<b>1</b>	<b>7</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>30</b>	<b>43</b>	<b>14</b>	<b>37</b>	<b>51</b>

**F. Extension personnel including the sponsored training programmes (Off Campus)**

Thematic Area	No. of Courses	No. of Participants											
		Others			SC			ST			Grand Total		
		M	F	T	M	F	T	M	F	T	M	F	T
<b>(C) Extension Personnel</b>													
Productivity enhancement in field crops													
Integrated Pest Management													
Integrated Nutrient management													
Rejuvenation of old orchards													
Value addition													
Protected cultivation technology													
Formation and Management of SHGs													
Group Dynamics and farmers organization													
Information networking among farmers													
Capacity building for ICT application													
Care and maintenance of farm machinery and implements													
WTO and IPR issues													
Management in farm animals													
Livestock feed and fodder production													
Household food security													
Women and Child care													
Low cost and nutrient efficient diet designing													
Production and use of organic inputs													
Gender mainstreaming through SHGs													
Crop intensification													
Others if any													
Nutritional garden	1	0	0	0	0	0	0	0	34	34	0	34	34
Resilient Agriculture	1	4	2	6	0	0	0	20	15	35	24	17	41
<b>TOTAL</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>49</b>	<b>69</b>	<b>24</b>	<b>51</b>	<b>75</b>

**G) Consolidated table (ON and OFF Campus)**
**i. Farmers & Farm Women**

Thematic Area	No. of Courses	No. of Participants											
		Others			SC			ST			Grand Total		
		M	F	T	M	F	T	M	F	T	M	F	T
(A) Farmers & Farm Women													
I. Crop Production													
Weed Management	2	2	2	4	0	0	0	34	31	65	36	33	69
Resource Conservation Technologies	1	0	0	0	0	0	0	24	0	24	24	0	24
Cropping Systems													
Crop Diversification													
Integrated Farming													
Water management	1	0	0	0	0	0	0	12	4	16	12	4	16
Seed production													
Nursery management													
Integrated Crop Management	82	137	85	222	10	9	19	992	881	1873	1139	975	2114
Fodder production													
Production of organic inputs	1	0	0	0	0	0	0	0	25	25	0	25	25
Others,													
Post harvest technology	1	2	0	2	0	0	0	24	4	28	26	4	30
Diversified farming	1	0	0		0	0	0	2	21	23	2	21	23
Total	89	141	87	228	10	9	19	1088	966	2054	1239	1062	2301
II. Horticulture													
a) Vegetable Crops													
Integrated nutrient management													
Water management	1	0	0	0	0	0	0	19	7	26	19	7	26
Enterprise development													
Skill development													
Yield increment													
Production of low volume and high value crops	15	23	17	40	6	2	8	234	207	441	263	226	489
Off-season vegetables													
Nursery raising	1	0	0	0	0	0	0	19	11	30	19	11	30
Export potential vegetables													
Grading and standardization	1	0	0	0	0	0	0	14	11	25	14	11	25
Protective cultivation (Green Houses, Shade Net etc.)	1	0	0	0	0	0	0	15	18	33	15	18	33
Others,													
Integrated Crop Management	5	29	5	34	0	1	1	125	127	252	154	133	287

[illegible]



Thematic Area	No. of Courses	No. of Participants											
		Others			SC			ST			Grand Total		
		M	F	T	M	F	T	M	F	T	M	F	T
Others, if any													
<b>Total</b>	<b>33</b>	<b>54</b>	<b>22</b>	<b>76</b>	<b>6</b>	<b>4</b>	<b>10</b>	<b>569</b>	<b>476</b>	<b>1045</b>	<b>629</b>	<b>502</b>	<b>1131</b>
<b>III. Soil Health and Fertility Management</b>													
Soil fertility management	1	0	0	0	0	0	0	9	21	30	9	21	30
Soil and Water Conservation													
Integrated Nutrient Management	5	2	0	2	1	0	1	96	52	148	99	52	151
Production and use of organic inputs	2	1	0	1	0	0	0	51	12	63	52	12	64
Management of Problematic soils	1	2	0	2	0	0	0	19	3	22	21	3	24
Micro nutrient deficiency in crops	1	2	0	2	0	0	0	16	5	21	18	5	23
Nutrient Use Efficiency													
Soil and Water Testing	3	4	2	6	0	0	0	193	29	222	197	31	228
Others, if any													
Soil health management	12	50	11	61	1	0	1	208	104	312	259	115	374
Natural farming	11	68	36	104	4	5	9	194	125	319	266	166	432
Liquid fertilizer	3	4	0	4	3	0	3	54	9	63	61	9	70
Balance use of fertilizer	2	8	0	8	0	0	0	37	24	61	45	24	69
Integrated Crop Management	5	4	4	8	0	0	0	58	26	84	62	30	92
<b>Total</b>	<b>46</b>	<b>145</b>	<b>53</b>	<b>198</b>	<b>9</b>	<b>5</b>	<b>14</b>	<b>935</b>	<b>410</b>	<b>1345</b>	<b>1089</b>	<b>468</b>	<b>1557</b>
<b>IV. Livestock Production and Management</b>													
Dairy Management	1	0	0	0	0	0	0	13	11	24	13	11	24
Poultry Management													
Piggery Management													
Rabbit Management													
Disease Management	2	6	5	11	0	0	0	20	17	37	26	22	48
Feed management	2	6	17	23	0	1	1	14	11	25	20	29	49
Production of quality animal products													
Others													
Milk production													
Fodder conservation	2	8	1	9	0	0	0	14	25	39	22	26	48
Vaccination	5	12	10	22	3	2	5	77	28	105	92	40	132
Fodder production	1	3	4	7	0	0	0	5	12	17	8	16	24
Goatry	2	16	2	18	3	0	3	12	21	33	31	23	54
Prevention and treatment of ecto parasite	1	0	0	0	0	0	0	14	10	24	14	10	24
Vermicomposting	1	0	0	0	1	0	1	13	21	34	14	21	35
<b>Total</b>	<b>17</b>	<b>51</b>	<b>39</b>	<b>90</b>	<b>7</b>	<b>3</b>	<b>10</b>	<b>182</b>	<b>156</b>	<b>338</b>	<b>240</b>	<b>198</b>	<b>438</b>

[illegible]

[illegible]

[illegible]

Thematic Area	No. of Courses	No. of Participants											
		Others			SC			ST			Grand Total		
		M	F	T	M	F	T	M	F	T	M	F	T
Others, if any													
XI Agro-forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													
<b>XII. Others (Pl. Specify)</b>													
<b>TOTAL</b>	<b>237</b>	<b>442</b>	<b>291</b>	<b>733</b>	<b>54</b>	<b>23</b>	<b>77</b>	<b>3150</b>	<b>2633</b>	<b>5783</b>	<b>3646</b>	<b>2947</b>	<b>6593</b>

ii. **RURAL YOUTH (On and Off Campus)**[illegible]

[illegible][illegible]

Thematic Area	No. of Courses	No. of Participants											
		Others			SC			ST				Grand Total	
		M	F	T	M	F	T	M	F	T	M	F	T
Capacity building for ICT application													
Care and maintenance of farm machinery and implements													
WTO and IPR issues													
Management in farm animals													
Livestock feed and fodder production													
Household food security													
Women and Child care													
Low cost and nutrient efficient diet designing													
Production and use of organic inputs													
Gender mainstreaming through SHGs													
Any other													
Soil sampling	1	10	0	10	0	0	0	14	5	19	24	5	29
Resilient agriculture	1	4	2	6	0	0	0	20	15	35	24	17	41
Nutritional garden	1	0	0	0	0	0	0	0	34	34	0	34	34
Natural Farming				0			0			0	0	0	0
Accounting & Tally	1	2	0	2	0	0	0	2	0	2	4	0	4
<b>TOTAL</b>	<b>4</b>	<b>16</b>	<b>2</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>36</b>	<b>54</b>	<b>90</b>	<b>52</b>	<b>56</b>	<b>108</b>

**Please furnish the details of training programmes as Annexure in the proforma given below**

[illegible]

## H) Vocational training programmes for Rural Youth

### Details of training programmes for Rural Youth

Crop / Enterprise	Identified Thrust Area	Training title*	Duration (days)	No. of Participants			Self-employed after training			Number of persons employed elsewhere
				M	F	T	Type of units	Number of units	Number of persons employed	
	Paravet	Paravet	15	12	4	16				
	INM	INM Certificate course	15	43	6	49				
	INM	INM Certificate course	15	27	3	30				
	Cutting & Tailoring	Cutting & Tailoring	30	0	19	19				
<b>Total</b>			<b>75</b>	<b>82</b>	<b>32</b>	<b>114</b>				

*\*Training title should specify the major technology /skill transferred*



### I) Sponsored Training Programmes

SI	Title	Thematic area	Month	Duration (days)	Client	No. of courses	No. of Participants										Sponsoring Agency
					PF/RY/EF		Male			Female			Total				
							Others	SC	ST	Others	SC	ST	Others	SC	ST	Total	
1.	Commercial Vegetable Cultivation	Production of high value crop	04-09-24	1	PF	1	3	4	14	0	0	4	3	4	18	25	FPO
2.	Improved Production Technology of Mustard	ICM	26-10-24	1	PF	1	0	0	21	0	0	4	0	0	25	25	DRMR
3.	Advance Production Technology of Mustard	ICM	06-11-24	1	PF	1	2	0	16	4	0	4	6	0	20	26	DRMR
4.	Advance Production Technology of Mustard	ICM	07-11-24	1	PF	1	1	0	7	0	0	9	1	0	16	17	DRMR
5.	Advance Production Technology of Mustard	ICM	08-11-24	1	PF	1	0	0	12	0	0	0	0	0	12	12	DRMR
6.	Advance Production Technology of Mustard	ICM	18-11-24	1	PF	1	1	0	2	0	0	9	1	0	11	12	DRMR
7.	Plant Propagation Technique	Plant Propagation	23-12-24	1	PF	1	0	0	15	0	0	10	0	0	25	25	BAIF
8.	Horticulture Training	Horticulture	26-12-24	1	PF	1	0	0	19	0	0	6	0	0	25	25	Vikas Bharti
		Total				8	7	4	106	4	0	46	11	4	152	167	
9.	Importamnce of drought in resilient agriculture	Climate resilient agriculture	01-07-24	1	PF	1	3	0	9	0	0	2	3	0	11	14	NICRA
10.	Awareness on drought resilient crop variety	Climate resilient agriculture	03-07-24	1	PF	1	0	0	5	0	0	4	0	0	9	9	NICRA
11.	Short duration crop variety and its importance in climate change	Climate resilient agriculture	04-07-24	1	PF	1	0	0	7	0	0	3	0	0	10	10	NICRA
12.	Promotion of DSR technology	RCT	04-07-24	1	PF	1	1	0	18	0	0	5	1	0	23	24	NICRA

SI	Title	Thematic area	Month	Duration (days)	Client	No. of courses	No. of Participants										Sponsoring Agency
					PF/RV/EF		Male			Female			Total				
							Others	SC	ST	Others	SC	ST	Others	SC	ST	Total	
13.	Farm bunding and resilient agriculture	Climate resilient agriculture	06-07-24	1	PF	1	0	0	4	0	0	14	0	0	18	18	NICRA
14.	Intercropping	Climate resilient agriculture	10-07-24	1	PF	1	0	0	5	0	0	18	0	0	23	23	NICRA
15.	IPM in kharif pulses	IPM	09-09-24	1	PF	1	0	0	24	0	0	01	0	0	25	25	FPO
16.	IPM in kharif cereals	IPM	10-09-24	1	PF	1	2	0	12	0	0	15	2	0	27	29	FPO
17.	Commercial vegetable cultivation	Cultivation of high volume crop	05-09-24	1	PF	1	3	2	7	1	2	3	4	4	10	18	FPO
18.	Commercial vegetable cultivation	Cultivation of high volume crop	20-09-24	1	PF	1	0	0	22	0	0	4	0	0	26	26	FPO
19.	Commercial vegetable cultivation	Cultivation of high volume crop	26-09-24	1	PF	1	0	0	17	0	0	10	0	0	27	27	FPO
20.	Commercial mango cultivation	Cultivation of fruit	25-09-24	1	PF	1	0	0	6	0	0	10	0	0	16	16	FPO
21.	Potato cultivation	Production of high volume crop	28/10/24	1	PF	1	2	0	15	3	0	34	5	0	49	54	Mahashakti mahila vikas samiti
22.	Potato Cultivation	Production of high value crop	26-10-24	1	PF	1	0	0	21	0	0	59	0	0	80	80	Mahashakti mahila vikas samiti
23.	IPM in kharif oilseed	IPM	17-10-24	1	PF	1	0	0	9	0	0	3	0	0	12	12	NICRA
24.	Integrated crop management	ICM	03-11-24	1	PF	1	4	0	21	0	0	5	4	0	26	30	NICRA
25.	Integrated crop management	ICM	19-11-24	1	PF	1	2	0	10	0	0	2	2	0	12	14	FPO
26.	Commercial Vegetable Cultivation	Cultivation of high volume crop	06-12-24	1	PF	1	0	0	16	0	0	16	0	0	32	32	FPO
27.	Commercial Vegetable Cultivation	Cultivation of high volume crop	12-12-24	1	PF	1	0	0	21	0	0	23	0	0	44	44	FPO
28.	Commercial Vegetable Cultivation	Cultivation of high volume crop	16-12-24	1	PF	1	13	0	0	13	0	0	26	0	0	26	FPO

SI	Title	Thematic area	Month	Duration (days)	Client	No. of courses	No. of Participants										Sponsoring Agency
					PF/RV/EF		Male			Female			Total				
							Others	SC	ST	Others	SC	ST	Others	SC	ST	Total	
29.	Commercial Vegetable Cultivation	Cultivation of high volume crop	19-12-24	1	PF	1	0	0	13	0	0	37	0	0	50	50	FPO
30.	Commercial Vegetable Cultivation	Cultivation of high volume crop	21-12-24	1	PF	1	0	0	30	0	0	2	0	0	32	32	FPO
31.	Commercial Vegetable Cultivation	Cultivation of high volume crop	04-12-24	1	PF	1	0	0	10	0	0	1	0	0	11	11	FPO
32.	Commercial Vegetable Cultivation	Cultivation of high volume crop	17-12-24	1	PF	1	2	0	7	0	0	4	2	0	11	13	FPO
33.	Resilient crop production technology	Climate resilient agriculture	14-12-24	1	PF	1	2	0	10	0	0	10	2	0	20	22	NICRA
		Total				25	34	2	319	17	2	285	51	4	604	659	
34.	Commecial Goat Rearing	Goatry	28/08/24-04/09/24 & 15/09/24-30/09/24	1	RY	1	1	0	14	3	0	12	4	0	26	30	ARYA
35.	Horticulture Training	Horticulture	26-30/11/24	1	RY	1	1	0	13	7	0	30	8	0	43	51	Pragati Educational Academy
				Total		2	2	0	27	10	0	42	12	0	69	81	
			Grand total			35	43	6	452	31	2	373	74	8	825	907	

Area of training	No. of Courses	No. of Participants											
		General			SC			ST			Grand Total		
		M	F	T	M	F	T	M	F	T	M	F	T
<b>Crop production and management</b>													
Increasing production and productivity of crops	16	16	16	16	4	0	4	234	264	498	254	269	523
Commercial production of vegetables	13	13	13	13	6	2	8	193	197	390	222	216	438
Production and value addition							0			0	0	0	0
Fruit Plants	2	2	2	2	0	0	0	25	10	35	25	10	35
Ornamental plants	1	1	1	1	0	0	0	15	10	25	15	10	25
Spices crops							0			0	0	0	0
Soil health and fertility management	1	1	1	1	0	0	0	39	1	40	39	1	40
Production of Inputs at site							0			0	0	0	0
Methods of protective cultivation							0			0	0	0	0
Other							0			0	0	0	0
Climate resilient agriculture	5	5	5	5	0	0	0	35	33	68	40	33	73
Resource conservation technology	1	1	1	1	0	0	0	18	5	23	19	5	24
Integrated Pest management	3	3	3	3	0	0	0	45	19	64	47	19	66
<b>Total</b>	<b>42</b>	<b>42</b>	<b>42</b>	<b>42</b>	<b>10</b>	<b>2</b>	<b>12</b>	<b>604</b>	<b>539</b>	<b>1143</b>	<b>661</b>	<b>563</b>	<b>1224</b>
<b>Post harvest technology and value addition</b>							0			0	0	0	0
Processing and value addition	1	1	1	1	0	0	0	24	4	28	26	4	30
Other							0			0	0	0	0
<b>Total</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>4</b>	<b>28</b>	<b>26</b>	<b>4</b>	<b>30</b>
<b>Farm machinery</b>							0			0	0	0	0
Farm machinery, tools and implements							0			0	0	0	0
Other							0			0	0	0	0
<b>Total</b>							0			0	0	0	0
<b>Livestock and fisheries</b>							0			0	0	0	0
Livestock production and management	1	1	1	1	3	0	3	3	9	12	21	9	30
Animal Nutrition Management							0			0	0	0	0
Animal Disease Management							0			0	0	0	0
Fisheries Nutrition							0			0	0	0	0
Fisheries Management							0			0	0	0	0
Other							0			0	0	0	0
<b>Total</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>9</b>	<b>12</b>	<b>21</b>	<b>9</b>	<b>30</b>
<b>Home Science</b>							0			0	0	0	0
Household nutritional security							0			0	0	0	0
Economic empowerment of women							0			0	0	0	0
Drudgery reduction of women							0			0	0	0	0
Other							0			0	0	0	0
<b>Total</b>							0			0	0	0	0
<b>Agricultural Extension</b>							0			0	0	0	0
Capacity Building and Group Dynamics	1	1	1	1	0	0	0	0	26	26	0	40	40
Other							0			0	0	0	0
<b>Total</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>26</b>	<b>26</b>	<b>0</b>	<b>40</b>	<b>40</b>
<b>Grand Total</b>	<b>45</b>	<b>45</b>	<b>45</b>	<b>45</b>	<b>13</b>	<b>2</b>	<b>15</b>	<b>631</b>	<b>578</b>	<b>1209</b>	<b>708</b>	<b>616</b>	<b>1324</b>

**J. Information on ASCI Skill Development Training Programme funded by ICAR undertaken during 2024**

Total no of training organised	Name of QP/Job role	Title of the training	Duration (in hrs.)	No. of participants									Fund utilized for the training (Rs.)
				SC		ST		Other		Total			
				M	F	M	F	M	F	M	F	T	

**K. Information on Skill Development Training Programme (Other agency if any) if undertaken**

Total no of training organised	Name of QP/Job role	Title of the training	Durat ion (in hrs.)	No. of participants									Fund utilized for the training (Rs.)
				SC		ST		Other		Total			
				M	F	M	F	M	F	M	F	T	
01	Mushroom Grower (Entrepreneur)	RPL training programme of Mushroom Grower	21	0	0	0	26	0	14	0	40	40	84000.00

### 3.5. A. ACHIEVEMENTS OF EXTENSION/OUTREACH ACTIVITIES

(Including activities of FLD programmes)

Nature of Extension Activity	No. of activities	Farmers					Extension Officials					Total				
		M	F	Total	SC (no.)	ST (no.)	M	F	Total	SC (no.)	ST (no.)	M	F	Total	SC (no.)	ST (no.)
Kisan Mela organized	3	3387	3565	6952	125	5246	10	2	12	2	7	3397	3567	6964	127	5253
Kisan Mela participated	3	272	409	681	23	566	11	4	15	2	15	283	413	696	25	581
Field Day	29	420	157	577	0	467	14	0	14	-	12	434	157	591	0	479
Kisan Ghosthi	15	500	547	977	1	892	7	2	9	0	6	207	549	1056	1	898
Exhibition organized	1	71	50	121	0	129	7	2	9			78	52	130	0	129
Participation in exhibition																
Film Show	14	271	171	442	14	293						271	171	442	14	293
Method Demonstrations	4	35	17	52	0	52	2	0	2			37	17	54	0	52
Farmers Seminar																
Workshop	3	81	33	114	1	90	6	3	9	0	6	87	36	123	1	96
Group discussion																
Lectures delivered as resource persons	6	177	52	229	0	158	4	0	4	0	4	181	52	233	0	162
Advisory Services	48	331	74	405	2	371	6	0	6			337	74	411	2	377
Scientific visit to farmers field	169	528	73	601	2	534	4	1	5			532	74	606	2	537
Farmers visit to KVK	109	959	481	1440	0	1191	20	5	25	0	23	979	486	1465	0	1214
Diagnostic visits																
Exposure visits	17	445	243	688	9	481	13	3	16	0	12	458	246	704	9	493
Ex-trainees Sammelan	3	31	49	80	1	78	2	0	2	0	2	33	49	82	1	80
Soil health Camp	5	186	122	308	1	268	5	1	6	0	5	191	123	314	1	273
Animal Health Camp	26	142	39	181	1	156	0	0	0	0	0	142	39	181	4	156
Agri mobile clinic																
Soil test campaigns																
Farm Science Club Conveners meet																
Self Help Group Conveners meetings	9	0	149	149	0	125	0	13	13	0	10	0	162	162	0	135
Mahila Mandals Conveners meetings																
Special day celebration																
Sankalp Se Siddhi																
Swatchta Hi Sewa	2	1232	741	1973	24	1783	4	3	7	0	5	1236	744	1980	24	1788

Nature of Extension Activity	No. of activities	Farmers					Extension Officials					Total				
		M	F	Total	SC (no.)	ST (no.)	M	F	Total	SC (no.)	ST (no.)	M	F	Total	SC (no.)	ST (no.)
Celebration of important date																
Others																
Helpline																
Clinical Service	169	132	38	170	2	134	0	0	0	0	0	132	38	170	2	134
FAP conducted	2	20	35	55	0	55	0	0	0	0	0	20	35	55	0	55
Group meeting	7	83	36	119	0	108	2	0	2	0	2	85	36	121	0	110
Natural farming awareness	22	549	576	1125	5	982	8	2	10	0	7	557	578	1135	5	989
Agriculture knowlwdge in rural school	3	97	52	149	7	116	2	1	3	0	2	99	53	152	7	118
PM live telecast	5	286	280	566	0	480	15	2	17	0	13	301	282	583	0	493
Input distribution under TSP	16	377	239	616	24	578	2	0	2	0	2	379	239	618	24	580
FPO meeting	15	166	121	287	8	229	4	1	5	0	3	170	122	292	8	232
RAWE programme	1	0	1	1	0	0			0			0	1	1	0	0
Drone awareness programme	4	62	30	92	0	92	1	0	1	0	1	63	30	93	0	93
Farmers scientist interaction	1	24	10	34	0	25	2	0	2	0	2	26	10	36	0	27
Prize distribution in kisan mela	1	91	116	207	22	155	3	0	3	0	3	94	116	210	22	158
Seminar	1	107	40	147	0	147	3	0	3	0	3	110	40	150	0	150
CSISA Survey	40	230	170	400	0	300	0	0	0	0	0	230	170	400	0	300
Swachhta programme	9	145	104	249	0	193	2	1	3	0	3	147	105	252	0	196
FPO Workshop	1	21	9	30	0	8	2	1	3	0	3	23	10	33	0	11
Live telecast of president's programme at NISA	1	0	60	60	0	60	2	0	2	0	2	2	60	62	0	62
Workshop on PM Kusum	2	20	59	79	30	36	3	0	3	0	3	23	59	82	30	39
Live telecast of Krishi choupal	1	30	113	143	0	123	2	0	2	0	2	32	113	145	0	125
Input distribution under SCSP	1	12	45	57	57	0	0	0	0	0	0	12	45	57	57	0

**B. Other Extension/content mobilization activities**

Nature of Extension Activity	No. of activities
Newspaper coverage	53
Radio talks	01
TV talks	01
Popular articles published	
Extension Literature Published	06
Electronic media	
Any other	
Extension Literature distributed	47

**C. Technology week celebration**

Type of activities	No. of activities	Number of participants	Related crop/livestock technology
Kisan Gosthi	03	105	IFS
Field day	02	253	Mustard, Lentil
Exhibition	01	125	Resilient Agricultural Technology)

**D. Celebration of important days in KVKs**

Celebration of Important Days	No. of activities	Farmers			Extension Officials			Total		
		M	F	Total	M	F	Total	M	F	Total
Republic day (26 <sup>th</sup> Jan.)	1	92	95	187	10	3	13	102	98	200
International Women's Day (8 <sup>th</sup> Mar.)	1	0	48	48	0	2	02	0	50	50
Ambedkar Jayanti (14 <sup>th</sup> Apr.)										
World's Veterinary Day (Last week of April)										
World 'Milk Day										
International Yoga Day (21 <sup>st</sup> Jun.)	1	21	33	54	3	2	05	24	35	59
Independence Day (15 <sup>th</sup> Aug.)	1	61	23	84	8	2	10	69	25	94
Parthenium Awareness Week (16-22 Aug)	1	90	100	190	2	0	02	92	100	192
Hindi Diwas (14 <sup>th</sup> Sep.)										
Gandhi Jayanti (2 <sup>nd</sup> Oct.)										
Mahila Kisan Diwas (15 <sup>th</sup> Oct.)	1	5	79	84	1	2	03	6	81	87
World Food Day (16 <sup>th</sup> Oct.)										
Vigilance Awareness Week										
National Unity Day (31 <sup>st</sup> Oct.)										
World Science Day (10 <sup>th</sup> Nov.)										
National Education Day (11 <sup>th</sup> Nov.)										
Fisheries day (21 Nov)										
National Constitution Day (26 <sup>th</sup> Nov.)										
World Soil Day (5 <sup>th</sup> Dec.)	1	37	17	54	2	1	03	39	18	57
Kisan Diwas (23 <sup>rd</sup> Dec.)	1	31	14	45	1	0	01	32	14	46
Any other day										
Republic day Jhanki	1	3945	3048	6993	5	2	07	3950	3050	7000
Viksit Bharat Sankalp Yatra	44	8176	11140	19316	18	3	21	8194	11143	19337
National science day (28 feb)	1	31	25	56	1	1	02	32	26	58
National Bee day (20 <sup>th</sup> May)	1	-1	28	27	1	1	02	0	29	29
Technology week	1	222	260	482	8	3	11	230	263	493



Celebration of Important Days	No. of activities	Farmers			Extension Officials			Total		
		M	F	Total	M	F	Total	M	F	Total
World environment day (5 June)	1	35	3	38	3	2	05	38	5	43
ICAR foundation day (16th July)	1	41	55	96	2	2	04	43	57	100
Hindi Pakhwada (1-14 Sep)	1	265	343	608	1	1	02	266	344	610
Poshan Mah (1-30 Sep)	1	71	559	630	3	6	09	74	565	639
World honey day (20 Aug)	1	10	25	35	0	0	0	10	25	35
<b>Total</b>	<b>61</b>	<b>13132</b>	<b>15895</b>	<b>29027</b>	<b>69</b>	<b>33</b>	<b>0</b>	<b>13201</b>	<b>15928</b>	<b>29129</b>

#### E. Interaction/Live telecast programme of Hon'ble PM/Hon'ble or Argil Minister

Sl.	Date of event	Name of Event/Programme	Interaction of Hon'ble PM/AM	Participants			
				Farmers	Staffs	VIP/Others	Total
1	18/06/24	Live screening of release of 17th Instalment of PM KISAN	Hon'ble PM	135	06	02	143
2	11/08/24	Live telecast of release of 109 ICAR varieties	Hon'ble PM	54	05	01	60
3	20/09/24	Live telecast of Hon'ble President's programme at NISA, Namkum, Ranchi	Hon'ble President	62	07	02	71
4	05/10/24	Live screening of release of 18 <sup>th</sup> Instalment of PM KISAN	Hon'ble PM	36	08	02	46

### 3.5 A. PRODUCTION AND SUPPLY OF TECHNOLOGICAL PRODUCTS

#### A. Seed production at seed village

Crop	Variety	Quantity of seed (q)	Value (Rs)	No. of farmers involved in village seed production	Number of farmers to whom seed provided			
					SC	ST	Other	Total
Niger	BN-3	3.0	21000.00	91	-	89	02	91
Mustard	BBM-1	12.47	87304.00	100	-	91	09	100
Redgram	Rajeev Lochan	1.5	18000.00	27	-	27	-	27
Ragi	GPU-28	2.60	10400.00	82	-	82	-	82
<b>Total</b>		<b>19.57</b>	<b>136704.00</b>	<b>300</b>	<b>-</b>	<b>289</b>	<b>11</b>	<b>300</b>

#### B. Seed production at KVK farm

Type of seed produced	Variety	Quantity of seed (q)	Value (Rs)	Number of farmers to whom seed provided			
				SC	ST	Other	Total
<b>Cereals</b>							
Paddy	MTU-1010	92.00	184000.00				
Paddy	Swarna Shreya	6.30	12600.00				
Paddy	Black Rice	1.90	3800.00				
Ragi	BM-03	8.60	34400.00				
<b>Total</b>		<b>108.8</b>	<b>234800.00</b>				
<b>Oil seed</b>							
Niger	Birsa Niger-3	1.80	21600.00				
Sesame	RT-351	0.77	9240.00				
Mustard	PM-30	0.94	4700.00				
<b>Total</b>		<b>3.51</b>	<b>35540.00</b>				
<b>Pulses</b>							
Redgram	Birsa arhar-2	0.50	2500.00				
<b>Total</b>		<b>0.50</b>	<b>2500.00</b>				
Green Manure							
Commercial crop							
Vegetables							
Yam	Gajendra	0.20	1000.00				
<b>Total</b>		<b>0.20</b>	<b>1000.00</b>				
Fodder							
Spices							
Fruits							
Forest crop							
Ornamental/flower							
Medicinal							
<b>Others</b>							
Dhaincha	Dhaincha	0.71	3550.00				
<b>Total</b>		<b>0.71</b>	<b>3550.00</b>				
<b>Grand Total</b>		<b>113.72</b>	<b>277390.00</b>				

## C. Production of planting materials by the KVKs

Crop	Variety	No. of planting materials	Value (Rs)	Number of farmers to whom planting material provided			
				SC	ST	Other	Total
<b>Vegetable seedlings</b>							
Cauliflower	Hybrid Lucky	525	131.25				
Cabbage	Golden Acre	450	112.50				
Tomato	Super Sonia	1100	275.00				
	Swarna Prakash	1250	312.50				
Brinjal	Swarna Shyamali	4550	1137.50	-	13	0	13
	RCBR-22	5100	1275.00				
Chilli							
Onion							
Others							
<b>Total</b>		<b>12975</b>	<b>3243.00</b>	<b>-</b>	<b>13</b>	<b>0</b>	<b>13</b>
<b>Commercial seedlings</b>							
Mulberry							
Sugarcane,							
Sweet Potato							
Turmeric							
Zinger							
Others							
<b>Fruits seedlings</b>							
Mango	Langra	-	-	-			57
	Langra	1000	50000.00				
Papaya	Ranchi Papaya	2500	12500.00	-	100	-	100
Pear	Netarhat selection	1500	22500.00	-	17	-	17
Litchi	Shahi	-	-				1500
<b>Total</b>		<b>5000</b>	<b>85000.00</b>				<b>1674</b>
<b>Ornamental plants</b>							
Annual chrysanthemum							
Tuberose							
Others							
<b>Medicinal and Aromatic</b>							
Lemongrass	Krishna	5000	5000.00				
<b>Total</b>		<b>5000</b>	<b>5000.00</b>				
<b>Plantation</b>							
<b>Tuber Elephant yams</b>							
<b>Spices</b>							
Onion	Nasik Red	4200	1050.00	-	-	-	-
Chilli	Swarna Apurva	4550	1137.50	-	13	0	13
<b>Total</b>		<b>8750</b>	<b>2187.50</b>				
<b>Flower</b>							
<b>Marigold</b>	Pusa Narangi	450	112.50				
<b>Total</b>		<b>450</b>	<b>112.50</b>				
<b>Grand Total</b>		<b>32175</b>	<b>95543.75</b>				

**D. Forest species**

Crop	Variety	No. of planting materials	Value (Rs)	Number of farmers to whom planting material provided			
				SC	ST	Other	Total

**E. Fodder crops saplings**

Crop	Variety	No. of planting materials	Value (Rs)	Number of farmers to whom planting material provided			
				SC	ST	Other	Total

**F. Production of Bio-Products**

Name of product	Quantity (Kg)	Value (Rs.)	No. of Farmers benefitted			
			SC	ST	Other	Total
<b>Bio-fertilizers</b>						
<b>Bio-food (Spirulina etc)</b>						
<b>Bio-pesticide</b>						
Jeevamruth	200 lit	3000.00				
<b>Bio-agents (Trichocard etc)</b>						
Vermicompost	10900 kg	130800.00				
Goat Gold	1000 kg	10000.00				
<b>Worms (earthworm, silk worms etc)</b>						
<b>Bio-fungicide</b>						
<b>Others, please specify</b> (Mushroom spawn, Culture Mineral Mixture, Coir pith compost, Cow dung, Cow urine						
<b>Total</b>	<b>200 lit</b> <b>11900 kg</b>	<b>143800.00</b>				

**G. Production of livestock & fisheries materials**

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers benefitted			
				SC	ST	Other	Total
<b>Dairy animals</b>							
Cows							
Buffaloes							
Calves							
Others (Pl. specify)							
<b>Small ruminants</b>							
Sheep							
Goat							
Kid	Black Bengal	07	14000.00				
Goat	Black Bengal	04 no 64 kg	32000.00				
Other, please specify							
<b>Poultry</b>							
<b>Chicks</b>	Sonali, Kadaknath	612	16896.00				
Broilers							
Layers							
Duals (broiler and layer)							
Japanese Quail							
Turkey							
Emu							
Ducks							
Others (Pl. specify)							
<b>Piggery</b>							
Piglet	Jharsook	36	114600.00				
Pig (Male)	Jharsook	100 kg	15000.00				
Hog							
Others (Pl. specify)							
<b>Rabbitry</b>							
<b>Fisheries</b>							
Indian carp							
Exotic carp							
Mixed carp							
Fish fingerlings							
Spawn							
Others (Pl. specify)							
<b>Grand Total</b>			<b>192496.00</b>				

## H. SOIL & WATER TESTING

### a. Details of equipment available in Soil and Water Testing Laboratory : ATTACHED in ANNEXURE

Sl. No	Name of the Equipment	Qty.

### b. Details of samples analyzed so far

Total number of soil samples analyzed till now		
Through mini soil testing kit/labs	Through soil testing laboratory	Total
	1943	1943

### c. Detail of Soil, Water and Plant analysis at KVK (2024)

Sl.	Analysis	No. of Samples analyzed	No. of Villages covered	No. of Farmers benefitted	Amount realized (Rs.)
1.	Soil	1943	234	1821	392030.00
2.	Water				
3.	Plant				
4.	Fertilizers				
5.	Manures				
6.	Food				
7.	Others (if any)				

### d. Details of World Soil Day Celebration

Sl No.	No. of Activity conducted	Soil Health Cards distributed	No. of farmers benefitted	No. of VIPs Number of	Name (s) of VIP(s) involved if any	Total No. of Participants attended the program
1	1		57	01	Shri Mahendra Bhagat, Joint Secretary Vikas Bharti Bishunpur	57

## I. Activities under Rain Water Harvesting structure and Micro Irrigation System

S.No	No of training programme conducted	No. of demonstrations	No. of plant material produced	Visit by the farmers (No.)	Visit by the officials (No.)
1	07	02	32175	423	12

### 3.5. b. Seed Hub Programme - “Creation of Seed Hubs for Increasing Indigenous Production of Pulses in India”

#### 1. Name of Seed Hub Centre: NA

Name of Nodal Officer:	
Address :	
e-mail :	
Phone No. :	
Mobile :	

#### 2. Quality Seed Production of Pulses

Season	Name of crop taken under seed production	Name of variety taken under seed production	Crop and variety wise area (ha) covered under seed production	Crop and variety wise Yield (Q/ha)	Crop and variety wise quantity of seed produced (Q)	Crop and variety wise quantity of seed sale out (Q)	Crop and variety wise number of farmers purchased seed from KVK	Quantity of seed sale out to farmers (Q)	No of village covered through sale of seed	Quantity of seed sale out to other organization (Q)	Amount generated (Lakh) during 2024-24	Total amount (Lakh) in Seed Hub project presently

#### 3. Financial Progress

Fund received	Expenditure (Rs. in lakhs)		Unspent balance (Rs. in lakhs)	Remarks
	Infrastructure	Revolving fund		
2016-17				
2017-18				
2018-19				
2019				
2020				
2021				
2022				
2024				
2024				

#### 4. Infrastructure Development

Item	Progress
Seed processing unit	
Seed storage structure	
Nursery	
Animal sector	
Mushroom / other enterprises	
Others	

### 3.6 HUMAN RESOUSES DEVELOPMENT, PUBLICATIONS, AWARDS & RECOGNITION

#### A. Details of Research papers published by KVK (with full title, author & journal)

S.No	Item	Details of publication bibliographic form (Authors name, year, title, volume, issue, page no, journal name)	NASS Rating	
			>6	<6
1	Research paper	Author-Sanjay Kumar et.al. Year- 2024 Gap analysis in Mustard crop through Frontline Demonstration for resilience and sustainable livelihood in Gumla District of Jharkhand Compendium Society of dryland agriculture		
2		R K Yogi, AK Sharma, Sanjay Kumar, AB Tiwari, Neha Ranjan, Anjani Kumari & PK Rai, January 2024, <i>Productivity Trends, of Rapseed-Mustard in Eastern Plateau and Hill Region</i> , Volume 1,88-95, Journal of Oil seeds <i>Brassica</i>		✓
3		R K Yogi, AK Sharma, Sanjay Kumar, AB Tiwari, Neha Ranjan, Anjani Kumari & PK Rai, 2023, <i>Capital formation through technology Integrated Approaches for Tribal Communities: A Pragmatic Analysis</i> , Volume 40, 15, Journal of Oilseeds Research	✓	-



**B. Details of Other Publications**

Particulars	Details of publication bibliographic form	No of copies published (if any)	No of copies distributed (if any)
Abstracts in Seminar/conference/symposia published			
Books published	Tiwari, N. and Singh, V. Bhojan, Poshan Evam Mulyasanvardhan (2024), Akinik Publication, Pg. No.99	5	
Book chapter published	Promising Climate Resilient Technologies	200	100
	Annual Report TDC-NICRA	500	85
Popular articles published	1.Tiwari, N and Kumar, S., Poshan Vatika se payen Poshak Suraksh (2024), Purvi Kiran, Vol.2 Pg no18-23		
	2.Tiwari, N and Kumar, S. Poshakta se bharpur Madhua ki Unnat Kheti Prabudh gram(2024), Pg21-24		
	3.Tiwari, N. and Kumar, S. Kisan Utpadan sangathan bna chote kisano ka aay k sadhan Prabudh gram (2024), Pg.33-37		
Success story published	Jangal Gatha	1000	1000
TOTAL			

**C. Details of Extension Publications**

Particulars	Details of publication (Totle, authors name, organization)	No of copies published (if any)	No of copies distributed (if any)
Extension Bulletins published			
Agro-advisory bulletins			
Extension folders/leaflet/pamphlets			
Technical reports	Annual Report (Jan-Dec 2023)	03	
	Annual Report (NICRA)	01	
	Annual Report (ARYA)	01	
	Annual Report (Natural Farming)	01	
	Annual Report (AICRP)	01	
	Annual Report (CFLD OLS & PLS)	01	
	Annual Report (DRMR)	01	
	Contingent plan in Gumla district Atal Bihari Tiwari & Sanjay Kumar		
News letter			
Electronic Publication (CD/DVD etc)	Light trap (AB Tiwari)	01	
TOTAL			

**D. Details of HRD programmes undergone by KVK personnel**

Sl. No.	Name of KVK personnel	designation	Name of course/training program attended	Date	Duration	Organizer/Venue
1.	Nisha Tiwari	SMS (H.Sc.)	Millet for national and livelihood security,	11-15//3/2024	5 days	CCAS,MPUAT, Udaipur
2.	Nisha Tiwari	SMS (H.Sc.)	Millet product processor	25-27/6/2024	3 days	NIT Rourkela
3.	Sweta Vishwakarma	Programme Assistant (Comp)	Innovations in Digital Extension	16-20/12/24	5 days	ICAR-NAARM, Hyderabad

**E. Awards/Recognition****Institutional Award received by KVK**

Sl. No.	Name of KVK	Name of the Award	Value (In Amount/kind)	Achievement	Conferring Authority
1	Gumla	Appreciation	-	Entrepreneurship development in Rural youths through ARYA	ICAR-ATARI Patna

**Award received by KVK Scientists**

Sl.	Name of KVK personnel	Name of the Award	Value (In Amount/kind)	Achievement	Conferring Authority

**Award received by Farmers**

Sl.	Name of KVK	Name of the Farmer	Name of the Award	Address	Contact No.	Value (In Amount/kind)	Achievement	Conferring Authority
1	Gumla	Ram Munda	Agrotech Kisan Mela	Vill-Sato Panchayat-Helta Block-Bishunpur	88477260197	0.00	Pig farming	BAU, Ranchi
2		Ajay Mahali	Agrotech Kisan Mela	Vill-Karamtoli Panchayat-Nagarpalika Bloc- Gumla	6204663101	0.00	Pig farming	BAU, Ranchi
3		Mrs. Sumitra Munda	Lakhpatri Didi	Vill- Chatam, Panchayat-Chirodih, Block-Bishunpur		0.00	Commercial vegetable production	Vikas Bharti

Sl.	Name of KVK	Name of the Farmer	Name of the Award	Address	Contact No.	Value (In Amount/ kind)	Achievement	Conferring Authority
4		Mrs. Basanti Devi		Vill- Nawagarh Serka, Panchayat-Serka, Block-Bishunpur			Value addition	Vikas Bharti
5		Mrs. Mani Devi		Vill- Turiamba, Panchayat-Turiamba, Block- Bharno			Integrated farming System	Vikas Bharti
6		Mrs. Phoolkumari Devi		Vill- Borang, Panchayat-Nirasi, Block-Bishunpur			Commercial Poultry farming	Vikas Bharti
7		Mrs. Anupa Oraon		Vill- Nagar Jakawatoli, Panchayat-Nagar, Block-Sisai			Lac Cultivation	Vikas Bharti
8		Mrs. Parvati Devi		Vill- Nagar Gondraotoli, Panchayat-Nagar, Block-Sisai			Lac Cultivation	Vikas Bharti
9		Mrs. Shila Devi		Vill- Kokotoli Dipa Bagicha, Panchayat-Banari, Block-Bishunpur			Vermicompost production	Vikas Bharti
10		Mrs. Rajmani Kujur		Vill- Damkom, Panchayat-Ghaghra, Block-Bishunpur			Stiching	Vikas Bharti

### 3.7. TECHNOLOGY DEVELOPMENT

#### A. Give details of Innovative Methodology/Process/Product or Innovative Technology developed by KVK

Sl. No.	Name/ Title of the technology	Brief details of the Innovative Technology	Impact of the technology	Status of commercialization / Patent
1	Sowing of Mustard, Niger, Urd and Paddy in open line developed Tracter drawn cultivator	Through this approach sowing of crop is done in line. Cost and time is also saved	Technology of sowing in open trench of cultivator is being widely adopted by the farmer especially in sowing of Niger, Mustard, Blackgram and Paddy. Approx 1400 ha area has been sown through this innovative method. The impact of this methodology has also been seen in yield enhancement in tune of 20-25%	
2	Canopy management in mango	Through this innovative approach centre of mango plant is opened with an objective to maximize light interaction to optimize light distribution within canopy and to maintain proper air flow and enhance productivity.	Canopy management practice is being widely adopted by the mango grower especially in Ghaghra, Palkot and Bishunpur blocks. The adoption rate is 10-12% of the growth.	
3	Ring method of leafy vegetable cultivation	Leafy vegetable viz Palak, Saro, Methi and Dhania is being cultivated in mango orchard ring in early stage of mango (2-4 years plants) with an objective to harvest leafy vegetable in advance with least investment and better income and self use. From single plant ring farmer's are succeeded in harvesting of 2-3 kg leafy sag costing of rupees 100-120/kg per plant ring.	This innovative methodology is being widely adopted by the tribal farmers in their homestead mango plantation as well as in orchards and get the better income and nutritional security.	
4	Cutting potato leaves during tuber development stage	Cutting potato leaves in Ghaghra block by the innovative farmer is being popularized in adjoining area. Potato grower cut the leaves of potato during tuber growth stage with an objective to reduce the number of irrigation. And this practice leads to larger and more potato yield and income.	Cutting potato leaves during their growth stage is being widely adopted by the commercial potato growers especially in rabi season. under this practice approximately more than 350 ha area is being cultivated and 2-3 number of irrigation is minimized.	

Sl. No.	Name/ Title of the technology	Brief details of the Innovative Technology	Impact of the technology	Status of commercialization / Patent
5	Reuse of Mushroom bundle for compost	Mushroom Cultivation is widely practiced by the SHG. About 200 SHGs are involved in Commercial Mushroom cultivation. After 2-3 plucking mushroom bundle is used by them for vermicompost production. Which is good enriched compost for improvement of soil fertility. Through this intervention group has succeeded in earning of Rs. 350-400 from 20-25 waste bundles in one rotation.	Reuse of Mushroom bundle is fastly popularized among mushroom growers and they are adopting and gaining Rs 350-400 from 20-25 bundles in single rotation.	
6	Process technology for preparation of Ragi cake.	Ragi cake is an eggless cake recipe using finger millet flour and prepared by SHG of Bishunpur block. The preparation of Ragi cake is extremely simple and healthy cake recipe. Youth women group of Bishunpur has started this new venture during IYM 2023 and get very positive response. After seeing the positive response group has started making ragi cake commercially and are earning net income @150/kg of cake. Approx 50-60 kg cake is being sold by the group in a month.	By seeing the impact of demand of cake others group has also associated with main group for production and marketing.	Through this venture group has succeeded in earning of Rs 7500-10000/month.
7	Climate Resilient technology: Sand Bag Check Dam (Bora Bandh)	. To harvest/conserved runoff and flow of river/rivulet in seasonal streams up to certain level by making canal/low-cost sand bag check dam (Bora Bandh) and making vulnerable community a little more resilient to the impending risks of climate variability like water stress and providing water security for overcoming dry spells during Kharif season and extending water availability during Rabi and	The innovative irrigation idea “ <b>Sand bag Check Dam</b> ” find resonance in other villages through convergence in coming year and create more than 1000 ha land under assured irrigation. This has definitely registered more than double or triple fold increase in production and productivity of the crop and enables the district to achieve and sustain self-sufficiency in food grain.	This technological intervention did not require high investments but just innovative technology at reducing the flow of the stream and extending the availability of water beyond kharif season. It also showed the farmers, development workers and the state administration

Sl. No.	Name/ Title of the technology	Brief details of the Innovative Technology	Impact of the technology	Status of commercialization / Patent
		Summer for increasing cropping intensity as well as ground water table.		as to how vast stretches of land left fallow for want of water could be brought under cultivation during rabi and summer give hope to many stakeholders suffering from water scarcity, resultant low productivity and lack of livelihood opportunities. This simple technological intervention contributing towards increasing cropping intensity and income. That indicate its commercial value in enhancing the production and income
8	<b>Tractor-operated paddy thresher machine</b>	Rice is the major <b>Kharif</b> crop in the <b>Gumla</b> district, and traditionally, farmers thresh grains using cattle, a method that is highly time-consuming and inefficient. To address this challenge, the <b>KVK</b> introduced a <b>tractor-operated paddy thresher</b> for the first time in the district. Method demonstrations were conducted in various villages to showcase its benefits. Additionally, the machine has been made available for <b>custom hiring</b> , enabling more farmers to access this advanced technology. This initiative has significantly improved threshing efficiency, reduced labor requirements, and enhanced overall productivity in paddy cultivation.	<p>The introduction of <b>tractor-operated paddy threshers</b> has revolutionized rice farming in the <b>Gumla district</b>. Today, approximately <b>1,200 threshers</b> are available, significantly reducing the time and labor required for threshing. Most <b>panchayats</b> have access to at least one to two threshers, which are not only serving local farmers but also benefiting adjoining villages.</p> <p>Many progressive farmers have established <b>custom hiring centers</b> for farm machinery, successfully turning them into profitable ventures that provide a steady source of income. These centers allow small and marginal farmers to access advanced equipment without the need for heavy investment, promoting <b>inclusive growth</b> in agriculture.</p> <p>The growing demand for <b>farm mechanization</b> has enhanced productivity, minimized post-harvest losses, and improved the overall efficiency of farming operations. By</p>	<p>Currently, service providers charge <b>Rs. 1,200 per hour</b>, making it an economically viable option for farmers.</p> <p>In addition to machine rental, some service providers also offer <b>labor support</b>, which is particularly beneficial in areas facing labor shortages. Compared to hiring manual labor, this mechanized service is <b>more cost-effective</b>, as farmers no longer need to provide extensive food and other facilities for local laborers.</p> <p>Beyond just saving time, this technology significantly reduces</p>

Sl. No.	Name/ Title of the technology	Brief details of the Innovative Technology	Impact of the technology	Status of commercialization / Patent
			reducing labor dependency and increasing operational speed, mechanization is enabling farmers to <b>adopt modern agricultural practices</b> , leading to higher profitability and sustainable farming.	cultivation costs, enhances efficiency, and simplifies paddy farming, making the process more convenient and productive for farmers.

**B. Give details of Organic farming practiced/Indigenous Technology/ITK practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs)**

Sl. No.	Enterprise	Brief details of the ITK Practiced	Purpose/Impact of ITK	Impact of the technology
1	Cow	Farmers feed their cow green leaves of Bamboo after parturition.	For expulsion of placenta	
2	Wheat	Leaf of sindwar kept in grain house storage.	To minimize storage loss from pest or insects	
3	Paddy	Stem of sindwar sticking in paddy field	To protect from pest & diseases	
4	Tobacco extract	Panting or Washing animals with Tobacco extract	To Control Ecto parasites in animal	
5	Bullock	Boiled water of Mahuwa is used harassment relief.	To relief from harassment especially in kharif season.	
6	Ghato plant leaf	Ghato plant leaf is boiled with water & after cooling used in brinjal.	To protect against stem & fruit borer	
7	Paddy	Farmer using Sali@1kg/decimel for smooth and safe uprooting of paddy seedling	For easy uprooting	
8	Paddy	Farmer using small stool for uprooting of seedling to avoid drudgery in knee and wrist	Drudgery reduction	
9	Paddy	Farmer using dry paddy straw with compost in pond for better fish production	For good recovery of fish	
10	Fish	When pH of pond increases the fish farmer put the bundles of leaves of tamrind in the pond and when level of pH become normal then they takes out leaves bundles from pond.	For reducing the pH of water.	
11	Paddy	Young bamboo is crushed and extracted juice to put into water inlet in the paddy field. That juice is spread into the field and is absorbed by the paddy plants which help to control the disease like blast.	Control Blast Disease	
12	Termite control	Extract of custard apple leaf is used in controlling termite.	Termite control	
13	Wheat	Safe grain of wheat by using the dust of bricks and putting 2-3 onion in a bag.	Pest Control	
14	Pig	Oil extracted from Raptile mixed with karanj oil and camphor. After mixing boil it and filter, Ready material is used to control skin disease in pig	Skin disease treatment	
15	Cattle	Laping of Aloevera pulp on the tounge of animal to protect FMD	Prevention from FMD	
16	Cattle	Outer layer of onion i'e epidermal cell used to feed cattle against ticks.	Ticks Control	
17	Rice	Bamboo (New bud) is cut in small pieces, mixed in water or direct in field for control of GLH manager	Green Leaf Hopper management	



Sl. No.	Enterprise	Brief details of the ITK Practiced	Purpose/Impact of ITK	Impact of the technology
18	Mustard	Seed of mustard first broadcasted then use tractor drawn cultivator making line sowing. After ploughing small ridge and furrow developed. 20-25 days after sowing farmers uprooted the tenders mustard crop open lines and sell it as leafy vegetables.	Purpose of ITK is making irrigation in furrow and line sowing.	
19	Beekeeping	Cow urine spray near bee box for managing the wasps and hornets insects.	Dataya insect management	
20	Pig	Application of lime in curing of wound in pig	wound curing	
21	Vegetable cultivation	Planting of cauliflower in close spacing to reduce the size of curd and make it marketable	To make marketable	
22	Cauliflower	Covering of seedling with leaf cup (Dona)	To protect from cold wave	
23	Onion storage	Onion storage through hanging	To control onion rotting	Up to 90% rotting is controlled
24	Organic Super food for Garlic	At the time of the first hoeing of the garlic crop, make powder of goat dung and sprinkle it in the lines of garlic crop and hoe it. This will ensure garlic leaves of the crop remain green till the before harvesting.	For the better crop growth	Organic Super food for Garlic

**Give details of by the farmer (if Any)**

Sl. No.	Crop / Enterprise	Area (ha)/ No. covered	Production	No. of farmers involved	Market available (Y/N)
1	Paddy	25	300 q	40	Yes

**C. Indicate the Specific Training Need Analysis Tools/Methodology followed by KVKs**

Sl. No.	Brief details of the tool/ methodology followed	Purpose for which the tool was followed
1	In order to provide effective training to farmers, KVK Gumla has followed some training analysis tools like Focus group discussion, open ended questionnaire, telephonic interview, group meeting and survey. During training analysis, problems and needs were identified, data regarding preferences of farmers towards type and area of training, knowledge and skill gap between actual and desired skill are collected and analyzed. For example, if a particular group/individual was performing less, then this approach could be used to send them for specific training that would enhance the particular skill that is lacking. On the basis of data analysis and feedback of the farmers, the thrust area of training, training schedule and methods were designed. With the help of training analysis tools, the major thematic area of training that were preferred by the farmers are goat farming, piggery, lac cultivation and its processing, mushroom cultivation, mali training, organic farming, cutting and tailoring, pump set repairing etc.	The purpose behind using the training analysis tools were to identify and solve the exact problem, to avoid repetition, to save time and money, to find out the future problems and taking steps for learning, growth and development of farmers through scientific cultivation, production and income generation. By following these training analysis tools, KVK Gumla has focused and designed training schedule on climate resilient technologies, animal husbandry entrepreneurial development and value addition etc. that were the need of the hour.

#### 4. IMPACT

##### A. Impact of KVK activities/ large-scale adoption of technology

Name of specific area	Brief details of the area	No. of farmers benefitted	Horizontal spread (in area/no.)	% Adoption	Impact of the technology in subjective terms	Impact of the technology in objective terms	Change in income (Rs.)	
							Before (Rs./ Unit)	After (Rs./Unit)
Lac cultivation	Lac cultivated on Ber trees in about 450 ha in Nagar panchayet of Sisai block, but yield deduction due to aspergillus and others fungal infection on host plant.	20	150	65	Training on scientific lac cultivation for tree treatment before broodlac inoculation has enhanced the productivity and quality of lac. 20 no of farmers spray 1 gm carbendazim per liter of water before inoculation of brood lac to control fungal infections, resulting in healthier host plants. This technology reduced broodlac mortality, ensuring better survival rates and higher yields. Through horizontal spread, 150 farmers adopted the practice, improving income, promoting sustainable lac cultivation, and boosting the local economy.	<p>➤ <b>Training Coverage:</b> 20 farmers trained; 150 farmers adopted the technology.</p> <p>➤ <b>Yield Improvement:</b> Increased broodlac survival by 25–30%.</p> <p>➤ <b>Income Rise:</b> Farmers experienced a 20–25% income boost.</p> <p>➤ <b>Pest Control:</b> Effective fungal disease management with 1 gm carbendazim/liter water application.</p> <p>➤ <b>Sustainability:</b> Reduced crop loss, promoting eco-friendly practices.</p> <p><b>Livelihood Impact:</b> Enhanced income generation for small and marginal farmers.</p>	6080	4960
Drip Irrigation in watermelon	Nowadays, watermelon cultivation has become popular among farmers in the Gumla district due to its high profitability. However, the flood irrigation has led excessive irrigation water consumption &	2	56 ha	41.66 (17/5)	After live seeing significant benefits of drip irrigation in watermelon in the field by adjoining farmers has also encourage and adopted the same technology in watermelon and green pea	This technology significantly save irrigation water, ensures the precise application of fertilizers directly to the root zone through the fertigation method	156235.00	213600.00

Name of specific area	Brief details of the area	No. of farmers benefitted	Horizontal spread (in area/no.)	% Adoption	Impact of the technology in subjective terms	Impact of the technology in objective terms	Change in income (Rs.)	
							Before (Rs./ Unit)	After (Rs./Unit)
	also damage fruits colour & sizes and KVK advice, two farmers have adopted drip irrigation for watermelon cultivation on approximately 4.4 hector at Belaghra, Ghaghra block, ensuring efficient water usage and improved crop quality. ,				crop in around 56 ha. This technology save a large amount of irrigation water, ensuring efficient usage while reducing labor costs associated with irrigation, fertilizer application, pumping, and weeding. Through the fertigation method, fertilizers are delivered directly to the root zone, minimizing wastage and enhancing nutrient absorption. Additionally, weed growth is significantly reduced, leading to improved crop health and lower labor requirements. Enhanced water and nutrient management result in higher yields, superior fruit quality and increased profitability, promoting sustainable and efficient farming practices. labor costs associated with irrigation, fertilizer application, pumping, and weeding. Through the fertigation method, fertilizers are delivered directly to the root zone, minimizing wastage and enhancing nutrient absorption. Additionally, weed growth is significantly reduced, leading to improved crop health and lower labor requirements. Enhanced water and nutrient management	without any wastage, and also minimizes weeds growth in the crop.		

Name of specific area	Brief details of the area	No. of farmers benefitted	Horizontal spread (in area/no.)	% Adoption	Impact of the technology in subjective terms	Impact of the technology in objective terms	Change in income (Rs.)	
							Before (Rs./ Unit)	After (Rs./Unit)
					result in higher yields, superior fruit quality and increased profitability, promoting sustainable and efficient farming practices.			
Sole cropping	Sole cropping of mustard cultivation has enhanced the farmers' income by enhancing yield.	1436	2685	92	<p>➤ Additionally, the sole cropping of mustard improve soil fertility and saving the irrigation water and making this a sustainable and profitable agricultural venture</p> <p>➤ Employment generation: It creates good employment opportunities in terms of number of days engaged.</p> <p>Sustainability: Reduced mono-cropping through mustard cultivation due to low water requirement crop.</p>	<p>➤ The number of farmers that adopted sole cropping of mustard cultivation was increased because of seeing good impact on the yield of mustard. This technology was spread among 2685 farmers through training, demonstration and farmers to farmer in the field.</p> <p>➤ Economic Benefits: 15–20% higher yield of mustard; 20 –25%</p> <p>➤ Market linkage: Farmers cultivating mustard under cluster approach have been linked to oil processing plants from where their produce is purchased at 2-5 percent higher price than the market price. Due to which farmers are getting additional income.</p>	13750	67925

Name of specific area	Brief details of the area	No. of farmers benefitted	Horizontal spread (in area/no.)	% Adoption	Impact of the technology in subjective terms	Impact of the technology in objective terms	Change in income (Rs.)	
							Before (Rs./ Unit)	After (Rs./Unit)
Soil Health Card	The Soil Health Card helps in providing information about soil's nutrient status, which leads to a reduction in chemical fertilizer usage. It also has good impact on agriculture by encouraging balanced fertilizer application based on soil needs; essentially promoting better soil health and agricultural productivity. Due to this increase in yield of crops and farmer's income were found in the fields.	1943	12650	18-20	<p>➤ Through Soil Health Card, farmers are able to know about the fertility and acidity of their soil. <b>In this direction, the government has also distributed 1800 q. dolomite among 1980 farmers whose soil pH value was less than 5.5.</b></p> <p>➤ <b>Sustainability promotion:</b> By reducing excessive fertilizer usage, the scheme contributes to environmental sustainability by mitigating pollution risks.</p>	<p><b>Key impacts of the Soil Health Card:</b></p> <p>➤ Reduced fertilizer usage.</p> <p>➤ Increased crop yield from 12 to 18 %</p> <p>➤ Cost reduction in farming from 8 to 10 %</p> <p>➤ Improved soil health</p> <p>➤ Enhanced farmer awareness:</p> <p>The cards provide valuable information about soil composition, allowing farmers to make informed decisions regarding crop selection and fertilizer application.</p>		Rs. 2725/ha deduction in cost of cultivation
Canopy Management	In dense Mango orchard the production was reduced drastically due to poor orchard management practices and improper rejuvenation technique i.e. hard and semi hard pruning in the month of November and December. The farmer were not able to get economic yield and also involved the risk of drying of some plants.	60	50-60 acre (20-24 ha)	58.33% (35)	Pruning technique of open the center keeping the receiving of full sunshine for better development. By using light canopy management in November and December along with cultural and nutritional management, Farmers are getting maximum number of fruit bearing and quality produce and gain of Rs. 45000-55000/ha as additional profit over the traditional practices. 35 mango orchard farmer's in 20-24 ha area are adopting canopy management techniques.	Through pruning technique enhance the fruit bearing quality, more production and income.	Rs. 10000-20000/ha	Rs. 45000-55000/ha


Name of specific area	Brief details of the area	No. of farmers benefitted	Horizontal spread (in area/no.)	% Adoption	Impact of the technology in subjective terms	Impact of the technology in objective terms	Change in income (Rs.)	
							Before (Rs./ Unit)	After (Rs./Unit)
Use of Bamboo machan for sitting of goats in gat farming unit	With the use of bamboo machan technology, the excreta and urine of goats flow away immediately which helps in keeping the area dry and hygienic. Many pathogenic oriented diseases are controlled with the use of bamboo machan for sitting of goats in goat unit. Through this technology excreta and urine are collected below the machan which can be easily cleaned and further it can be used as manure in field.	20	120	75%	Seeing the advantage of bamboo machan for goat rearing, most of the farmers adopted it. Through this technology the mortality rate of goats were reduced 6-25% which helps in increasing the income of the farmer. With increase in income more farmers were promoted towards goat rearing.	Through this technology, there is less chance of goats to coming contact with ammonia gases that are found through urine and excreta of goats on the floor below the machan. Due to this the percentage of of disease in goats are minimized to 20% and it helps them to live in disease free environment.	Rs. 30000/- unit	Rs. 80000/- unit
Scientific cultivation of Oyster Mushroom	Cultivation of oyster mushroom from October to February is favorable for Gumla District because of its favorable temperature and humidity. Mushroom farming is an enterprise of high profit at low cost. For production of oyster mushroom, the necessary materials that are required are arched room, shady place, rack made of wood bamboo, paddy straw, spawn, polyethylene bag (14" 22"), scissors, fungicide and insecticides. The major steps are required in oyster mushroom production technology are preparation of straw, polythene bag, spawn preparation and spawning.	137	70	51.09	Not only income but the number of farmers and farm women engaged in mushroom cultivation were also increased. Most of the farm women were purchasing mushroom spawn and other related materials required for mushroom cultivation at their own level. Earlier oyster mushroom cultivation was found in a limited area of one or two blocks but now mushroom cultivation has been adopted by the farmers and farm women almost from all blocks of Gumla district.	During 2024- 25, the farm women that were engaged in mushroom cultivation earned an additional income of Rs 45000 to Rs. 50000 in a season through the sale of mushroom, mushroom nuggets and pickles..	Rs.10,000 from the sale of natural mushroom	Rs.45000 from oyster mushroom.

**B. Details of entrepreneurship/startup developed by KVK**

Entrepreneurship development	
Name of the enterprise	Lac cultivation
Name & complete address of the entrepreneur	Name:- <b>Anupa Devi</b> Village:- Kataidamar, Panchayet:- Nagar, Block Sisai, Dist:- Gumla, Jharkhand
Role of KVK with quantitative data support:	Training, quality brood lac and tools related to lac cultivation were provided by Krishi Vigyan Kendra Gumla. By the joining the KVK, today they are getting handsome income by the Scientific lac cultivation.
Timeline of the entrepreneurship development	Started scientific lac cultivation after training in KVK in 2018-19
Technical Components of the Enterprise	<ul style="list-style-type: none"> <li>• Selection of host plants</li> <li>• Prunning of host plants</li> <li>• Treatment of host plant before inoculation</li> <li>• Proper brood lac inoculation</li> <li>• Insect pest management</li> <li>• Use of farm machinery for lac cultivation</li> </ul>
Status of entrepreneur before and after the enterprise	<p>Anupa Devi used to cultivate lac on 100 Ber trees which did not give him good income. There was a net profit of about Rs 40000 in a year from traditional lac cultivation.</p> <p>Today, by scientific lac cultivation, we are getting a net income of about Rs 150,000 in a year.</p>
Present working condition of enterprise in terms of raw materials availability, labour availability, consumer preference, marketing the product etc. (Economic viability of the enterprise):	Lac is a natural product of commercial importance. In Gumla district lac host plant is naturally available and climate is suitable for lac cultivation. Due to the increasing demand of lac in foreign market, today lac is being sold a handsome price due to which farmers getting good income.
Horizontal spread of enterprise	Seeing the success of Anupa Devi about 45 farmers of nearby villages are also earning good income by scientific lac cultivation

### C. Success stories/Case studies, if any

#### 1. Personal information



1.	<b>Name of the farmer/ entrepreneur : Pawas Minz</b>	
2.	Date of Birth : 16/12/1964	
3.	Education : XII	
4.	Farming Experience/ Experience in enterprise : 60	
5.	Cell no./ e-mail : 9612387721	
6.	Full address : Konatoli, Telgown, Block: Gumla, Dist.: Gumla	
7.	Professional membership : FPO (Farmer club/SHG/ATMA/etc.)	
8.	Major achievement of the farmers :NA	
9.	Awards received : NA	

#### 2. Professional Information

1.	Title of the success story/case study <b>Overcoming Labor Shortages Through Farm Mechanization – The Success Story of Mr. Minz</b>
2.	<p><b>Situation analysis/Problem statement (What prompted this initiative? What was the problem that needed to be addressed?)</b></p> <p>Mr. Minz retired from the Indian Army in December 31, 2021 and decided to begin a new life as a farmer after retirement. Coming from a farming family, he was familiar with agriculture. His total landholding was around 8 acres, consisting of 2.4 acres of upland and 5.7 acres of lowland. For nearly three decades, the upland remained uncultivated, while the lowland was used for paddy farming through sharecropping during the kharif season. Over time, things had changed in his village. Most villagers were no longer interested in farming because Gumla town was just 15 km away. Many people preferred to work in the town for daily wages rather than work on farms. As a result, finding farm labor became a major challenge for Mr. Minz. The lack of workers made it difficult for him to continue farming successfully.</p> <p>After retirement, he spent around four months settling in the village and renovating his house. Without wasting any time, he immediately began preparing his land for Kharif crops. The summer ploughing was done using a rented tractor. Farming conditions in Jharkhand are entirely dependent on rainfall, with the monsoon typically beginning around mid-June. However, he encountered significant challenges even before the monsoon arrived. Every farmer in the village was occupied with field preparations, making it difficult to hire tractors and laborers. Despite these obstacles, he managed to prepare the field and ready the paddy seedlings on time.</p> <p>During the transplanting phase, a severe shortage of farm laborers caused delays. As a result, his paddy seedlings became over-matured, and he could not complete transplantation on his 5.7 acre field on time. He faced the same issue with his ragi crop. Additionally, labor shortages affected him during weeding, harvesting, and threshing. Despite these setbacks, he managed to sow black gram</p>



	using the broadcasting method on one acre. However, his plans to cultivate maize and vegetables on two acres failed due to a persistent labor shortage.
3.	<p><b>Plan, Implement and Support/KVK Intervention(s):</b></p> <p>In September 2022, he participated in an FPO Member Training Program on Farm Mechanization at the FPO Gumla Office. The program deeply motivated him to explore farm mechanization. During the training, he gained valuable information about agricultural machinery. After the training, he contacted a KVK scientist to discuss the ongoing farm labor crisis and seek immediate solutions. The scientist explained the benefits of farm machinery and suggested purchasing a rice transplanter, a power weeder, and a reaper, requiring an investment of around ₹2,00,000. However, he told that money was not a concern for him and also expressed his intention to buy a tractor and rotavator. After a suggestion of scientist, he decided to purchase a tractor in next year.</p> <p>By coincidence, on the same evening, the District Soil Conservation Officer called the KVK Scientist to request applications from interested farmers for the Farm Machinery Scheme, which offered an 80% subsidy on agricultural equipment. The scientist conveyed this message to Mr. Minz, who met the officer the next day and submitted the required documents.</p> <p>Six months later, he received a call from the District Soil Conservation Office, Gumla, confirming the approval of his application. The total package under the scheme was ₹10,00,000 (Rupees Ten Lakhs Only), which included one mini tractor, one rotavator, one rice power transplanter machine, and one reaper. He paid ₹2,00,000 (Rupees Two Lakhs Only) as his share of the cost.</p> <p>He considers himself one of the luckiest people on earth, as he was able to acquire exactly what he needed. Someone once said, <b>"God helps those who work hard with dedication."</b></p>
4.	<p><b>Details of Practices followed by the farmer</b></p> <p>The farmer cultivates hybrid rice, potato, tomato, chili, mustard, and maize on 5.7 acres during kharif and rabi seasons. With the support of modern farm machinery and implements, he efficiently manages land preparation, sowing, irrigation, fertilization, and pest control. These advanced agricultural practices improve productivity, reduce labor, and enhance resource utilization, making farming more sustainable, cost-effective, and profitable while ensuring high yields and quality produce.</p>
5.	<p><b>Results/ Output (economical/ social/ etc.)</b></p> <p><b>(Key results/ Insight/ Interesting fact- initial, intermediate, or long-term outcome)</b></p> <p>In early 2022, he feared that farming would struggle in the future due to a shortage of labor. However, with the support of modern farm machinery, agriculture became more efficient and manageable for him. During the Kharif and Rabi seasons of 2021-22, he earned a net profit of ₹38,488. By 2023-24, his earnings had soared to ₹1,71,858, reflecting an impressive 346.52% increase in just two years. He also provides permanent employment to a driver. While many retirees ends life with alcohol and gambling, Mr. Minz has proven that life has no retirement age. Today, he is an inspirational figure in society.</p>

6.	<p><b>Impact/ Outcome:</b></p> <p>He thought the purchased farm machinery was only for personal use to increase farming efficiency. However, after his successful farming, the villagers, seeing his progress, also demanded farm machinery for their fields. From 2022 onward, he decided to supply farm machinery (Reaper) on a hiring basis to villagers. That year, he harvested paddy on around 16 acres and earned a net profit of approximately ₹15,000. In 2023, using a mini tractor, transplanter, and reaper, he covered 62 acres and gained a net profit of around ₹1,72,000. In 2022, KVK Gumla also supported him by providing a paddle-cum-electric paddy thresher machine under TSP. At present, he is a service provider of farm machinery for adjoining villages also. In the coming years, he plans to purchase a tractor and thresher to expand his operations and run a large-scale custom hiring center. He believes this center will not only generate income but also provide employment opportunities for many unemployed youths in the village.</p>
7.	<p><b>Future plans</b></p> <p>In the coming years, he aims to invest in a tractor and thresher to expand his agricultural operations and establish a large-scale custom hiring center. This initiative will enable farmers to access modern equipment at affordable rates, boost productivity, and create job opportunities for many unemployed youths in the village, fostering rural development.</p>
8.	 

### 3. Economic Information

Year	Enterprise	Area (acre)	Gross Income (annual)	Net income	Cost-Benefit ratio
2021-22	Rice (Lalat)	3.0	55566	17766	1.47
	Black Gram (Local)	0.5	6500	1500	1.30
	Ragi (Local)	0.5	3622	1222	1.51
	Ragi-Vegetable (Cole crops)	0.5	27000	18000	3.00
	<b>Total :</b>	<b>4.5</b>	<b>92688</b>	<b>38488</b>	<b>1.71</b>
2022-23	Rice (Hybrid)	3	78456	38856	1.98
	Rice (Sonpiya)	2	28224	10624	1.60
	G/N (Improved)	0.5	15825	8825	2.26
	Rice-Vegetable (Brinjal)	0.5	14400	5400	1.60
	Rice –Potato (Lalgulab)	0.5	38450	19380	2.02
	Rice –Tomato (Suraccha)	1	57792	31672	2.21
	Rice–Chilly (Suraj Mukhi)	0.5	23660	14620	2.62
	G/N-Mustard (PM-30)	1	23436	14836	2.73
	Custom hiring (Reaper)	16	9600	6400	3.00
	<b>Total :</b>	<b>25</b>	<b>289843</b>	<b>150613</b>	<b>2.08</b>
2023-24	Rice (Hybrid)	3	78456	38856	1.98
	Rice (Sahbhagi dhan)	1.5	37360	18160	1.95
	G/N (Improved)	0.5	15825	8825	2.26

Year	Enterprise	Area (acre)	Gross Income (annual)	Net income	Cost-Benefit ratio
	Maize (Kanchan)	0.5	12395	5695	1.85
	Rice-Vegetable (Brinjal)	0.5	14400	5400	1.60
	Rice –Potato (Lalgulab)	0.5	38450	19380	2.02
	Rice –Tomato (Suraccha)	1	57792	31672	2.21
	G/N- Pea (GS 10)	1	32600	11400	1.54
	G/N-Mustard (PM-30)	1.5	23221	9211	1.66
	Custom hiring (Reaper, Transplanter & Mini Tractor)	62	42800	23259	2.19
	<b>Total :</b>	<b>10</b>	<b>353299</b>	<b>171858</b>	<b>1.95</b>

Between 2021-22 and 2023-24, the farmer significantly expanded his agricultural operations, increasing the sown area from 4.5 acres to 10 acres. In 2021-22, during the kharif season, he cultivated 4.5 acres, generating a gross income of ₹92,688 and a net income of ₹38,488. By 2022-23, with cultivation in both kharif and rabi seasons across 9 acres, his gross income rose to ₹2,89,843, including earnings from farming and custom hiring, with a net income of ₹1,50,613. Further expansion in 2023-24 to 10 acres resulted in a gross income of ₹3,53,299 and a net income of ₹1,71,858. The introduction of custom hiring services played a key role in boosting profitability. This steady growth reflects improved resource utilization, higher productivity, and enhanced financial sustainability, positioning the farmer for further expansion and success.

## SUCCESS STORY-II

### I. Personal Information

1.	Name of Farmer	Mr. Ram Munda
2	Date of Birth/age	31 years
3	Education	Inter
4	Farming Experience	5 years
5	Cell no.	8847260197
6	Full Address	Village – Sato, Panchayat- Helta, Block- Bishunpur, District- Gumla, Jharkhnad-835231
7	Professional Membership	ATMA
8	Awards Received	Best Farmer Award

### 2. Professional Information

**Title: Pig farming: Profitable venture for income security.**

#### Situation analysis

Mr. Ram Munda, 31 years old, was an unemployed belongs to farming family and lives in village- Sato, Panchayat- Helta, Block-Bishunpur. He was dependent on farming only and earned about Rs 45,000 to Rs. 50,000 in a year from farming of paddy, maize, ragi, from 2.5 acre of land and rearing of pig of local breed, which was insufficient to meet his family expenses. He faced problems like low litter size, or growth, and high mortality etc in his small pig farm and due to lack of knowledge he was not able to establish it in a profitable manner. To sort out these problems and for establishing highly remunerative enterprise, he decided to take training on pig farming which would help him in leading good piggery unit and also help him in securing better livelihood.

#### Plan, Implement and support /KVK intervention

Then, he contacted Krishi Vigyan Kendra Gumla in the year 2023 for training on pig farming and undertook entrepreneurship development training for pig farming. In 2023 Krishi Vigyan Kendra Gumla provided him seven days skilled training on Pig Farming which assisted him in establishing piggery unit in a profitable manner. During training he learnt about proper rearing, breeding, feed management, common diseases and vaccination of piggery unit. As the piglet of improved breeds are also not easily available in the adjoining area of the village So, Krishi Vigyan Kendra Gumla provided him 2 pigs and vaccines also i.e. 2 piglets of Jharsuk breed (one male and one female) through demonstration because of its high yield, low per unit cost of production and black colour and fattening purposes. This breed can also gain approximately 80 kg body weight at slaughter age of 8-10 months. It can produce 8-12 piglets in each farrowing with two farrowing each year.

#### Details of practice

After receiving training and pigs, he sold all the desi pigs at Rs 144000/- for starting this unit on a commercial basis and with this amount he procured 2 boars and 10 sows on his own basis. Within 11-12 months each sow delivered 8-12 nos. of piglets in the first batch. The piglets were reared up to 60-75 days of age and sold at Rs. 2,500-3,000/- each. He spends around Rs.1000-1100/- per month on purchasing of the feed ingredients like broken rice, rice bran etc. and medicines, vaccines etc. He also used left-over rice, kitchen waste etc. for feeding of pigs and followed proper feed management practices. He also maintained frequent contact with experts of KVK Gumla to update his knowledge on scientific management practices of piggery unit. He expressed a great satisfaction while he sold the piglets as there was huge demand of improved piglets.

#### Results/Output

In 2023, he procured 2 boars and 10 sows on his own level after selling of 18 local breed pigs at Rs 144000/- and from 11 sows 88 piglets were born in one farrowing in the 2023. After rearing of these piglets for 60 to

75 days he sold it to the other farmers and was succeeded to earn a handsome amount of Rs. 264000/- which provided him a greater satisfaction. Because of increasing rearing cost, he also sold 5 adults at the rate of Rs 15000 and received an amount of Rs.75000 in the year 2023. In 2024, the number of piglets were also increased to 124 because of two farrowing in a year.

KVK was also regularly providing vaccination and clinical support to him and with regular technical support, it was observed that the mortality percentage was also reduced from 30- 40 % to 5-10 % among pigs. The scientific personnels were regularly visiting for monitoring the growth performance of the pigs and time to time provided mineral mixtures, dewormer, pig grower and finisher rations etc. In addition, his pig farm maintains high standards of cleanliness and sanitation in order to protect the pigs from contacting with any infections.

### Impact/Outcome

For maintaining the sustainable pig farming Mr. Munda was successfully increasing the population of pigs in his piggery unit. For the expansion of Jharsuk breed in his area he sold it in surrounding villages and motivated the 20 other farmers towards piggery enterprise. Not only his income was increased but also, he got a good recognition in the society. With this additional income he was able to provide better education to their children. Income depends upon market need which comes in the tune of Rs. 250 to 300/kg and he had succeeded to earn a gross income of Rs. 2500-3000 / piglet. In 2024 he had sold 124 no. of piglets with a sum of Rs.372000 which was tremendous growth in his income from this unit. He was also awarded with **progressive farmer award** from **Shri Hemant Soren Hon'ble chief minister of Jharkhand** in Agrotech Kisan Mela 2025. With KVK's interventions in the form of Jharsuk crossbred pigs, entrepreneurship training, package of practices and regular guidance from scientists, he has emerged as one of the successful entrepreneurs among the youth in pig enterprise and earning a net annual income (profit) of approx. Rs. 8,00,000/- from the sale of 212 nos. of piglets and 23 adults in two years. He further expressed his commitment to keep his pig as long as it could give births so as to show that rearing pigs can substantially augment incomes of a family.

Pig farming is now becoming an important entrepreneurial venture with faster and higher economic returns, owing to pig's inherent qualities like early maturity, high fecundity, better-feed conversion efficiency, shorter generation interval along with smaller requirements of investment on buildings and equipment. More and more farmers are now adopting pig farming due to its high profitability.

### Lesson Learned and Future Plan

In future Mr. Munda is planning for establishing this unit on a large scale by engaging more numbers of farmers on a payment basis for wider acceptance of this breed in Gumla district.

### 3. Economic Information:

Year	Enterprise name (Piggery Unit)	No.	Gross Income (Rs) (annual)	Net Income	Cost- Benefit ratio
2023	i. Local breed pig	18	144000/-	90000/-	2.66
	ii. Piglet (Jharsuk)	88	264000/-	176000/-	3.00
	iii. Adults/growers (Jharsuk)	5	75000/-	40000/-	2.14
2024	Piglet (Jharsuk)	124	372000/-	224000/-	2.50

## Photographs



### हिन्दुस्त 9.02.2025 गुमला के दो किसानों को सीएम ने किया सम्मानित



गुमला में शहीदाय को प्रतिष्ठित पत्र दिखाते सम्मानित हुए किसान। • हिन्दुस्तान

मुम्बल, संज्वादयल। बिरसा कृषि विविधालय रांची में आयोजित प्रदेश स्तरीय एग्रीटेक किसान मेला में मुख्यमंत्री हेमन्त सोरेन ने गुमला जिले के दो प्रगतिशील किसानों राम मुंडा (सातली, धिमानपुर) और अजय महाली (करमटोली, मुमला) को सुअर पालन के क्षेत्र में प्रतिष्ठित पत्र व साल केटकर सम्मानित किया।

अजय महाली ने कृषि विज्ञान केंद्र गुमला द्वारा संचालित साथी


परियोजना के तहत प्रशिक्षण प्राप्त कर वैज्ञानिक पद्धति से सुअर पालन शुरू किया। जिससे वे प्रतिवर्ष दो-तीन लाख रुपये की आयवासी अर्जित कर रहे हैं।

जहाँ राम मुंडा ने खेती के साथ-साथ सुअर पालन का निर्णय लिया और कृषि विज्ञान केंद्र गुमला से प्रशिक्षण प्राप्त कर इसे अपनाया। आज वे हर साल केन्द्र-दो लाख रुपये की अतिरिक्त आय प्राप्त कर रहे हैं।



## Success Story-III

### I. Personal Information

1.	Name of Farmer	Basant Chik Badayik	
2	Date of Birth/age	01.01.1992	
3	Education	9 <sup>th</sup>	
4	Farming Experience	8 years	
5	Cell no.	8252607873	
6	Full Address	Village –Khartanga , Panchayat-Marasilli , Block- Bharno District- Gumla, Jharkhnad-835231	
7	Professional Membership	ATMA	
8	Awards Received		

### 2. Professional Information

#### Title: Vegetable Nursery Production

#### Situation analysis

Mr. Basant Chik Barayik, resident of village- khartanga, block-Bharno is a farmer by profession and was totally depend on paddy farming only. He did paddy farming once in a year in 2 acre of land for earning his income for his livelihood. But income from paddy farming was not sufficient for fulfilling his family needs around the year. Therefore, he was engaged in labour work for their livelihood.

#### Plan, Implement and support /KVK intervention

In 2021-22 he came on contact with Krishi Vigyan Kendra Gumla and asked about ways of increasing income from his fields. He was facilitated through FLD programme and received knowledge about vegetable nursey production in a scientific way. He turned his interest towards vegetable nursery production.

Mr. Barayik was always in touch with KVK scientist and was taking regular technical assistance from scientist of KVK.

#### Details of practices followed by the farmers

Mr. Barayik was very much influenced with the efforts of Krishi Vigyan Kendra Gumla that motivated him towards vegetable nursery production for improving his income. He followed all the steps of vegetable nursery production like preparation of nursery bed, soil management, planting procedure, control of seedling density, seed nursery raising practice in portray. He raised good amount of vegetable nursery as per the demand of vegetable in his area and sold in the local market.

#### Results/Output

After getting technical advice from KVK, he raised nursery of vegetables like tomato, brinjal, chilli, cauliflower in one acre of land through adopting all the technology of nursery management like Portray nursery, protective nursery, need based bio pesticides use, disease resistant varieties, adequate time of seed sowing, seed treatment for good quality seed raising and his net income return was Rs 177000 in 2023-24 with benefit cost ratio 3.92.

### Impact/Outcome

This agri enterprise was giving him good results and he proved as a good nursery grower in the society. He was not only getting income from vegetable nursery production but also had good impact among the other farmers. His successful return delivered the positive message among local people. Now he has become a good example for other farmers in his village.

### Lesson Learned and Future Plan

In future he is planning to expand vegetable nursery management in 15-20 acre of land by forming commodity interest group with 40 farmers of two villages of Bharno block.

### 3. Economic Information:


Enterprise name	Seedling No.	Gross cost (Rs)	Gross Income (Rs)	Net Income	Cost- Benefit ratio
Vegetable Nursery (Seedlings of Tomato, Chilli, Cauliflower, Brinjal, Cabbage)	7.50 lakhs	60500	237500	177000	3.92





### Success Story-IV

#### Nutritional Garden brings Nutritional Security

<b>Name of Farmer</b>	:	Mrs. Anjella Kerketta		
<b>Address</b>	:	Village -Bendi, Panchayat- Amtipani Block- Bishunpur, District- Gumla		
<b>Contact details (Phone No. &amp; email ID)</b>	:	6202169324		
<b>Landholding (in ha)</b>	:	01		
<b>Name and description of the farm/enterprise</b>	:	Mrs. Anjella Kerketta was a successful Nutritional gardener from Bendi Village within Bishunpur block of Gumla District, was doing nutritional gardening in a very small area (0.008 ha). As she did not have prior knowledge of Nutritional gardening was not getting adequate quantity of vegetables around the years. In 2022 she came in contact with the scientist of Krishi Vigyan Kendra Gumla and showed her keen interest in Nutritional gardening and other technical support from the scientist. Being a hard working farm women she grasped the technology faster and adopted it. After getting scientific knowledge of nutritional garden and good quality vegetable seeds like Carrot, Beet, Brinjal, Cauliflower, Green leafy Vegetable, Chili, Coriander, Tomato, Radish, French bean etc, she developed nutritional garden in 300sqm and also planted fruit plants like Guava, Mango, Papaya, Drumstick etc.		
<b>Economic impact</b>	:	Initially she was developing Nutritional garden with constant encouragement because of this she was not able to get vegetables around the year. In 2022 after demonstration on Nutritional Garden and regular follow up by the KVK Scientist at her field, area under Nutritional garden was increased to 300sqm. which was able to full fill food diversity in the diet of her family members. It had also reduced reliance on market for introduced vegetables and fruits. With this Nutritional garden she was happy to enhance Nutritional security and also income security for her family. She earned about Rs. 2500.00 per month from the sale of surplus vegetables.		
<b>Social Impact</b>	:	Through Nutritional garden her family members were Nutritionally secured because of intake of all nutrient's like proteins, vitamins and minerals in their diets and this motivated other family of her village for including balanced and		

		healthy diet in their meal. She was a key person for other farm women in developing Nutritional garden in their land.
<b>Environmental impact</b>		With the adoption of short duration varieties of vegetables and ridge method planting under Nutritional garden, the water saving was found up to 10-15%.
<b>Horizontal/vertical spread</b>	:	By seeing Mrs. Anjella Kerketta's effort almost all the farm women of her surrounding villages have adopted Nutritional garden at their own land for enhance their income and Nutritional securities both.

### Action Photographs



### Success Story-V

#### Specific Technology:- Introduction of improve Groundnut variety (K-1812) & ICM.

<b>Name of KVK</b>	Gumla
<b>Crop and variety</b>	Groundnut, Variety – K-1812
<b>Name of farmer &amp; address</b>	Shri Kamaldev Oraon Village – Lutobertoli Block – Gumla District – Gumla Mobile - 7858800557
<b>Background information about farmer field</b>	Kamal Oraon is a progressive farmer from Lutobertoli village in Gumla district. He owns 0.4 hectares of tar land, which is rainfed and used only for kharif crop cultivation. The soil in his field is low in fertility, with deficiencies of nitrogen (N), phosphorus (P), and potassium (K). Traditionally, he cultivated K-6 variety of groundnut, which had a low yield of 12 q/ha. There was no seed treatment, use of bio-fertilizers, or proper soil amendments, leading to low productivity and poor income. To address these challenges, KVK Gumla implemented the Cluster Frontline Demonstration (CFLD) program to introduce scientific farming practices and high-yielding varieties to increase productivity and profitability.
<b>Details of technology demonstrated</b>	<ul style="list-style-type: none"> <li>➤ Demonstrated Variety: K-1812 (High-yielding, disease-resistant &amp; drought tolerant )</li> <li>➤ Area Covered: 0.4 hectares</li> <li>➤ Inputs Provided: Certified seeds, bio-fertilizers, dolomite</li> <li>➤ Seed Treatment: Thiram to prevent seed-borne diseases</li> <li>➤ Line sowing for uniform plant growth</li> <li>➤ Soil testing-based fertilizer application</li> <li>➤ Integrated pest and disease management</li> <li>➤ Crop Duration: 112 days</li> </ul>
<b>Institutional involvement</b>	The KVK Gumla scientists played a crucial role in ensuring the success of this demonstration. Regular field visits were conducted to monitor crop growth and guide the farmer on best practices. Capacity-building training sessions were organized to educate the farmer on improved cultivation techniques. Technical support was provided for weed management, pest and disease and insect management scheduling.
<b>Success point</b>	<ul style="list-style-type: none"> <li>➤ Higher Yield: The adoption of K-1812 variety and improved practices led to an increase in yield from 12 q/ha to 22 q/ha.</li> <li>➤ Better Disease Resistance: Seed treatment with Thiram and the use of bio-fertilizers reduced the incidence of soil-borne diseases.</li> <li>➤ Increased Profitability: The net income increased from ₹40,000/ha to ₹1,00,000/ha, making groundnut farming more profitable.</li> <li>➤ Adoption by Other Farmers: Seeing the success, other farmers in the village showed interest in adopting K-1812 variety and improved agricultural techniques.</li> <li>➤ Improved Soil Health: The use of bio-fertilizers and dolomite helped in enhancing soil fertility and productivity. Sri</li> </ul>

	<p>Kamaldev Oraon getting very interest for adoption of this technology. His field was prepared by rotavator and then line sowing was done with the help of cultivator.</p> <ul style="list-style-type: none"> <li>➤ The fertilizer applied was 100 kg N: 60 kg P: 40 kg K with 4500 kg organic manure (FYM).</li> <li>➤ Weed management through weedicide (Pendimethalin) @ 2.0 liter/ ha.</li> </ul>
<b>Farmer feedback</b>	Farmer feedback about the demonstrated technology was very encouraging and shows their willingness to adopt this variety and ICM in right way.
<b>Yield (q/ha)</b> <ul style="list-style-type: none"> <li>- Potential yield of variety : 35.00 q/ha</li> <li>- District average : 13.35 q/ha</li> <li>(Previous year)</li> <li>- State average : 8.80 q/ha</li> <li>(Previous year)</li> </ul>	

Performance of technology vis-à-vis Local check (Increase in productivity and returns)

Used Practice	Yield (q/ha)	Gross cost (Rs/ha)	Gross income (Rs/ha)	Net income (Rs/ha)	B:C ratio
Farmer practices	14.30	48500	96997	48497	2.00
Demonstration	22.70	50600.00	153974	103374	3.04
% Increase	58.74				

**Photographs:**



Field follow-up



Groundnut field



Field day on Groundnut (K-1812)

## 5. LINKAGES

### 5.1. Functional linkage with different organizations

S.No	Name of organization	Nature of linkage
1.	District Cooperative Office Gumla	Training
2.	ATMA Lohardaga	Training
3.	ATMA Palamu	Training
4.	AICRP Niger	FLD
5.	AICRP Niger	Training
6.	National Bee Board	Training, Awareness
7.	IIMR Hyderabad	Establishment of Millet Processing Centre

### 5.2. Details of Externally funded project & Programmes during 2024 (Eg. ATMA/ Central Govt/ State Govt./NABARD/NHM/NFDB/Other Agencies) (information of previous years should not be provided)

#### a) Programmes for infrastructure development

Name of the programme/ scheme	Purpose of programme	Date/ Month of initiation	Funding agency	Amount (Rs.)
-	-	-	-	-

#### (b) Programme for other activities (training, FLD, OFT, Mela, Exhibition etc.)

Name of the programme/ scheme	Purpose of programme	Date/ Month of initiation	Funding agency	Amount (Rs.)
Training	Training	04/01/24	District Cooperative Office Gumla	675000.00
Training	Training	09/02/24	ATMA Lohardaga	75000.00
Training	Training	26/02/24	ATMA Palamu	58750.00
FLD	FLD	11/03/24	AICRP Niger	80000.00
Training	Training	20/01/24	AICRP Niger	24000.00
Training, Awareness	Training, Awareness	25/06/24	National Bee Board	550000.00
Establishment of Millet Processing Centre	Establishment of Millet Processing Centre	08/01/25	IIMR Hyderabad	3612000.00
<b>Total</b>				<b>5074750.00</b>



## 6. PERFORMANCE INDICATORS

### 6.1. Performance of demonstration units (other than instructional farm)

SINo	Name of demo Unit	Year of estt.	Area (Sq.mt)	Details of production			Amount (Rs.)		Remarks
				Variety/ breed	Produce	Qty.	Cost of inputs	Gross income	
1.	Rainwater harvesting unit	2007-08	40 m x 30 m	Rohu, Katla, Mrigal					
2.	Vermicompost	2010-11	189 sq. ft	Easenia foetida	Compost	1.09 q	59009.00	105600.00	Sell 88 q 21 q stock in hand
3.	Nursery unit	2018-19	0.20 ha	Vegetables	Seedling	12975 no	60892.00	74250.00	Farm sue, Sell and distribution
				Spices	Seedling	21870 no			Farm sue, Sell and distribution
				Fruits	Plant	5000 no			Sell and stock in hand
				Medicinal	Slip	5000 no			Stock in hand
4.	Goatry	2017-18	0.30 ha	Black bangal	Kids	07 no	38496.00	32000.00	Sell and stock in hand
5.	Duckry	2018-19	1500 sq ft	Khakhi campbell	Egg	35 no.	2406.00	245.00	Sell
6.	Pig	2018-19	366 sq ft	Jharsuk	Piglet	36 no	102117.00	129600.00	Sell
					Pig	100 kg			
7.	Hatchery unit	2023-24		Sonali, Jharseem	Chicks	612 no	5712.00	16896.00	Sell
8.	Semialata	2024-25	0.05	Semialata	-	-	7140.00	-	Growth stage
8.	Custom hiring			Drone		134.5 acre	7309.00	85950.00	
				Tractor		2.0 hr.			
	<b>Total</b>								

## 6.2 Performance of Instructional Farm (Crops)

Name Of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)			Remarks
				Variety	Type of Produce	Qty.(q)	Cost of inputs		Gross income	
Paddy	29/07/24- 04/08/24	20/11/24- 26/11/24	2.0	MTU-1010	F/S	92.0	124311.00		184000.00	Stock in Hand
Paddy	04/08/24- 06/08/24	27/11/24	0.20	Black Rice	T/S	1.92			3800.00	
Wheat	27/12/24	-	0.40	K-1006	F/S	-	7050.00		--	Growth Stage
Mustard	20/10/23	10/02/24	0.30	PM-30	T/S	0.94	Jan-Dec	1912.00	4700.00	Stock in hand
							Oct-Dec	5916.00		
Sugarcane	09/03/24	17/01/25	0.05	Local		90 pc	8693.00		900.00	Crop standing & Growth stage
Sesame	09/07/24	16/10/24- 18/10/24	1.0	RT-351	F/S	0.77	9456.00		9240.00	Stock in hand Crop damaged due to weather at the time of harvesting
Paddy	24/07/24- 25/07/24	25/11/24- 27/11/24	0.20	Swarna Shreya	F/S	6.30	14806.00		24000.00	
Dhaincha	19/07/24	26/11/24- 28/11/24	0.20	Dhaincha	T/S	0.71	5063.00		3550.00	
Ragi	26/07/24- 27/07/24	20/11/24- 24/11/24	0.80	BM-03	C/S	6.89	7466.00		27560.00	
Niger	30/08/24- 03/09/24	01/12/24- 14/12/24	1.6	BM-03	F/S	1.80	14179.00		21000.00	
Mustard	29/10/24	-	0.40	PM-30	T/S	-	9536.00			Crop standing
Mustard	05/12/24	-	0.40	BBM-1	F/S	-	2753.00			Crop standing
Wheat	08/12/24- 19/12/24	-	0.80	DBW-187	F/S	-	13877.00			Crop standing
Redgram	11/07/23	20/04/24	0.40	Birsar Arhar- 02	C/S	0.50	Jan-Apr	2295.00	4000.00	Crop damaged due to weather
							July-Dec	13418.00		
							Total	15713.00		
Sunflower (Trial)	11/11/23	31/03/24	0.04	SH-23	T/S	0.10	Nov-Dec	637.00	-	Stock in hand
							Jan-Dec	2167.00		

Name Of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)				Remarks
				Variety	Type of Produce	Qty.(q)	Cost of inputs		Gross income		
							Total	2804.00			
Orange	28/10/15- 29/10/18	13/12/24	0.09	Nagpur Santara	Fruit	0.60	2422.00		3000.00		Sell
Lemon	08/08/15	04/08/24	0.04	Kagji	Fruit	0.15	765.00		450.00		Sell
HD Guava	21/07/09 24/08/17	-	0.50	L-49, KG Guava, Allahabad Safeda	Fruit	-	10710.00		-		Pruning work
Mango (B Block)	21/06/13	07/06/24	2.0	Langra	Fruit	Sold with tree	21580.00		48000.00		Sell
Mango (C D Block)	20/07/08	07/06/24	0.80	Amrapali, Himsagar	Fruit	Sold with tree	7476.00				
Mango (A Block)	22/08/17	07/06/24	0.60	Amrapali, Langra	Fruit	Sold with tree	7866.00				
Pomegranate + Litchi	25/04/11 2022	-	0.31	Ganesh, Bhagwa	Fruit	-	3060.00		-		Growth stage
Papaya	27/07/23- 04/08/23		0.06	Ranchi Papaya	Fruit	-	Jan-Dec	2677.00			Growth stage
Litchi	24/12/23		47 plants	Shahi	Fruit	-	3187.00				Growth stage
Potato	14/10/23	17/01/24	0.03	Lal Gulab, Kufri	Non seed	3.87	Oct-Dec	6027.00	Dec	720.00	Sell
										5130.00	
									Total	5850.00	
Tomato	11/11/23	19/04/24- 18/05/24	0.01	Swarna Prakash	Non seed	1.27	Nov-Dec 23	446.00	2390.00		Sell
							Jan-Dec 24	1402.00			
							Total	1848.00			
Corainder + Spanich	12/12/23	21/02/24- 15/03/24	0.02	All green	Non seed	1.07	Dec 23	1245.00	2325.00		Sell
							Jan-Dec 24	127.50			
							Total	1372.00			
Yam	07/05/23		0.07	Gajendra		4.28		13742.00	16096.00		Sell



Name Of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)				Remarks
				Variety	Type of Produce	Qty.(q)	Cost of inputs		Gross income		
							Jan-Dec	1530.00			
		21/02/24- 22/02/24			Non seed		<b>Total</b>	15272.00			
Chilli	07/10/23	27/02/24- 20/03/24	0.02	Agni	Non seed	0.48	Oct-Dec	1912.00	2175.00	Sell	
Okra	14/03/24	02/05/24- 18/05/24	0.15	Mahico Bhindi-10	Non seed	0.39	6727.00		1540.00	Damaged due to grazing	
Watermelon	08/03/24	-	0.12		Non seed	-	3185.00		-	Damaged due to grazing	
Bottle gourd	10/03/24	-	0003	Anokhi	Non seed	-	3465.00		-	Damaged due to Wilting	
Yam	15/05/24	12/12/24	0.40	Gajendra	Non seed	1.68	21245.00		6780.00	Stock in hand and sell going on	
Brinjal	25/10/24	-	0.04	RCBR-22	Non seed	-	1647.00		-	Growth stage	
Garlic	23/10/24	-	0.02	Local	Non seed	-	3030.00		-	Growth stage	
Tomato	30/10/24	-	0.02	Swarna Prakash	Non seed	-	1530.00		-	Growth stage	
Chilli	30/10/24	-	0.02	Agni	Non seed	-	1657.00		-	Growth stage	
Natural Farming (Rabi 2023)											
Potato Wheat Gram	02/12/23- 14/12/23	27/02/24- 27/04/24	0.20	Lal Gulab HD-2967 GNG-15	Non seed	1.70 0.40 0.05	Dec 23	5084.00	Dec 23	2600.00	
							Jan-Mar	4335.00	Jan-Mar	800.00	
							Total	9419.00	Total	3400.00	
Bottle gourd + ... + Dhaincha	20/04/24	20/06/24	0.20	All green	Non seed	0.54	4087.00		1080.00		
Ragi	27/07/24- 26/07/24	20/11/24- 24/11/24	0.20	BM-03	Seed	1.70	10410.00		6800.00		
Wheat	30/11/24	-	0.20	HD-2967 DBW-187	seed	-	3547.00		-	Crop standing Growth stage	

**6.3. Performance of Production Units (bio-agents / bio pesticides/ bio fertilizers etc.,)**

Sl. No.	Name of the Product	Qty. (Kg)	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1.	Vermicompost	1.09 q	59009.00	105600.00	Sell-88 q Stock in hand-21 q
2.	Jeevamruth	200 lit	-	-	Used in Natural farming plot
3.	Goat gold	10.0 q	2677.00	10000.00	Sell
	<b>Total</b>	<b>1.09 q</b>	<b>61686.00</b>	<b>115600.00</b>	

**6.4. Performance of Instructional Farm (livestock and fisheries production)**

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1.	Goat	Black Bengal	Kid	07 no.	38496.00	32000.00	Sell
2.	Pig	Jharsook	Piglet	36 no.	102117.00	129600.00	Sell
3.	Duck	Khakhi Campbell	Pig	100 kg	2406.00	245.00	Egg sell 09 Ducks stock in hand
4.	Poultry	Jharsim, Sonali	Chicks	35 no.	5712.00	16896.00	Sell
	<b>Total</b>				<b>148731.00</b>	<b>178741.00</b>	

**6.5. Performance of Automatic Weather Station in KVK**

Date of establishment	Source of funding i.e. IMD/ICAR/Others (pl. specify)	Present status of functioning
07/04/2021	IMD	Yes

## 6.6. Utilization of hostel facilities

Accommodation available (No. of beds)

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
Jan 24	10	250	
Feb 24	20	100	
Feb 24	20	20	
Feb 24	20	40	
Feb 24	21	105	
Mar 24	22	44	
Mar 24	22	44	
Mar 24	25	175	
Mar 24	22	44	
Mar 24	25	50	
May 24	16	240	
May 24	20	140	
May 24	9	45	
June 24	23	345	
June 24	13	91	
Aug 24	25	175	
Sep 24	30	390	
Sep 24	17	255	
Sep 24	25	125	
Sep 24	17	85	
Dec 24	4	12	
Dec 24	13	65	
Dec 24	20	100	
Jan 25	17	119	
Jan 25	22	330	
Feb 25	20	600	
<b>Total:</b>	<b>498</b>	<b>3989</b>	

## 6.7 Utilization of staff quarters

Whether staff quarters has been completed : Completed

No. of staff quarters : 06

Date of completion : 9<sup>th</sup> March 2008

### Occupancy details:

Months	Q I	QII	Q III	QIV	Q V	QVI
January 24	√	√	√	√	√	√
February 24	√	√	√	√	√	√
March 24	√	√	√	√	√	√
April 24	√	√	√	√	√	√
May 24	√	√	√	√	√	√
June 24	√	√	√	√	√	√
July 24	√	√	√	√	√	√
August 24	√	√	√	√	√	√
September 24	√	√	√	√	√	√
October 24	√	√	√	√	√	√
November 24	√	√	√	√	√	√
December 24	√	√	√	√	√	√

## 7. FINANCIAL PERFORMANCE

### 7.1. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
With Host Institute	--	--	--
With KVK	Bank of India	Bishunpur	492210100009600
Revolving fund (KVK)	Bank of India	Bishunpur	492210100009591
Hostel & Staff Quarter (KVK)	Bank of India	Bishunpur	492210100011614

### 7.2. Utilization of funds under CFLD on Oilseed (2024) (Rs. In Lakhs)

Item	Released by ICAR		Expenditure		Unspent balance as on
	Kharif	Rabi	Kharif	Rabi	
Sesame	47944.00		47944.00		
Niger	201200.00		201200.00		
Mustard		73541.00		73541.00	
Linseed		83857.00		83857.00	
Sunflower		79153.00		79153.00	
Oilseed Model Village		107908.00		107908.00	

### 7.3. Utilization of funds under CFLD on Pulses (2024) (Rs. In Lakhs)

Item	Released by ICAR		Expenditure		Unspent balance as on ....
	Kharif	Rabi	Kharif	Rabi	
Blackgram					
Pigeon pea					
Lentil					
Pulses Model Village					

**7.4. Utilization of KVK funds during the year 2024 (Not audited)**

Sl. No.	Particulars	Sanctioned	Released	Expenditure
<b>A. Recurring Contingencies</b>				
1	Pay & Allowances	22198251.00	22198251.00	22198251.00
2	Salary head balance Refund to ATARI	248591.00	248591.00	248591.00
	<b>Total</b>	<b>22446842.00</b>	<b>22446842.00</b>	<b>22446842.00</b>
3	Contingencies (General)			
a	TA	80458.00	80458.00	80458.00
b	HRD	12080.00	12080.00	12080.00
c	Miscellaneous (POL, Stationary, Postage, Repair of vehicle, Telephone etc.	398696.0	398696.0	398696.0
d	Training of farmers	122223.00	122223.00	122223.00
e	OFT	31440.00	31440.00	31440.00
f	FLD	63260.00	63260.00	63260.00
g	Maintenance of Building	19755.00	19755.00	19755.00
h	Exhibition and Kisan mela	19701.00	19701.00	19701.00
i	General Expenses	1100000.00	1100000.00	1100000.00
j	Operational	156515.00	156515.00	156515.00
	<b>Total</b>	<b>2004128.00</b>	<b>2004128.00</b>	<b>2004128.00</b>
4	<b>SCSP</b>			
	General	268436.00	268436.00	268436.00
	Capital	98136.00	98136.00	98136.00
	<b>Total</b>	<b>366572.00</b>	<b>366572.00</b>	<b>366572.00</b>
5	<b>TSP</b>			
	General	937507.00	937507.00	937507.00
	Capital	1602860.00	1602860.00	1602860.00
	<b>Total</b>	<b>2540367.00</b>	<b>2540367.00</b>	<b>2540367.00</b>
	<b>Grand Total</b>	<b>27357909.00</b>	<b>27357909.00</b>	<b>27357909.00</b>
<b>B. Non-Recurring Contingencies</b>				
1	-	70000.00	70000.00	70000.00
	<b>TOTAL (B)</b>	<b>70000.00</b>	<b>70000.00</b>	<b>70000.00</b>
<b>C. REVOLVING FUND</b>		-	-	-
<b>GRAND TOTAL (A+B+C)</b>		<b>27427909.00</b>	<b>27427909.00</b>	<b>27427909.00</b>

**7.5. Status of Revolving fund (Rs. in lakh) for last three years**

Year	Opening balance as on 1 <sup>st</sup> April	Income during the year	Expenditure during the year	Net balance in hand as on 1 <sup>st</sup> April of each year (Kind + cash)
2022	4128123.00	1223271.00	982935.00	4368459.00
2023	4368459.00	1625826.00	1005518.00	4988767.00
2024	4988767.00	1935085.00	1248542.00	5675310.00

7.6. i. **Number of SHGs formed by KVKs:** In Gumla district all the SHGs were formed by the JSLPS not by KVK. The role of KVK was to provide technical guidance to the SHGs during the reporting period.

**(ii) Association of KVKs with SHGs (2024) formed by other organizations : 27**

No. of SHGs associated with KVK (2023)	Bank Linkage (Yes/No)	Activities
27	Yes	1. Lac cultivation, Bee keeping, Mustard and Mushroom cultivation 2. Promotion of Medicinal Aromatic and NTFP 3. Millet based food products 4. Commercial vegetable and mango production 5. Poultry Framing and Goat Farming

**ii) Association of KVKs with SHGs formed by other organization indicating the area of SHGs activities**

There were 27 SHGs associated with KVK Gumla which were formed by other agencies like JSLPS, PRADAN earlier and engaged in different activities after linking with KVK through training, demonstration, Gosthi, trials and input support during 2024-25. The details of SHGs activities are listed below:

SL	Activities	No. of SHG	Mode of Convergence	Village	Block
1	Millet Cultivation	4	Aspirational Block development Scheme	Icha, Lohri, Kura Pakadtoli, Chunderi	Ghaghra, Basia, Palkot,
2	Lac cultivation	02	ARYA	Kataidamar	Sisai
3	Bee Keeping	01	ARYA	Chainpur	Chainpur
4	Poultry Farming	01	ARYA	Borang	Bishunpur
5	Mushroom cultivation	04	JSLPS	Kharka, Role, Hetadar, Sarango,	Gumla, Ghaghra, Bishunpur
6	Commercial Vegetable and Mango production	8	NICRA	Shivrajpur, Belagarha, Langratanr	Ghaghra, Bishunpur
7	Millet based food products and value addition	5	JSLPS, FPO and DSW (District Social Welfare) Gumla	Gumla, Palkot, Bishunpur	Gumla, Palkot, Bishunpur
8	Goat Farming	2	ARYA	Sirkot, Ajiyatu	Ghaghra
	<b>Total</b>	<b>27</b>			

**ii. Details of marketing channels created for the SHGs**

SHG associated with KVK during 2024-25 in specific activities for which the KVK has created the market linkage with different processing units viz LAMPS Banari, Common Facility Centre, Vikas Bharti Bishunpur, Mahila mandal and Milinda group oil extracting centre established in NICRA cluster village Gunia and Jargatoli of Ghaghra block.

SHGs member are also linked with FPOs for backward and forward linkages with the help of line departments. For example, Mahila Vikas Mandal Baghima Palkot producer company Limited has established Ragi Processing Plant named “Johar millet café”, with the support of Shri Sushant Gaurav (Deputy Commissioner, Gumla) under the supervision of JSLPS and technical guidance of KVK Gumla. Through convergence with district line department, SHGs were linked with the production of millet-based food products like ragi based laddu, cookies, nimki, cake and flour.

For smooth accessing the market channels / unit, KVK has organized a field programme and motivating the SHGs to participate in Kisan Mela, Saras Mela, Exhibition organized by state and national bodies for wider promotion and marketing of their produce.

**Details of market available during 2024-25 for associated SHG and their commodities**

SN	Commodity	Quantity (in q)	Access to processing/ sellers point	Value (Rs. In lakh)
1	Lac	80	Lac purchasing centre developed under ARYA in Nagar (Sisai)	48.00
2	Mustard	300	LAMPS, Milinda oil extracting centre & JSLPS	18.00
3	Honey	45	Dabour, CFC Vikas Bharti Bishunpur	90.00
4	Mushroom	40	Local Market	8.00
5	Poultry	1200 pc	Local Market	2.8
6	Goat	14	Local Market	5.6
7	Millet based food products and value added products	120	Outlet (Johar millet café) at Gumla, Anganwadi Centre through DSW, Gumla, watsapp online store	24.00
	<b>Total</b>	<b>599 q and 1200 pc</b>		<b>196.4</b>

**7.7. Joint activity carried out with line departments and ATMA**

Name of activity	Number of activities	Season	With line department	With ATMA	With both
Training	01	18/12/2024	Horticulture		
Meeting	01	16/12/2024	Horticulture		
Meeting	01	02/02/2024			both
Rabi workshop	01	21/12/2024			Both
Meeting	01	31/01/2024			Both
Meeting	01	20/02/2024			Both
Meeting	01	28/02/2024			Both

### 7.8 Revenue generation

Sl.No.	Name of Head	Income (Rs.)	Sponsoring agency
1.	Training	675000.00	District Cooperative Office Gumla
2.	Training	75000.00	ATMA Lohardaga
3.	Training	58750.00	ATMA Palamu
4.	FLD	80000.00	AICRP Niger
5.	Training	24000.00	AICRP Niger
6.	Training, Awareness	550000.00	National Bee Board
7.	Establishment of Millet Processing Centre	3612000.00	IIMR Hyderabad
	<b>Total</b>	<b>5074750.00</b>	

### 7.9 Resource Generation

Sl.No.	Name of the programme	Purpose of the programme	Sources of fund	Amount (Rs. lakhs)	Infrastructure created
-	-	-	-	-	-



## 8. MISCELLANEOUS INFORMATION

### 8.1. Prevalent diseases in Crops

Name of the disease	Crop	Date of outbreak	Area affected (in ha)	% Commodity loss	Preventive measures taken for area (in ha)
False smut disease	Paddy	17/10/2024 to 12/11/2024	85	15-20	Sisai & Palkot
Mango Hopper	Mango	12/02/2024 to 3/03/2024	3500	40-45	Whole Gumla District

### 8.2. Prevalent diseases in Livestock/Fishery :

Name of the disease	Species affected	Date of outbreak	Number of death/ Morbidity rate (%)	Number of animals vaccinated	Preventive measures taken in pond (in ha)
-	-	-	-	-	-

### 8.3. Nehru Yuva Kendra (NYK) Training : NA

Title of the training programme	Period		No. of the participant		Amount of Fund Received (Rs)
	From	To	Male	Female	

### 8.6 Details of 'Pre-Rabi Campaign' Programme

Date of	No. of Union Ministers attended the programme	No. of Hon' ble MPs (Loksabha/ Rajyasabha) participated	No. of State Govt. Ministers	Participants (No.)							Coverage by Door Darshan	Coverage by other channels
				MLAs Attended	Chairman ZilaPanch	Distt. Collector/ DM	Bank Officials	Farmers	Govt. Officials, NRI	Total		

### 8.7 . Vikisit Viksit Bharat Sanklap Yatra :

Sl.	No of events attended	No. of Gram Panchayat covered	Total no of farmer participated	No of Lecture Delivered on Soil Health/ Natural Farming
1	44	44	9928	132

### 8.8. Contingent crop planning

Name of the state	Name of district/KVK	Thematic area	Number of programmes organized	Number of Farmers contacted	A brief about contingent plan executed by the KVK
Jharkhand	Gumla	Resilient agriculture	04	56	Training and awareness about resilient agriculture

### 8.9 Information on Visit of VIP/Ministers/ MP/MLA/DM/VC/Zila Parishad/Other Head of Organization/Foreigners/other Dignitaries to KVKs, if any

Date of Visit	Name of Hon'ble Minister	Name of Ministry	Salient points in his/ her observation (2-3 bulleted points)
04/03/2024	Mr. Kentaro Orita	Embassy of Japan	Excellent activities on the ground level
12/03/2024	Mr. Stayabrat Mehrotra		Good work
03/05/2024	Dr. Mohd. Hanif Mevati	Director, KVIC state office, Ranchi	Activities and knowledge dissemination by KVK is commendable
14/06/2024	Mr. Satish Chandra	Advocate, Lucknow	Good approach of KVK to the farm families of hilly areas
5/10/2024	Mr. Gujjadi Parphakaran J. Nayak	C A Karnataka	Inspired by the activities of KVK Good impact on tribal people
19/10/2024	Dr. R. K. Sinha	Ex. MP (Rajya Sabha)	Good interaction with farmers
25/10/2024	Mr. Santosh Pandey	Member of parliament	Working culture is very good
22/12/2024	Mr. Ravi Ranjan	AGM, Sail Ranchi	Remarkable work

### 8.10 Details of Scientific Advisory Committee (SAC) Meetings

Date : 22/12/23

No. of Participants : 67

S. No	Salient Recommendation	Action Taken	If not, State reason
1	Krishi Vigyan Kendra should provide support in the Sidho-Kanho forest produce conservation awareness programme	In accordance with the recommendation, 02 trainings on Beekeeping were organized among 205 participants through Vikas Bharti Bishunpur under Sidho kanho NTFP project for forest diversification through inclusion of the honey bees ( <i>Apis mellifera</i> ) that are found in forest and awareness programme on conservation of forest produce were also conducted with the technical support of Krishi Vigyan Kendra Gumla.	
2	Canopy management of old orchards should be Promoted	In the light of the suggestion, Krishi Vigyan Kendra Gumla had provided training and awareness programmes on promotion of canopy management among 105 farmers of Kurag, Shivrajpur, Icha (Ghaghara) and Salam (Bishunpur) villages. In 200 acre canopy management has been done by the 55 farmers of kurag and shivrajpur village in their orchards by following all these steps that were learned during the trainings.	

S. No	Salient Recommendation	Action Taken	If not, State reason
3	Spraying of pesticides should be done through drones in mango orchards.	During 2024, KVK demonstrated an Agri Drone in 117 acres, involving 111 farmers in the villages of Tilhaitoli, Khorajamtoli, Sehal Bansitoli, Belaghra, and Shivrajpur. The demonstration covered mustard (36.8 acres), watermelon (11 acres), and rice (25 acres), with nano urea, Sulphur and biofertilizer(jivamitra) applications.	
4	Farmers should be trained and prepared as master trainers in the field of horticulture crop production and animal husbandry.	Upon the initiative, this year one vocational training of 15 days was conducted on <b>paravet</b> and the number of participants were 16. The trainees were from blocks of Gumla, Chainpur, Raidih, Bishunpur, Basia, Kamdara, and Ghaghra. Among these trainees, 5 trainees were prepared as a master trainer of paravet and they are performing as a master trainer in the field of animal husbandry. In the field of horticulture crop production, 42 farmers were trained under rural youth training on orchard management and mali training. Among these trainees 15 trainees are well acquainted with this trainings and applied their knowledge in the fields. With the convergence of Mahashakti Mahila Vikas Samiti Gumla, ,Krishi Vigyan Kendra Gumla has also provided the training on cultivation of <i>Kharif</i> Potato (Variety- <i>Kufri chipsona-2</i> ) to 80 PVTGs of Bishunpur block and 54 farmers of Udani and Majhgaon panchayat of Dumri Block especially of identified model village (Aurapaat) by NITI Ayog and also promoted <i>kharif</i> potato (Variety- <i>Kufri chipsona-2</i> ) production in 80 acres through 400 farmers of paat area with the support of District Horticulture Department.	
5	In case of less rainfall, farmers should be trained to cultivate paddy through the aerobic method instead of transplanting paddy cultivation.	After the pre-monsoon season, KVK conducted seven training sessions on Aerobic Rice Cultivation in the villages (07 no.) of Majhatoli, Sursang, Bishunpur, Kharka, Panso, Keradhi, and Luru. Additionally, KVK promoted Aerobic rice cultivation technology among FPO members in Gumla and Raidih, covering approximately 165 acres. Furthermore, KVK conducted a Frontline Demonstration (FLD) on DSR in one acre in Manjira. Village of Bishunpur. With the convergence of ATMA, the DSR and Aerobic method were also popularized in 400 acres in Chainpur, Dumri, and Jaari Block.	
6	Instead of five composite fish, farmers should be trained to rear three types of fish: grass carp, common carp, and silver carp, which will bring more profits to the farmers.	To increase the income of farmers through the venture of fish farming, The KVK Gumla had provided five days training on fish farming to 20 farmers and motivated to 10 farmers who were having ponds for adopting the fish farming at personal level. They were provided 30 kg fingerlings under FLD. In lieu of this, 1.8 cr fingerlings of grass carp and common carp were also provided among 11 farmers through Mega water shed project of Vikas Bharti in Bishunpur block with the technical guidance of Krishi Vigyan Kendra Gumla.	
7	Promotion of millets cultivation should be done.	In the light of the suggestion, Ragi cultivation (variety- GPU 28 and BM 3) has been promoted in 12000 hactares in Gumla district through District Administration and progressive farmers at their own level. The center has also conducted front line demonstration on Ragi, variety- GPU 28 among 82 in 16	

S. No	Salient Recommendation	Action Taken	If not, State reason
		hactares in villages like Fori, Kotam, Kura Pakadtoli, Dorangdih and Lohri of Gumla District. For value chain development and marketing of millet and its products JSLPS and other departments, agencies are involved in promoting FPOs and SHGs with an objective to enhance the income of SHGs through millet processing. Mahila Vikas Mandal Farmer Producer Company Baghima Palkot is a good example of promotion of millet and its processed products in a district.	
8	Promote the cultivation of turmeric as intercropping in mango orchards.	The Center has promoted the cultivation of turmeric as an intercropping in mango orchards in 5 acres land in Teliya, Shivrajpur and Icha villages among 10 framers through On Farm Trials.	
9	KVKs should organize training on the INM subject.	In light of the suggestion, the center has conducted two trainings of fifteen days certificate course on INM for upliftment of Rural Youth and fertilizer dealer in the month of June and September among 79 participants. Among 79 participants, 61 participants were from Gumla district and remaining 18 participants were from 10 districts namely Gumla, Latehar, Ranchi, Koderma, West Singhbhoomi, Plamu, Gharwa, Deogarh, Bokaro, Giridih through Common Service Center of the Jharkhand state.	
10	Efforts should be made to stop migration.	Towards this recommendation, Under the ICAR-ARYA (Attracting and Retaining Youth in Agriculture) Project 2024, KVK provided training to school dropout youths in Pig Farming (75 no), Goat Farming (61 no), Lac Cultivation (52 no), and Beekeeping (22 no). As a result, entrepreneurial units were successfully established, including 7 units of Pig Farming, 12 units of Goat Farming, 16 units of Lac Cultivation, and 03 units of Beekeeping. They are earning average net income per unit per year was Rs. 3.85 lakhs from Pig Farming, Rs 1.75 lakhs from Goat Farming, Rs.1.66 lakhs from Lac Cultivation, and Rs 0.92 lakhs from Beekeeping. The objective of these trainings was not only to increase the income but also to check the migration of farmers by engaging them in entrepreneurial activities.	
12	Training on poultry hatchery management should be organized for the youth, and after training, a visit should be made to BAU.	The center has organized 02 off campus training on poultry hatchery management among 40 farmers and provided 03 poultry hatchery machines to 03 SHGs in villages like Borang Shivrajpur, and Jargatoli for larger extension of poultry unit. Regular follow up of hatchery unit were also conducted by KVK scientists.	
13	To ensure the availability of improved breed of pigs in the district, farmers should be developed as breeders.	Persuant to suggestions, the center is working on entrepreneurial development of youth by engaging them in rearing of improved breed of pigs as an enterprise under ARYA project. Regarding breed improvement of pigs the center has provided piglets of Jharsuk breed (1 male and 2 female) to the farmers under FLD in villages like Ratantoli (Dumri), Karamtoli (Gumla), Jairagi (Dumri), Tapkara(Palkot) and Sato( Bishunpur). The main purpose of this demonstration was to establish quality piglet breed (Jharsuk) production center in pigs. More than 200 farmers are benefited with this enterprise	

S. No	Salient Recommendation	Action Taken	If not, State reason
		through ARYA project and getting income in tuning of 1.5 to 3.8 lakh per annum.	
14	The nutritive value of traditional aromatic paddy variety of paddy has to be examined.	In light of this, the center has already collected 02 samples of traditional varieties like Kalajeera, and Jeeraful, for nutritional analysis which will be carried out in coming year. However, in 2018 nutritional profiling of different varieties of paddy like Bacchha dhan, Dahiya, Tenchun, Naniha and Lalat were carried out from BIT Mesra Ranchi.	
15	There should be a publicity division in KVK.	Publicity division has been established for printing and publishing of publication at the Center.	
16	The sunflower project has to be promoted.	For promotion of Sunflower in Gumla district, the sunflower seeds (variety -LSFH -171) were demonstrated among 104 farmers from 5 blocks (Sisai, Ghagara, Gumla, Raidih and Bishunpur) in 20 hectares under CFLD and their result was highly impressive (Avg. yield 12.05 q/ha)	
17	Millet processing plant from TSP can be provided to SHG	In light of the suggestion, the center has received amount Rs.36.12 lakh for establishment of project on "Millet Technology and Promotion Center" (FY 2024-25) at Krishi Vigyan Kendra Gumla, Vikas Bharti Bishunpur through ICAR-IIMR Hyderabad for the promotion of millet through processing of primary and secondary products with the participation of SHGs and FPOs for increasing their income through creating value chain development in millet and its processing.	

#### Details of other meeting related to ATARI

Date	Type of Meeting	Agenda	Representative from ATARI
03/01/24	Online	Review meeting under the STC project	
09/01/24	Online	TDC NICRA review meeting	
11/01/24	Online	Financial review meeting of KVKs	
18/01/24	Online	Financial review meeting of ARYA & FFP projects	
23/01/24	Online	LDS Pulse Survey Review-Bihar & Jharkhand	
29/01/24	Online	Financial review meeting	
6/2/25	Online	Review meeting	
09-10/02/24	Physical	Financial review meeting	
16/02/24	Online	Preparation of ARYA Annual Workshop	
27/02/24	Online	Review meeting of budget utilization	
28/02/24	Online	Review meeting of PPV & FRA PROGRAM	
29/02/24	Online	Meeting with Implementing Agencies	
11/03/24	Online	Financial review meeting	
13/03/24	Online	Review of budget meeting	
27/03/24	Online	Review of expenditure of ATARI-Patna and KVKs	
04/04/24	Online	Meeting with Implementing Agencies for onboarding on Krishi Mapper ap	
08/04/24	Online	NICRA Data recording review meeting	
12/04/24	Online	Meeting on Ecoregional programm	

Date	Type of Meeting	Agenda	Representative from ATARI
16/04/24	Online	Viksit Bharat meeting	
16/04/24	Online	Review Meeting	
19/04/24	Online	Review Meeting	
01/05/24	Online	Viksit Bharat meeting (Horticulture Crops)	
03/05/24	Online	Review Meeting of KVKs	
15/05/24	Online	meeting on CFLDs and Krishi Mapper App	
21/05/24	Online	NICRA review meeting	
29/05/24	Online	Review of RKVY STT and RPL	
29/05/24	Online	Meeting of review and discussion on the CSS Formation and Promotion of 10,000 FPOs	
30/05/24	Online	Viksit Bharat Meeting (Fisheries Science)	
30/05/24	Online	Review meeting of CFLD Oilseed model village	
07/06/24	Online	Review Meeting of KVKs	
15/06/24	Online	Review meeting of KVKs	
20/06/24	Online	2nd round of Review Meeting of ICAR Institutes	
28/06/24	Online	Meeting with National Level Agencies/ Bamboo Technology Support Group (NLAs/BTSG) regarding the new procedure of Central SNA for fund release in year 2024-2025	
03/07/24	Online	Review meeting of 100 days action plan	
26/07/24	Online	Mapping of Saving Accounts of KVKs under code Krishonnati Yojana-4138code	
30/07/24	Online	Review meeting of KVKs	
09/08/24	Online	National bamboo mission project fund new procedure of central SNA for fund release	
14/08/24	Online	100 days action plan	
14/08/24	Online	Preparatory meeting MoA&FW's "Ek Ped Maa Ke Naam" plantation event on 21st August 2024	
16/08/24	Online	Review of ATARI Foundation day preparation	
28/08/24	Online	100 days action plan of KVKs	
19/08/24	Online	celebration of ICAR-ATARI Patna Foundation Day function at KVKs	
20/08/24	Online	100 days action plan review meeting	
29/08/24	Online	Inaugural and hands-on training of Annual Zonal Workshop of ATARI, Zone-IV	
10/09/24	Online	KVK Review meeting	
12/09/24	Online	CFLD oilseeds and pulses	
13/09/24	Online	Swachhata Hi Sewa	
17/09/24	Online	Meeting of NGO President/ Secretary and KVK Heads	Under the chairmanship of Secretary, DARE and DG, ICAR at the Conference Hall, NASC, New Delhi

Date	Type of Meeting	Agenda	Representative from ATARI
17/09/24	Online	Swachhata Pledge	
18/09/24	Online	RY meeting	
24/09/24	Online	KVK Review meeting	
03/10/24	Online	100 days achievement & other issues of KVKs	
22/10/24	Online	Financial Management of CFLD	
06/11/24	Online	Urgent meeting	
07/11/24	Online	Feedback of KVKs on status of fertilizers, Nano urea and liquid DAP	
11/11/24	Online	Convergence platform meeting of CSISA Project	
12/11/24	Online	CFLD Oilseed and Pulses implementation & Fund utilization	
26/11/24	Online	Review meeting of TDC-NICRA	
13/12/24	Online	Review of KVK	
17/12/24	Online	Financial issue & progress of CFLD programme	

#### 9. Details of attachment training (RAWE/ FET for ARS/Others) through KVK

Type of attachment	No of student trained	No of days stayed
Village attachment training under RAWE	01	12 <sup>th</sup> June to 16 <sup>th</sup> July 2024 (30 days)

#### 10. Any other programme organized by KVK, not covered above

### 11 PROJECT-WISE REPORTING (Applicable for KVKs identified under the given project)

#### 11.1. Details of Cereal Systems Initiative for South Asia (CSISA)

Season	Village Covered (no.)	Block Covered (no.)	District Covered (No.)	Respondent (no.)	Trial Name	Area covered (ha)	Name of Crop	Technology Options	Variety name	Duration (Days)	Sowing date	Harvesting date	Days of Maturity	Grain Yield (q/ha)	Cost of cultivation (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	BCR
	40	05	01															

NOTE :- Survey work done among 400 farmers in pulses crop

## 11.2 Details of Tribal Sub Plan (TSP)

### a. Achievements of physical output under TSP

Sl.	Activities	Physical Achievement	
1)	Trainings	No. of Trainings/Demos	No. of beneficiaries
a.	Farmer	127	3675
b.	Women	01	19
c.	Rural Youths	32	610
d.	Extension Personnel	04	108
2)	OFT	No. of OFTs	No. of beneficiaries
		13	172
3)	FLD	No. of FLDs	No. of beneficiaries
		2335	2687
4)	Mobile agro- advisory to farmers	No. of advisory	No. of beneficiaries
		94	62505
5)	Other activities		
a.	Participants in extension activities (No.)	20589	
b.	Production of seed (q)	133.29	
c.	Production of Planting material (No. in lakh)	0.3217	
d.	Production of Livestock strains (No. in lakh)	0.00655	
e.	Production of fingerlings (No. in lakh)	0	
f.	Testing of Soil, water, plant, manures samples (Nos.)	1943	
g.	Asset creation (Mango plant, Cerate, Pump, Gootur Pump, Irrigation delivery pipe, .)	1433	
h.	No. of other programmes oraginsed (Swachha Bharat Abhiyaan, Agriculture knowledge in rural school, Planting material distribution, Vaccination camp etc.)	742	

b. Fund received under TSP in 2024-25 (Rs. In lakh): 29.50

### c. Achievements of physical outcome under TSP during 2024

Sl. No.	Description	Unit	Achievements
1	Change in family income	%	74
2	Change in family consumption level	%	83
3	Change in availability of agricultural implements/ tools etc.	No. per household	05



**d. Location and Beneficiary Details during 2024**

District	Sub-district	No. of Village covered	Name of village(s) covered	ST population benefitted (No.)		
				M	F	T
Gumla	Gumla	178	Chota ajiyatu, Mayel, Rol, Tapkara, Semla bertoli, Echa, Luto bertoli, Kasitoli, Kharka, Pora, Sehal bansitoli, Sammal, Tengariya chainpur, Telya, Lalpur Ghutti, Sirkot, Shivrajpur, Sursang, Tulmanga, Kasra, Leha, Chameli, Lpsar, Konatoli, Samdega, Harsari, Dhobari, Rehe, Jarda, Nagar, Burhu, Serka, Sarango, Karondi, Tirra, Chatam, Khorajamtoli, Bangarulolotoli, Katkaya, Ramja, Sugakanta, Kobja, Gunia, Khambhiya, Belagara, Sarnatoli, Banalat, Jehangutwa, Kurag, Kugawn, Panso, Hapamuni, Beti, Angloya, Orya, Parsa, Bhadauli, Chainpur, Helta, Chirodih, Ghaghra, Banari, Bishunpur, Nirasi, Etam, Konaskeli, Bargawn, Dalmati, Naro, Kochedega, Kadamdih, Hutar, Chapatoli, Konbir, Sakarpur, Hurhuriya, Dumari, Majhgawn, Nawadih, Gumla, Dardag, Cheda, Mahuatoli, Manjira, Makra, Dhobani, Baniadih, Chapka, Jori, Melwadih, Nathpur, Tangar sikwar, Didhauli, Bimarla, Mentgara, Jamira, Kundari, Bhandartoli, Thithaitangar, Kataidamar, Charbhaiya, Jampani, Sirkot, Adar, Karakel, Tetra, Majhkera, Jakuatoli, Gondarotoli, Badri, Moreng, Hadup, Kechki, Langratand, Barkadohar, Sato, Jahup, Urmi, Phori, Belgaon, Ataria, Kolambi, Haslata, Kutua, Soso, Murkunda, Kasira, Balatu, Jamti, Ratan toil, Kokotoli, Salam, Jargatoli, Sarnatoli, Halmati, Nawatoli, Totambi, Semra Lamati, Gara, Surhu, Turiamba, Khartanga, Dewaki, Nawadih, Kotam, Jairagi, Ratantoli, Gutwapani, Karamtoli, Samdari	12572	10518	23090

### 11.3. Details of Scheduled Caste Sub Plan (SCSP)

Sl.	Activities	Physical Achievement	
		No. of Trainings/Demos	No. of beneficiaries
1)	Trainings		
a.	Farmer	01	22
b.	Women		
c.	Rural Youths	01	25
d.	Extension Personnel		
2)	OFT	No. of OFTs	No. of beneficiaries
3)	FLD	No. of FLDs	No. of beneficiaries
4)	Mobile agro- advisory to farmers	No. of advisory	No. of beneficiaries
5)	Other activities		
a.	Participants in extension activities (No.)		
b.	Production of seed (q)		
c.	Production of Planting material (No. in lakh)		
d.	Production of Livestock strains (No. in lakh)		
e.	Production of fingerlings (No. in lakh)		
FTSP	Testing of Soil, water, plant, manures samples (Nos.)		

## Overall achievements

## Basic Information

### Performances of demonstration of in-situ moisture conservation technologies

### Performances of water harvesting and recycling for supplemental irrigation

### Performance of ZTD in various crops

## Performance of artificial groundwater recharge technologies demonstrated

[illegible]

**Performance of different water saving irrigation methods**

FST type	Crop / season (name)	Technology demonstrated	No. of farmers	Area (ha)/ Unit	Yield (q/ha)	Economics of demonstration (Rs/ha)		
						Gross Cost	Net Return	BCR
FST-4	Pea /Rabi	Irrigation through Drip irrigation	12	10	64.60 Green pod	58000	71200	2.22

**Rainwater harvesting structures developed**

New(Nos.)	Renovated(Nos.)	Total	Storage capacity (cu m)	Protective irrigation potential (ha)	Cropping Intensity (%) increase
-	01	01	60000	12	40

**Performance of different trough tolerant varieties**

FST type	Crop / season (name)	Technology demonstrated	No. of farmers	Area(ha)/Unit	Yield (q/ha)	Economics of demonstration (Rs/ha)		
						Gross Cost	Net Return	BCR
FST2	Paddy/Kharif	Improve variety Swarna shreya	25	20	39.02	38800	50746	2.31
	Ragi/Kharif	Improve variety BM-3	41	10	14.57	24000	38505	2.60
	Blackgram/Kharif	Improve variety PU-31	24	6.0	11.52	26300	58948	3.24
	Redgram/Kharif (2023)	Improve variety Rajeev Lochan	07	1.0	12.68	34060	54700	2.60
	Redgram/Kharif (2024)	Improve variety Rajeev Lochan	27	7.5	Flowering stage			

**Performance of different short duration rice varieties**

FST type	Crop / season (name)	Technology demonstrated	No. of farmers	Area(ha)/Unit	Yield (q/ha)	Economics of demonstration(Rs/ha)		
						Gross Cost	Net Return	BCR
FST-4	Greengram/Rabi	Improve variety IPM 2-3	09	6.0	11.60	28800	70472	3.02

**Performance of different flood tolerant varieties NA**

FST type	Crop / season (name)	Technology demonstrated	No.of farmers	Area(ha)/Unit	Yield (q/ha)	Economics of demonstration(Rs/ha)		
						Gross Cost	Net Return	BCR

**Performance of advancement of planting dates in different crops**

FST type	Crop / season (name)	Technology demonstrated	No.of farmers	Area(ha)/Unit	Yield (q/ha)	Economics of demonstration (Rs/ha)		
						Gross Cost	Net Return	BCR
FST4	Mustard/Rabi 2024	Improve variety PM-30	17	5.60	17.20	41560	55620	2.34
	Wheat /Rabi 2024	Improve variety SabourNirjal	12	3.00	33.68	32200	44422	2.38
	Wheat /Rabi	Improve variety	03	0.60	37.00	35200	48975	2.39

FST type	Crop / season (name)	Technology demonstrated	No.of farmers	Area(ha)/Unit	Yield (q/ha)	Economics of demonstration (Rs/ha)		
						Gross Cost	Net Return	BCR
	2024	DBW-252						
	Wheat /Rabi 2024	Improve variety HD-2967	04	1.20	34.40	35200	43060	2.22
	Lentil /Rabi 2024	Improve variety IPL-220	03	1.00	12.80	28600	53640	2.87
	Okra /Summer 2024	Improve variety Anukranti	15	3.00	185.60	47400	137800	3.91
	Linseed /Rabi 2024	Improve variety Birsa Tisi-2	08	2.00	10.80	26800	38000	2.41
	Mustard/Rabi 2025	Improve variety BBM-3	87	29.20	Flowering stage			
	Wheat/Rabi 2025	Improve variety DBW-187	13	5.20	Growth stage			
	Wheat/Rabi 2025	Improve variety DBW-187	12	2.00	Growth stage			
	Lentil/Rabi 2025	Improve variety IPL-220	13	2.00	Growth stage			
	Linseed/rabi 2025	Improve variety Divya	11	2.00	Growth stage			
				56.8				

#### Performances of water saving technologies for rice cultivation

FST type	Crop / season (name)	Technology demonstrated	No.of farmers	Area(ha)/Unit	Yield (q/ha)	Economics of demonstration(Rs/ha)		
						Gross Cost	Net Return	BCR
FST2	Paddy/Kharif	Aerobic rice	03	1.0	30.10	29200	38190	2.30

#### Integration of cropping system with other farming

FST type	Crop / season (name)	Fodder quantity (dry/ green) utilized for livestock	No.of farmers	Area(ha)/Unit	Yield (q/ha)	% of reduced fodder purchase from outside
FST2	--	-	-	-		-
FST4						-

#### Performance of Community nurseries

FST type	Crop / season (name)	Technology demonstrated	No.of farmers	Area(ha)	Coverage area (ha)	Economics of demonstration(Rs/ha)		
						CoC of nursery	NR from nursery	BCR
FST2	Ragi/Kharif	Community nursery	41	1	10	31670	6334	1.20
	Paddy		25	2	20	37170	6319	1.17

#### Performance of different location specific intercropping systems

FST type	Crop / season (name)	Technology demonstrated	No.of farmers	Area(ha)/ Unit	Yield (q/ha)	Economics of demonstration(Rs/ha)		
						Gross Cost	Net Return	BCR
FST2	Groundnut+Red gram 2024 /Rabi	Inter cropping Groundnut+Red gram 2024 /Rabi	08	2.0	22.33	45000	96760	3.15
FST4	Mango+Mustard /2024/Rabi	Mango+Mustard /2024/Rabi	20	6.3	20.00	37600	71400	2.89

**Performance of different crop diversification in NICRA villages**

FST type	Crop / season (name)	Technology demonstrated	No.of farmers	Area(ha)	Yield (q/ha)	Economics of demonstration(Rs/ha)		
						Gross Cost	Net Return	BCR
FST4	Pea/ rabi 2024	Improve variety (GS-10)	12	10	73.6	58000	89200	2.54
	Watermelon/Summer 2024	Improve variety (Sugar queen)	09	12	275.0	73600	165000	2.24
	Pea/ rabi 2025	Improve variety (GS-10)	08	06	Pod formation stage			
	Watermelon/Summer 2024	Improve variety (Sugar queen)	10	11	Growth stage			

**Performance of other demonstration**

FST type	Crop / season (name)	Technology demonstrated	No.of farmers	Area(ha)/Unit	Yield (q/ha)	Economics of demonstration(Rs/ha)		
						Gross Cost	Net Return	BCR
FST2	Paddy/Kharif	Application of Nano urea through Kisan Drone	14	16.6	39.85	38625	53030	2.37

**Performance of different fodder demonstration in community lands**

FST type	Crop / season (name)	Technology demonstrated	No.of farmers	Area(ha)/Unit	Yield (q/ha)	Economics of demonstration(Rs/ha)		
						Gross Cost	Net Return	BCR
-	-	-	-	-	-	-	-	-

**Performance of improved fodder**

FST type	Crop / season (name)	Technology demonstrated	No.of farmers	Area(ha)/Unit	Yield (q/ha)	Economics of demonstration(Rs/ha)		
						Gross Cost	Net Return	BCR
FST2	Maize/Kharif	Improve fodder production (J1006)	10	1.0	220	24000	64000	3.66

**Performance of various vaccination camps organized**

FST	Type of animal and Month	Technology demonstrated	No. of farmers covered	No. of animal covered			
					Less 1 yr calf	Heifer	Adult
FST-2	Cow /June	FMD& PPR	60	350	120	83	147

**For Goat/ sheep/ pig**

FST	Type of animal and Month	Technology demonstrated	No.of farmers covered	No.of animal covered			
					Kid	Buck	Doe
FST2	June	PPR	75	312	81	65	166

FST	Type of animal and Month	Technology demonstrated	No.of farmers covered	No.of animal covered			
					Chick (<9 weeks)	Growin g chicke ns (9-20 week)	> 20 weeks
FST2	Poultry/Oct	Ranikhet disease	45	452	80	60	312

FST	Fish species	Technology demonstrated with dose rate	No.of farmers	Area(ha) /Unit	Fish yield (q/ha)	Economics of demonstration(Rs/ha)		
						CoC	NR	BCR
FST 2	Composite fish	Cleaning and fingerlings	4	1.0	36.20	37500	68650	1.93

FST type	Animal / season (name)	Technology demonstrated	No.of farmers	No. of animals/ unit	Milk yield (liters/ lactation)	Economics of demonstration(Rs/ha)		
						Gross Cost	Net Return	BCR
FST2	Cow	Fodder management	10	20	480	11000	13000	2.17

[illegible][illegible][illegible]

**INSTITUTIONAL INTERVENTION**

Name Of KVK	Seed bank		Fodder bank	
	Crop with variety	Quantity in (q)	Fodder crop with variety	Quantity in (q)
Gumla	Paddy /Swrnashreya	164	Paddy straw	1000
	Blackgram/PU-31	37	Maize /J1006	220
	Ragi /BM-3	13	-	-

**Revenue generated through Custom Hiring Centres and VCRMC in KVKs**

Name of KVK	Revenue Generated(Rs.)	
	From Custom Hiring Centres (2024-25)	Total under VCRMC
Gumla	Rotavetor	1200.00
	Portable rice thresher	500.00
	Hatchery unit	500.00
	Maize thresher	4500.00
<b>Total amount in VCRMC (2024)</b>		<b>2,34,994.00</b>

**Extension Activities**

Name of the activity	Number of Programmes	No. of beneficiaries		
		Male	Female	Total
Field days	03	26	32	58
KisanGosthi	01	12	26	38
Agriculture Drone Technology Demonstration	02	8	06	14
Exposure Visit	01	10	06	16

**Soil Health Card prepared and distributed**

KVK	No.of soil samples collected	No. of samples analyzed	SHC issued	No.of farmers benefitted
-	-	-	-	-

**ConvergenceProgramme**

KVK	Development Scheme/ Programme	Nature of work	Amount(Rs.)
Gumla	MGNREGA	Pond renovation	1800000

**Dignitaries visited NICRA Villages**

NameofKVK	NameofVIPs/Experts	Dateofvisit
Gumla	BDO Ghaghra	
	Team of District administration	



## Newspaper Coverage



## Publication (Research Paper, Book, Technical bulletins Paper presented in national/international seminars etc.)


### Research Paper

- Impact of Frontline Demonstration on varietal evaluation on Wheat (*Triticum astivum*) under limited irrigation in midland of Gumla (Jharkhand).
- Capital formation through Technology Integrated Approaches for Tribal Communities: A Pragmatic Analysis.
- Productivity trends of the rapeseed-mustard in Eastern Plateau and hill Region.

### Book

- Promising Climate resilient Technologies for Jharkhand
- NICRA Annual Report 2023-24

## Success Stories

1	Name	:	First name: Manju Middle Name: Surname: Oraon	
2	Postal address	:	W/O- Shri Lalmohan Oraon Village – Shivrajpur Block- Ghaghra Phone: Mobile: 9835703602	
3	Home town	:	Village: Shivrajpur Block: Ghaghra	
4	Age	:	42	
5	Education	:	8 <sup>th</sup>	

6	<b>Land holding (acres)</b>	:	<b>Irrigated: 05</b>	<b>Rainfed: 04</b>																																
7	<b>Farming experience</b>	:	<table border="1"> <tr> <td><b>Crops grown:</b></td> <td><b>Area (acres)</b></td> <td><b>Productivity (kg/acre)</b></td> </tr> <tr> <td>1 Paddy</td> <td>06</td> <td>1346 (33.46 q/ha)</td> </tr> <tr> <td>2 Blackgram</td> <td>01</td> <td>440 (11.0 q/ha)</td> </tr> <tr> <td>3 Ragi</td> <td>01</td> <td>480 (12 q/ha)</td> </tr> <tr> <td>4 Mustard</td> <td>02</td> <td>520 (13 q/ha)</td> </tr> <tr> <td>5 Wheat</td> <td>01</td> <td>800 (32 q/ha)</td> </tr> <tr> <td>6. Garden pea</td> <td>02</td> <td>3400 (85 q/ha)</td> </tr> <tr> <td>7 Mango Orchard</td> <td>01</td> <td>80-90 kg/plant (85 q/ha)</td> </tr> <tr> <td colspan="2"><b>Livestock (no.): 08</b></td> <td><b>Poultry (no.): 150</b></td> </tr> <tr> <td colspan="2"><b>Small ruminants (no.): 12</b></td> <td><b>Farm machinery available:</b></td> </tr> <tr> <td colspan="2"></td> <td>           1. Water delivery pipe            2. Spray Machine            3. Cono weeder            4. Winnowing Fan         </td> </tr> </table>	<b>Crops grown:</b>	<b>Area (acres)</b>	<b>Productivity (kg/acre)</b>	1 Paddy	06	1346 (33.46 q/ha)	2 Blackgram	01	440 (11.0 q/ha)	3 Ragi	01	480 (12 q/ha)	4 Mustard	02	520 (13 q/ha)	5 Wheat	01	800 (32 q/ha)	6. Garden pea	02	3400 (85 q/ha)	7 Mango Orchard	01	80-90 kg/plant (85 q/ha)	<b>Livestock (no.): 08</b>		<b>Poultry (no.): 150</b>	<b>Small ruminants (no.): 12</b>		<b>Farm machinery available:</b>			1. Water delivery pipe 2. Spray Machine 3. Cono weeder 4. Winnowing Fan
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		1. Water delivery pipe 2. Spray Machine 3. Cono weeder 4. Winnowing Fan																																		
8	<b>List the Rainfed/ Innovative farming technologies adopted</b>	:	<b>In situ water harvesting:</b> a. Mulching b. Farm Bunding c. Check Basing Method <b>Ex-situ water harvesting:</b> a. Pond b. 5% model c. Canal <b>Improved varieties:</b> a. Paddy – Sahbhagi Dhan, Swarna Shreya, CR-310 b. Blackgram-PU-31 c. Ragi-BM-3 d. Wheat- Sabour Nirjal, K-9107, Birsa Gehun-4 e. Mustard-PM-30 f. Garden pea – G-10 <b>Farm machinery usage:</b> a. Rotavator b. Cultivator c. Multicrop Thresher d. Solar based water delivery pump e. Tractor f. Agri Drone																																	
9	<b>Recognition Certificates, awards etc. already recieved) Received from (Name of the organization)</b>	:	1. Krishi Vigyan Kendra Gumla 2. Vikas Bharti Bishunpur and 3. PRADAN																																	
10	<b>Description of innovation/ adopted technologies -Farm / Climate resilient practices (1 or 2 practices)</b>	:	<p>Mrs. Manju Devi is a 42 year young lady residing in village Shivrajpur. She is 8<sup>th</sup> Pass and having 03 children. Mrs. Manju Devi is a innovative farmer. She is always in search of new farming technologies which is resilient in nature and maximising productivity and income as well as provided empowerment opportunity. As her family engaged in farming since very beginning and cultivated Paddy, Blackgram, Ragi, Wheat, Mustard and Garden pea. And getting net</p>																																	

	<b>Describe in not more than 100 words and attach separately/ photo of the innovation/adopted technology)</b>		<p>income of Rs. 75000-85000 per annum. She wants to enhance their income more than 1.5 lakh per annum and accordingly she has started to know about the new agricultural technology. As she has realised the importance of resilient technology by seeing her relatives farming in old NICRA Village Gunia, Where KVK Gumla has implemented NICRA project since 2011-12. She Came in Contact to KVK When KVK has selected her village in Phase-III for implementation of NICRA project. She has imparted training programme on Crop production technology, Mango orchard management and Backyard poultry farming. After getting the training she uses drought tolerant rice variety Sahbhagi dhan, Swarna Shreya and CR dhan-310 and succeeded in getting 31-36 q/ha yield respectively. She also applied Canopy management in her 01 acre Mango orchard and getting 80-90 kg mango fruit per plant where earlier she has getting only 35-40 kg/plant. In ragi she uses variety BM-3 and getting 12 q/ha yield where earlier she had harvested only 8-10 q/ha.</p> <p>Mrs. Manju Devi is also doing Backyard poultry farming on her homestead with 150 no. of poultry birds of Desi breed. Through this intervention she was getting net income of Rs. 36000-45000 per lot but she realised that the income earned from Backyard poultry farming is not much enough. So she started to take this Backyard poultry farming as a venture for more income generation and resiliency during crop failure .</p>
11	<b>Process of innovation/ Adoption</b>  <b>(Describe in not more than 100 words)</b>	:	<p>By seeing her effort KVK has provided one poultry hatchery unit with capacity of 112 eggs to produce the market demanded breed Sonali, Jharshim and Divyayan. Hatchery unit has been installed in participatory mode as she has installed inverter at own level. The purpose of installation of inverter was for power backup during electricity supply failure. By this way she has succeeding in producing healthy and good quality poultry chicks with 85-90 percent success rate. Through this innovative approach she has succeeded in saving Rs. 25-30 rupees per chicks and getting additional income of Rs. 25000 per annum by producing poultry chick's bird.</p>
12	<b>Practical utility of the innovation/adoption of technology</b>  <b>(Benefits-yeild/income/resource conservation etc.,)</b>	:	<p>Innovation of Poultry hatchery unit not only enhances her income but she has succeeded in fulfilling her need-based chicks demand to other Backyard poultry farmer's.</p> <p>Integration of Backyard poultry farming and application of resilient crop varieties, method of sowing, crop management practices, canopy management in mango orchard. She has succeeded in earning of more than 1.5 lakh per annum instead of Rs 80000 per annum from her 9 acre of land. The 87 percent income enhancement is observed only by the application of resilient technological intervention and proper guidance of KVK.</p>
13	<b>Impact of innovation on other farmers</b> <b>(Quantify in terms of no. of other farmers</b>	:	<p>By seeing the farming approaches of Mrs. Manju Devi other farmers of the village Shivrajpur and adjoining villages of Sarnatoli came in contact with Manju Devi and learned the process of innovation and approaches and decided to do farming with proper knowledge and information as Mrs. Manju Devi has applied. Her success has inspired</p>

	<b>adopted, area covered etc.)</b>		15 no. of youth farmers in which 06 women and 09 men to start Backyard poultry farming in their homestead with more than 200 no of poultry chicks of sonali breed with uses of resilient crop and orchard management technology in their farm. Now all of them are practicing Backyard poultry farming as a Innovative venture for regular income generation. In addition to usual crop husbandry practices, they have succeeded in earning of Rs. 1 lakh to 2 lakh per annum and they are very happy and leading a quality livelihood and providing better education to their children.
14	<b>Any other information pertaining to innovation/adoption of the technology not covered above</b>	:	All 15 number of Backyard poultry growers and Mango growers formed a <b>Farmers Interest Group</b> on small level to facilitate the market for better income and to free from middle man. Mrs. Manju Devi's initiative is not only inspiring the other fellow farmers but for farming community also.
15	<b>Any other institutions related to Support of KVK</b>	:	KVK Gumla has provided technical guidance and clinical services on regular basis to all participant farmer's. And also supporting in supply of demand driven poultry chicks on time with close monitoring.
16	<b>Spread of the technology</b>		Resilient Integrated farming technologies approached adopted by the Shivrajpur village's lead by Mrs. Manju Devi has been spread in 05 to 06 villages. Farmers of the adopted village are getting resilient crop varieties seed under seed exchange process and also poultry chicks by Mrs. Manju Devi and fellow farmers.

#### Name of PI & Co-PI List

Name of KVK	Name of PI	Name Of Co PI
Gumla	Dr Sanjay Kumar	Atal Bihari Tiwari

**Table: Capacity development (Training On-campus) organized under TDC-NICRA**

S. No.	Title of the training course	Period of Training program	Duration	Participant No.		Category			
				Male	Female	General	OBC	ST	SC
01	Resilient production technology of blackgram	01/07/2024 03/07/2024	01	17	06	0	03	20	0
02	Resilient crop (Finger millet) production technology	04/07/2024	01	07	03	0	0	10	0
03	Application of DSR in CRA	04/07/2024	01	19	05	0	01	23	0
04	Management of insect pest management in kharif pulses	09/09/2024	01	24	01	0	0	25	0
05	Integrated Pest	10/09/2024	01	14	15	0	02	27	0

S. No.	Title of the training course	Period of Training program	Duration	Participant No.		Category			
				Male	Female	General	OBC	ST	SC
	Management in kharif cereals								
06	Integrated Pest Management in Rabi pulses	17/10/2024	01	09	03	0	0	12	0
07	Scientific Fish Farming	20/10/2024	01	22	03	0	03	22	0
08	Promotion of Resilient crop variety	08/11/2024	01	25	05	0	04	26	0
09	Low water requiring crop production technology of Mustard	04/11/2024, 19/11/2024, 22/11/2024	03	30	55	0	05	80	0
10	Resilient production technology of Wheat	19/11/2024	01	12	02	0	02	12	0

**Table: Capacity development (Training Off-campus) organized under TDC-NICRA**

S. No.	Title of the training course	Period of Training program	Duration	Participant No.		Category			
				Male	Female	General	OBC	ST	SC
01	Feed management	6 /02/2024	01	08	09	0	03	14	0
02	Importance of farm bunding and its role in mitigation of drought	06/07/2024	01	04	14	0	0	18	0
03	Importance of intercropping and improve production technology of Redgram	10/07/2024	01	05	18	0	0	23	0
04	Major Resilient crop variety in Rabi season	14/12/2024	01	12	10	0	02	20	0

**Table: Custom Hiring of Farm-Implement**

Name of farm implement/equipment	No. of farmers used Implement	Area covered by Farm Implement	Farm Implement used (In Hours)	Revenue generated by Farm Implement (Rs.)	Expenditure incurred on repairing (Rs.)
Rotavetor	06	2.0	4.0	1200.00	0
Portable rice thresher	02	3.5	10days	500.00	0
Hatchery unit	01	400 egg	-	500.00	0
Maize thresher	08	4.0	15	4500.00	0

**Table: Village wise VCRMC**

Village name	VCRMC Constitution date	VCRMC members (no.)		Meetings organized by VCRMC (no.)	Date of VCRMC meeting	Name of Secretary	Name of President	Major decision taken
		M	F					
Shivrajpur		12	03	02	05/07/2024 & 06/11/2024	Sitaram Oraon	Vijay Oraon	Seed conservation & water conservation

**Attachments: Good quality Photograph**

		
Pea cultivation under Drip irrigation	Paddy transplanting with the use of WHS	Community nursery (Swarna shreya)
		
Mulching with paddy straw in mango	Mulching with green weeds in mango	Trench bunding



		
Community nursery Ragi (BM-3)	Ragi field	Field follow up of Ragi
		
Community nursery (Swarna shreya)	Paddy field (Swarna Shreya)	Field day on Paddy (Swarna shreya)
		
Application of Nano Urea through Kisan Drone	Blackgram field (PU-31)	
		
Wheat demo field (Sabour Nirjal)	Wheat demo field (DBW-252)	
		



Mustard (PM-30)



Lentil (IPL-220)



Linseed field (Birsia Tisi-2)



Mechanization under NICRA



Goat (Black Bengal)



Community fish farming

Hatchery unit at village level



Watermelon cultivation

Intercropping (Groundnut + Redgram)

Intercropping (Mango+ Vegetables)



### 11.5. Formation and Promotion of FPOs as Cluster Based Business Organization (CBBOs)

Name of State	Name of district	No. of blocks allocated	No. of FPOs registered as CBBO	Average no of members per FPO	No. of FPO received Management cost	No. of FPO received Equity Grant	Tech. backstopping provided to no. of FPOs	No. of training programme organized for FPOs for Technology backstopping as CBBO	Training received by FPO members (Y/N) If yes then major area of training	Assistance to no. of FPOs in economic activities	Is Business plan prepared for FPOs as CBBOs	Is Business plan prepared for FPOs as without CBBOs	No. Of FPOs doing business
Jharkhand	Gumla	Gumla	1	414	1	1	1		Yes	Seed, Agri tools, Training	Yes	No	1
	Gumla	Gumla	1	409	1	1	1		Yes	Seed, Agri tools, Training	Yes	No	1

### Details of commodity-based organizations/ farmers' cooperative society/ FPO formed/ associated with KVK under NCDC funding

S.N	Name of the FPO	Address of FPO	Registration No and Date	Proposed Activity	Commodity Identified	Total No. of BOM Members	Total no of farmers attached	Financial position (Rupees in lakh)	Success indicator
1	Gumla Sabji Utpadak Sahyog Samiti Limited	Manjhatoli, Block: Raidih, Dist.: Gumla	05/Gum/2021 and 13/07/2021	Multi Crops, Fruits & Vegetables, Seed, Agri small tools, implements business	Tomato	13	414	10,15,315.00	Business
2	Raidih Phal Utpadak Sahyog Samiti Limited	Gashitoli, Block: Gumla, Dist.: Gumla	04/Gum/2021 and 03/07/2021	Multi Crops, Fruits & Vegetables, Seed, Agri small tools, implements business	Mango	13	409	8,28,415.00	Business

## 11.6. Nutri-Sensitive Agricultural Resources and Innovation (NARI)

### a. Overall achievement

No. of Nutri smart village developed	Total Area covered	Total No of OFT organized	Total No. of FLD organized	No. of training/capacity development programme	Total No. of farmers/ beneficiaries	No of Extension programmes	Total No. of farmers/ beneficiaries
04	1.25 ha.	1	40	8	107	2	60

### b. Details of OFT/FLD

<b>OFT</b>		
Nutritional Garden		
Bio-fortified Crops		
Value addition (in no. of Unit or no. of Enterprise)	<b>1</b>	<b>6</b>
Other Enterprises (in no. of Unit or no. of Enterprise)		
	<b>Area (ha/ no. of Unit/Enterprise)</b>	<b>No. of farmers/ beneficiaries</b>
<b>FLD</b>		
Nutritional Garden	40	40
Bio-fortified Crops	1.6 ha	20
Value addition (in no. of Unit or no. of Enterprise)		
Other Enterprises (in no. of Unit or no. of Enterprise:Mushroom)	10	10

### c. Details of established Nutrition Garden in Nutri-Smart village

Sl.	Name of Nutri-Smart Village	Type of Nutrition Garden	Number	Area (sqm)	No. of beneficiaries
1.	Mayil.Shivrajpur, Hesrag, Bensdi	Backyard/Kitchen Garden	40	1254	40
2.		Community level			
3.		Terrace Garden			
4.		Vertical Garden			
TOTAL					

### d. Details of Bio-fortified crops used in Nutri-Smart village

Name of Nutri-Smart Village	Season	Activity (OFT/FLD)	Category of crop (cereal/ pulses/oilseed/ fruits & veg./ others	Name of Crop	Variety	Area (ha)	No. of beneficiaries
Mayil	rabi	FLD	Cereal	Wheat	DBW187	1.6 ha	20

**e. Details of Value addition in Nutri-Smart village**

<b>Name of Nutri Smart Village</b>	<b>Name of Crop/ veg./ fruits/ other</b>	<b>Name of Value-added product</b>	<b>Activity (OFT/FLD)</b>	<b>No. of farmers/ beneficiaries</b>
Mayil	Ragi, Little millet	Composite flour	OFT	6

**f. Training programmes in Nutri-Smart village**

<b>Name of Nutri Smart Village</b>	<b>Area of Training</b>	<b>No of courses</b>	<b>No. of beneficiaries</b>
Mayil	Mushroom Production	1	20
Mayil	Importance of biofortified varieties	1	21
Shivrajpur Mayil	Nutrition Garden	1	29
Mayil	Drudgery reduction	1	26
Mayil	Value added Products	1	13
Mayil	Importance of cooking Methods	1	8

**g. Extension activities under NARI Project**

<b>Name of Nutri-Smart Village</b>	<b>Title of Activity</b>	<b>No. of activities</b>	<b>No. of beneficiaries</b>
Mayil	SHG meeting.	1	20
Mayil	Poshan Maah	1	40

### 11.7 Attracting and Retaining Youth in Agriculture (ARYA)

Name of Enterprises	No of Skill training conducted (No.)	Name of Training	Duration (Days)	Youth trained (No.)	Established entrepreneurial unit (No.)	No. of Groups Formed for establishment of unit	No. of Members in each Group	No. of Groups active	No. of person left the group	Total Viable unit (No.)	Average size of each entrepreneurial unit	Total Production /unit / year	Per unit cost of Production (Rs)	Sale value of Produce (Rs.)	Gross Return/Unit/ Year (Rs.)	Economic Gains/ unit (Rs.)	B:C Ratio	Employment generated/ year (manday @ 8 hr/ day)
Pig Farming	1	Scientific Pig Farming	7	20	08	01	08	01	02	06	35	37 no Pigs, 192 no piglets	3.55	3.55	8.72	5.16	2.46	182
Goat Farming	1	Scientific Goad Farming	15	30	10	02	10	02	05	15	25	28 no Goat & Buck, 17 no kids	0.42	0.42	1.88	1.46	4.43	180
Lac Cultivation	1	Scientific Lac Cultivation	5	26	19	02	15	02	00	30	20	Brood lac 4.4 q (Rangeeni & Kusumi)	1.19	1.19	3.44	2.24	2.89	60
Bee Keeping	1	Scientific Bee Keeping	1	29	03	01	14	01	03	11	12	Honey 3.9 q	0.30	0.30	1.56	1.25	5.12	112

### 11.8 Out-scaling of Natural Farming Format

#### Geographical information

<b>Name of State</b>		<b>Jharkhand</b>	
<b>Name of KVK</b>		<b>Gumla</b>	
<b>Agro Climatic Zone of Village/KVK</b>		<b>V (Rgion Name : Western Plateau Zone)</b>	
<b>Farming Situation of the Selected Farmer/KVK</b>	<b>Rain fed</b>	<b>Latitude (N)</b>	<b>Longitude (E)</b>
		<b>23.436316</b>	<b>84.321744</b>

#### Physical information

<b>Name of KVK</b>	<b>Name of activity</b>	<b>No of activities organized</b>	<b>No of participants</b>	<b>Participants (Male)</b>						<b>Participants (Female)</b>					
				<b>GEN</b>	<b>OBC</b>	<b>SC</b>	<b>ST</b>	<b>Others</b>	<b>Total</b>	<b>GEN</b>	<b>OBC</b>	<b>SC</b>	<b>ST</b>	<b>Others</b>	<b>Total</b>
Gumla	Training	10	404	-	48	03	192	-	243	-	33	5	123	-	161
	Awareness	22	1135	8	90	4	455	-	557	-	43	1	534	-	578
	Demonstration	12	12	-	1	-	11	-	12	-	-	-	-	-	-
	Other activities														

#### Training information

<b>Title of Natural Farming training Programme</b>	<b>Date of Training</b>	<b>Venue of programme</b>	<b>Participants (Male)</b>						<b>Participants (Female)</b>						<b>GT</b>	<b>Remarks/ Observation/Feedback Recorded</b>
			<b>GEN</b>	<b>OBC</b>	<b>SC</b>	<b>ST</b>	<b>Others</b>	<b>Total</b>	<b>GEN</b>	<b>OBC</b>	<b>SC</b>	<b>ST</b>	<b>Others</b>	<b>Total</b>		
Natural farming	23-24/2/24	At KVK HQ	-	-	-	39	-	39	-	-	-	01	-	01	40	
Natural farming	06-07/3/24	At KVK HQ	-	-	-	29	-	29	-	-	-	11	-	11	40	
Natural farming	11-12/3/24	At KVK HQ	-	-	-	08	-	08	-	01	-	32	-	31	40	
Natural farming	13-14/3/24	P B Dumri	-	-	2	11	-	13	-	-	05	22	-	27	40	
Natural farming	15-16/3/24	At KVK HQ	-	11	-	04	-	15	-	13	-	12	-	25	40	
Natural farming	15-16/3/24	At KVK HQ	-	11	-	08	-	19	-	13	-	8	-	21	40	
Natural farming	19-20/3/24	At KVK HQ	-	06	01	21	-	28	-	-	-	12	-	12	40	
Natural farming	19-20/3/24	At KVK HQ	-	20	-	11	-	31	-	06	-	03	-	09	40	
Natural farming	25/7/2024	Borang	-	-	-	30	-	30	-	-	-	14	-	14	44	
Natural farming	13/8/2025	At KVK HQ	-	-	-	31	-	31	-	-	-	09	-	09	40	
<b>Total</b>			<b>0</b>	<b>48</b>	<b>3</b>	<b>192</b>	<b>0</b>	<b>243</b>	<b>0</b>	<b>33</b>	<b>5</b>	<b>124</b>	<b>0</b>	<b>160</b>	<b>404</b>	

## Awareness programme information

Title of Natural Farming Awareness programme	Date of Awareness programme	Venue of programme	Participants (Male)						Participants (Female)						GT	Remarks/Observation/Feedback Recorded
			GEN	OBC	SC	ST	Others	Total	GEN	OBC	SC	ST	Others	Total		
Awareness	2/1/24	Kulukera	-	-	-	2	-	-	-	-	-	26	-	-	28	
Awareness	3/1/24	Narma	-	-	-	11	-	-	-	-	-	54	-	-	65	
Awareness	5/1/24	Uttari Palkot	-	-	-	21	-	-	-	-	-	09	-	-	30	
Awareness	8/1/24	Basia	-	-	-	17	-	-	-	-	-	59	-	-	56	
Awareness	9/1/24	Kaliga	-	-	-	20	-	-	-	-	-	52	-	-	72	
Awareness	9/1/24	Larango	-	-	-	13	-	-	-	-	-	40	-	-	53	
Awareness	10/1/24	Tetara	-	-	-	07	-	-	-	-	-	74	-	-	81	
Awareness	10/1/24	Puso	-	-	-	55	-	-	-	-	-	54	-	-	109	
Awareness	12/1/24	Dakshini Bharno	-	-	-	16	04	-	-	-	-	05	-	-	25	
Awareness	13/1/24	Marasilli	-	-	-	24	02	-	-	-	-	03	-	-	29	
Awareness	16/1/24	Turiamba	-	-	-	14	02	-	-	-	-	10	01	-	27	
Awareness	17/1/24	Olmunda	-	-	-	17	03	-	-	-	-	08	01	-	29	
Awareness	18/1/24	Phori	-	-	-	39	10	-	-	-	-	18	03	-	70	
Awareness	19/1/24	Telgaon	-	-	-	03	-	-	-	-	-	30	-	-	33	
Awareness	20/1/24	Kumhariya	-	-	-	15	06	-	-	-	-	05	02	-	28	
Awareness	21/1/24	Karaundi	-	-	01	22	07	-	-	-	-	09	-	-	39	
Awareness	22/1/24	Brinda	-	-		14	03	-	-	-	-	06	02	-	25	
Awareness	23/1/24	Ambowa	-	-	01	03	14	-	-	-	-	09	08	-	35	
Awareness	24/1/24	Kasira	-	-	-	13	10	-	-	-	-	15	15	-	53	
Awareness	12/3/24	KVK HQ	-	-	-	40		-	-	-	-		-	-	40	
Awareness	26/12/24	Ghaghra	-	-	-	38	03	-	-	-	-	14	01	-	56	
Awareness	27/12/24	Sisai	-	-	-	18	08	-	-	-	-	02	04	-	32	
<b>Total</b>			<b>0</b>	<b>0</b>	<b>2</b>	<b>422</b>	<b>72</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>502</b>	<b>37</b>	<b>0</b>	<b>1015</b>	

Any other Programme /Activity organized for Natural farming promotion		
Name of the Innovative programme organized	Significance of innovative programme	Remarks/Observation/Feedback Recorded
Natural farming component preparation methods live display at Kisan Mela.	Farmer learned the components preparation of natural farming like Ghan-Jeevamrit, Jeevamrit, Beejamrit and Jeevamrit by watching and discussing.	Farmer are very excited to learn the process of preparation of natural farming components.

**Details of Beneficiaries under Demonsatration at Farmer's Fields**

Name of KVK	No. of blocks covered	No. of village covered	Total no. of Trained/Pra cticing NF Farmer	No. of farmers influenced to adopt NF	No. of farmers with whom the NF farmer can engaged all season	No. of farmers with whom the NF farmer can engage in 1 season	Any Remarks (in <50 words)
Gumla	02	04	12	47	12	47	

### Demonstration Information (1)

KVK/ Farmer wise information of demonstration conducted till date			
Name of State		Jharkhand	
Name of KVK/Farmer where demonstration conducted		Dileshwar Oraon	
Address of Farmer with contact detail		Separate sheet enclosed (Annexure : 1)	
Agro Climatic Zone of KVK/Village of farmer		V (Rgion Name : Western Plateau Zone)	
Cropping patter of KVK plot/ Farmer plot		Vegetable based	
Farming Situation of the Selected KVK/Farmer	Irrigated	Latitude (N)	Longitude (E)
		23.531516''	84.398816''

Name of Activity	Crop	Variety	Season (Kharif /Rabi/ Summer)	Name of Natural Farming components/Technology demonstrated	Area (ha) in Natural farming practice	Detail of farmer practice	Observations Recorded		
							Name of parameter	Performance	
								Without NF practice	With NF practice
Demonstration	Maize + Cowpea	Suwan-1 + YB7	Kharif	Uses Of Natural farming component	4.0 ha	Improved	Plant height (cm)	209.5	206.2
							Other relevant parameter	1.33	1.33
							• No of cob/plant		
							• Cob length in (cm)	14.47	13.5
							Yield (q/ha)	57.31	55.25
							Cost of cultivation (Rs/ha)	48500	43650
							Gross Return (Rs/ha)	127515	122931



Name of Activity	Crop	Variety	Season (Kharif /Rabi/ Summer)	Name of Natural Farming components/Technology demonstrated	Area (ha) in Natural farming practice	Detail of farmer practice	Observations Recorded		
							Name of parameter	Performance	
								Without NF practice	With NF practice
							Net Return (Rs/ha)	79015	79281
							B:C Ratio	2.63	2.82
							Soil PH	6.12	6.18
							Soil OC (%)	0.49	0.51
							Soil EC (dS/m)	0.201	0.196
							Available N (Kg/ha)	299.14	306.4
							Available P (Kg/ha)	17.52	18.13
							Available K (Kg/ha)	534.12	560.14
							Soil Microbes (cfu)		
Feedback of farmer									

### Demonstration Information (2)

KVK/ Farmer wise information of demonstration conducted till date			
Name of State		Jharkhand	
Name of KVK/Farmer where demonstration conducted		Chuyu Oraon	
Address of Farmer with contact detail		Separate sheet enclosed (Annexure : 1)	
Agro Climatic Zone of KVK/Village of farmer		V (Rgion Name : Western Plateau Zone)	
Cropping patter of KVK plot/ Farmer plot		Vegetable based	
Farming Situation of the Selected KVK/Farmer	Irrigated	Latitude (N)	Longitude (E)
		23.530828"	84.398808"



**Demonstration Information (3)**

KVK/ Farmer wise information of demonstration conducted till date			
Name of State		Jharkhand	
Name of KVK/Farmer where demonstration conducted		Kandaru Oraon	
Address of Farmer with contact detail		Separate sheet enclosed (Annexure : 1)	
Agro Climatic Zone of KVK/Village of farmer		V (Rgion Name : Western Plateau Zone)	
Cropping patter of KVK plot/ Farmer plot		Vegetable based	
Farming Situation of the Selected KVK/Farmer	Irrigated	Latitude (N)	Longitude (E)
		23.534009''	84.401851''

Name of Activity	Crop	Variety	Season (Kharif /Rabi/ Summer)	Name of Natural Farming components/Technology demonstrated	Area (ha) in Natural farming practice	Detail of farmer practice	Observations Recorded		
							Name of parameter	Performance	
								Without NF practice	With NF practice
Demonstration	Maize + Cowpea	Suwan-1 + YB7	Kharif	Uses Of Natural farming component	4.0 ha	Improved	Plant height (cm)	214.3	209.5
							Other relevant parameter	2.00	1.66
							• No of cob/plant		
							• Cob length in (cm)	18.00	17.20
							Yield (q/ha)	69.53	67.78
							Cost of cultivation (Rs/ha)	48500	43650
							Gross Return (Rs/ha)	154704	150811
							Net Return (Rs/ha)	106204	107161
							B:C Ratio	3.19	3.45



**Demonstration Information (4)**

KVK/ Farmer wise information of demonstration conducted till date			
Name of State		Jharkhand	
Name of KVK/Farmer where demonstration conducted		Rajendra Oraon	
Address of Farmer with contact detail		Separate sheet enclosed (Annexure : 1)	
Agro Climatic Zone of KVK/Village of farmer		V (Rgion Name : Western Plateau Zone)	
Cropping patter of KVK plot/ Farmer plot		Vegetable based	
Farming Situation of the Selected KVK/Farmer	Irrigated	Latitude (N)	Longitude (E)
		23.533039''	84.405113''

Name of Activity	Crop	Variety	Season (Kharif /Rabi/ Summer)	Name of Natural Farming components/Technology demonstrated	Area (ha) in Natural farming practice	Detail of farmer practice	Observations Recorded		
							Name of parameter	Performance	
								Without NF practice	With NF practice
Demonstration	Maize + Cowpea	Suwan-1 + YB7	Kharif	Uses Of Natural farming component	4.0 ha	Improved	Plant height (cm)	204.0	199.5
							Other relevant parameter	1.66	1.00
							• No of cob/plant		
							• Cob length in (cm)	13.00	12.40
							Yield (q/ha)	56.61	55.34
							Cost of cultivation (Rs/ha)	48500	43650
							Gross Return (Rs/ha)	125957	123132
							Net Return (Rs/ha)	77457	79482

Name of Activity	Crop	Variety	Season (Kharif /Rabi/ Summer)	Name of Natural Farming components/Technology demonstrated	Area (ha) in Natural farming practice	Detail of farmer practice	Observations Recorded		
							Name of parameter	Performance	
								Without NF practice	With NF practice
							B:C Ratio	2.60	2.82
							Soil PH	5.17	5.24
							Soil OC (%)	0.64	0.65
							Soil EC (dS/m)	0.189	0.196
							Available N (Kg/ha)	350.14	378.16
							Available P (Kg/ha)	9.87	12.38
							Available K (Kg/ha)	358.62	375.12
							Soil Microbes (cfu)		
							Any other, specify		
Feedback of farmer									

**Demonstration Information (5)**

KVK/ Farmer wise information of demonstration conducted till date			
Name of State		Jharkhand	
Name of KVK/Farmer where demonstration conducted		Bandha Brijiya	
Address of Farmer with contact detail		Separate sheet enclosed (Annexure : 1)	
Agro Climatic Zone of KVK/Village of farmer		V (Rgion Name : Western Plateau Zone)	
Cropping patter of KVK plot/ Farmer plot		Vegetable based	
Farming Situation of the Selected KVK/Farmer	Irrigated	Latitude (N)	Longitude (E)
		23.435577"	84.292158"

Name of Activity	Crop	Variety	Season (Kharif /Rabi/ Summer)	Name of Natural Farming components/Technology demonstrated	Area (ha) in Natural farming practice	Detail of farmer practice	Observations Recorded		
							Name of parameter	Performance	
								Without NF practice	With NF practice
Demonstration	Maize + Cowpea	Suwan-1 + YB7	Kharif	Uses Of Natural farming component	4.0 ha	Improved	Plant height (cm)	213.5	210.4
							Other relevant parameter	2.00	1.66
							• No of cob/plant		
							• Cob length in (cm)	16.00	14.90
							Yield (q/ha)	61.93	59.00
							Cost of cultivation (Rs/ha)	48500	43650
							Gross Return (Rs/ha)	137794	131275
							Net Return (Rs/ha)	89294	87625
							B:C Ratio	2.84	3.01





**Demonstration Information (6)**

KVK/ Farmer wise information of demonstration conducted till date			
Name of State		Jharkhand	
Name of KVK/Farmer where demonstration conducted		Ratiya Oraon	
Address of Farmer with contact detail		Separate sheet enclosed (Annexure : 1)	
Agro Climatic Zone of KVK/Village of farmer		V (Rgion Name : Western Plateau Zone)	
Cropping patter of KVK plot/ Farmer plot		Vegetable based	
Farming Situation of the Selected KVK/Farmer	Irrigated	Latitude (N)	Longitude (E)
		23.435577"	84.292158"

Name of Activity	Crop	Variety	Season (Kharif /Rabi/ Summer)	Name of Natural Farming components/Technology demonstrated	Area (ha) in Natural farming practice	Detail of farmer practice	Observations Recorded		
							Name of parameter	Performance	
								Without NF practice	With NF practice
Demonstration	Maize + Cowpea	Suwan-1 + YB7	Kharif	Uses Of Natural farming component	4.0 ha	Improved	Plant height (cm)	202.8	198.4
							Other relevant parameter	1.33	1.33
							• No of cob/plant		
							• Cob length in (cm)	12.90	11.20
							Yield (q/ha)	49.80	49.35
							Cost of cultivation (Rs/ha)	48500	43650
							Gross Return (Rs/ha)	110805	109804
							Net Return (Rs/ha)	62305	66154
							B:C Ratio	2.28	2.52



**Demonstration Information (7)**

KVK/ Farmer wise information of demonstration conducted till date			
Name of State		Jharkhand	
Name of KVK/Farmer where demonstration conducted		Laudha Mahali	
Address of Farmer with contact detail		Separate sheet enclosed (Annexure : 1)	
Agro Climatic Zone of KVK/Village of farmer		V (Rgion Name : Western Plateau Zone)	
Cropping patter of KVK plot/ Farmer plot		Vegetable based	
Farming Situation of the Selected KVK/Farmer	Irrigated	Latitude (N)	Longitude (E)
		23.523204"	84.415413"

Name of Activity	Crop	Variety	Season (Kharif /Rabi/ Summer)	Name of Natural Farming components/Technology demonstrated	Area (ha) in Natural farming practice	Detail of farmer practice	Observations Recorded		
							Name of parameter	Performance	
								Without NF practice	With NF practice
Demonstration	Maize + Cowpea	Suwan-1 + YB7	Kharif	Uses Of Natural farming component	4.0 ha	Improved	Plant height (cm)	207.5	203.2
							Other relevant parameter	1.33	1.00
							• No of cob/plant		
							• Cob length in (cm)	13.20	12.50
							Yield (q/ha)	52.16	50.50
							Cost of cultivation (Rs/ha)	48500	43650
							Gross Return (Rs/ha)	116056	112363
							Net Return (Rs/ha)	67556	68713
							B:C Ratio	2.39	2.57



**Demonstration Information (8)**

KVK/ Farmer wise information of demonstration conducted till date			
Name of State		Jharkhand	
Name of KVK/Farmer where demonstration conducted		Arun Bhagat	
Address of Farmer with contact detail		Separate sheet enclosed (Annexure : 1)	
Agro Climatic Zone of KVK/Village of farmer		V (Rgion Name : Western Plateau Zone)	
Cropping patter of KVK plot/ Farmer plot		Vegetable based	
Farming Situation of the Selected KVK/Farmer	Irrigated	Latitude (N)	Longitude (E)
		23.528206"	84.414986"

Name of Activity	Crop	Variety	Season (Kharif /Rabi/ Summer)	Name of Natural Farming components/Technology demonstrated	Area (ha) in Natural farming practice	Detail of farmer practice	Observations Recorded		
							Name of parameter	Performance	
								Without NF practice	With NF practice
Demonstration	Maize + Cowpea	Suwan-1 + YB7	Kharif	Uses Of Natural farming component	4.0 ha	Improved	Plant height (cm)	199.5	197.2
							Other relevant parameter	1.00	1.00
							• No of cob/plant		
							• Cob length in (cm)	14.80	13.90
							Yield (q/ha)	53.28	52.03
							Cost of cultivation (Rs/ha)	48500	43650
							Gross Return (Rs/ha)	118548	115767
							Net Return (Rs/ha)	70048	72117
							B:C Ratio	2.44	2.65



**Demonstration Information (9)**

KVK/ Farmer wise information of demonstration conducted till date			
Name of State		Jharkhand	
Name of KVK/Farmer where demonstration conducted		Pandiya Oraon	
Address of Farmer with contact detail		Separate sheet enclosed (Annexure : 1)	
Agro Climatic Zone of KVK/Village of farmer		V (Rgion Name : Western Plateau Zone)	
Cropping patter of KVK plot/ Farmer plot		Vegetable based	
Farming Situation of the Selected KVK/Farmer	Irrigated	Latitude (N)	Longitude (E)
		23.521628"	84.411091"

Name of Activity	Crop	Variety	Season (Kharif /Rabi/ Summer)	Name of Natural Farming components/Technology demonstrated	Area (ha) in Natural farming practice	Detail of farmer practice	Observations Recorded		
							Name of parameter	Performance	
								Without NF practice	With NF practice
Demonstration	Maize + Cowpea	Suwan-1 + YB7	Kharif	Uses Of Natural farming component	4.0 ha	Improved	Plant height (cm)	211.3	208.5
							Other relevant parameter	1.66	1.33
							• No of cob/plant		
							• Cob length in (cm)	15.60	14.00
							Yield (q/ha)	64.21	59.47
							Cost of cultivation (Rs/ha)	48500	43650
							Gross Return (Rs/ha)	142867	132321
							Net Return (Rs/ha)	94367	88671
							B:C Ratio	2.95	3.03





**Demonstration Information (10)**

KVK/ Farmer wise information of demonstration conducted till date			
Name of State		Jharkhand	
Name of KVK/Farmer where demonstration conducted		Chamru Oraon	
Address of Farmer with contact detail		Separate sheet enclosed (Annexure : 1)	
Agro Climatic Zone of KVK/Village of farmer		V (Rgion Name : Western Plateau Zone)	
Cropping patter of KVK plot/ Farmer plot		Vegetable based	
Farming Situation of the Selected KVK/Farmer	Irrigated	Latitude (N)	Longitude (E)
		23.522142"	84.412857"

Name of Activity	Crop	Variety	Season (Kharif /Rabi/ Summer)	Name of Natural Farming components/Technology demonstrated	Area (ha) in Natural farming practice	Detail of farmer practice	Observations Recorded		
							Name of parameter	Performance	
								Without NF practice	With NF practice
Demonstration	Maize + Cowpea	Suwan-1 + YB7	Kharif	Uses Of Natural farming component	4.0 ha	Improved	Plant height (cm)	212.5	210.3
							Other relevant parameter	1.66	1.66
							• No of cob/plant		
							• Cob length in (cm)	16.5	15.7
							Yield (q/ha)	66.4	64.08
							Cost of cultivation (Rs/ha)	48500	43650
							Gross Return (Rs/ha)	147740	14578
							Net Return (Rs/ha)	99240	98928
							B:C Ratio	3.05	3.27

Name of Activity	Crop	Variety	Season (Kharif /Rabi/ Summer)	Name of Natural Farming components/Technology demonstrated	Area (ha) in Natural farming practice	Detail of farmer practice	Observations Recorded		
							Name of parameter	Performance	
								Without NF practice	With NF practice
							Soil PH	6.87	6.95
							Soil OC (%)	0.60	0.69
							Soil EC (dS/m)	0.204	0.221
							Available N (Kg/ha)	386.48	405.13
							Available P (Kg/ha)	20.34	23.18
							Available K (Kg/ha)	350.82	367.2
							Soil Microbes (cfu)		
							Any other, specify		
Feedback of farmer									

**Demonstration Information (11)**

KVK/ Farmer wise information of demonstration conducted till date			
Name of State		Jharkhand	
Name of KVK/Farmer where demonstration conducted		Bachandeo Kherwar	
Address of Farmer with contact detail		Separate sheet enclosed (Annexure : 1)	
Agro Climatic Zone of KVK/Village of farmer		V (Rgion Name : Western Plateau Zone)	
Cropping patter of KVK plot/ Farmer plot		Vegetable based	
Farming Situation of the Selected KVK/Farmer	Irrigated	Latitude (N)	Longitude (E)
		23.436242''	84.290856''

Name of Activity	Crop	Variety	Season (Kharif /Rabi/ Summer)	Name of Natural Farming components/Technology demonstrated	Area (ha) in Natural farming practice	Detail of farmer practice	Observations Recorded		
							Name of parameter	Performance	
								Without NF practice	With NF practice
Demonstration	Ragi	BBM-3	Kharif	Uses Of Natural farming component	4.0 ha	Improved	Plant height (cm)	103.5	105.5
							Other relevant parameter		
							• No of effective tillers/m2	81.33	84.66
							• Panicle length in (cm)	5.26	5.5
							Yield (q/ha)	13.85	14.27
							Cost of cultivation (Rs/ha)	27381	27087
							Gross Return (Rs/ha)	59417	61218
							Net Return (Rs/ha)	32036	34131

Name of Activity	Crop	Variety	Season (Kharif /Rabi/ Summer)	Name of Natural Farming components/Technology demonstrated	Area (ha) in Natural farming practice	Detail of farmer practice	Observations Recorded		
							Name of parameter	Performance	
								Without NF practice	With NF practice
							B:C Ratio	2.17	2.26
							Soil PH	5.75	5.87
							Soil OC (%)	0.56	0.59
							Soil EC (dS/m)	0.163	0.12
							Available N (Kg/ha)	300.63	316.73
							Available P (Kg/ha)	16.50	18.13
							Available K (Kg/ha)	470.18	495.10
							Soil Microbes (cfu)		
							Any other, specify		
Feedback of farmer									

**Demonstration Information (12)**

KVK/ Farmer wise information of demonstration conducted till date			
Name of State		Jharkhand	
Name of KVK/Farmer where demonstration conducted		Rajesh Sahu	
Address of Farmer with contact detail		Separate sheet enclosed (Annexure : 1)	
Agro Climatic Zone of KVK/Village of farmer		V (Rgion Name : Western Plateau Zone)	
Cropping patter of KVK plot/ Farmer plot		Vegetable based	
Farming Situation of the Selected KVK/Farmer	Irrigated	Latitude (N)	Longitude (E)
		23.436242''	84.290856''

Name of Activity	Crop	Variety	Season (Kharif /Rabi/ Summer)	Name of Natural Farming components/Technology demonstrated	Area (ha) in Natural farming practice	Detail of farmer practice	Observations Recorded		
							Name of parameter	Performance	
								Without NF practice	With NF practice
Demonstration	Lady finger	Reetu	Kharif	Uses Of Natural farming component	4.0 ha	Improved	Plant height (cm)	191	197
							Other relevant parameter	15.33	16
							• No of fruit/plant		
							• Fruit length in (cm)	9.20	9.50
							Yield (q/ha)	87.25	92.67
							Cost of cultivation (Rs/ha)	56500	52450
							Gross Return (Rs/ha)	174500	185340
							Net Return (Rs/ha)	118000	132890
							B:C Ratio	3.09	3.53



Information of Farmer Already Practicing Natural Farming													
S. No.	Name of District	Name of Farmer	Name of Village and address with contact No	No. of Indigenous (Desi Cows)	Land Holding (ha)	Normal Crops Grown	No. of Years practicing in Natural Farming	Area (ha) Covered under Natural Farming	Crop Grown under Natural Farming	Natural Farming Technology practicing/ adopted	Observations Recorded		
											Name of parameter	Performance	
												Without NF practice	With NF practice
1	Gumla	Rajesh Sahu	Nawadih, Kugaon, Ghaghra,6202517687	02	2.0	Vegetables, Paddy, Oil seed	09	0.8	Vegetables,	All components of natural farming	Plant height (cm)	191	197
											Other relevant parameter	15.33	16
												9.20	9.50
											Yield (q/ha)	87.25	92.67
											Cost of cultivation (Rs/ha)	56500	52450
											Gross Return (Rs/ha)	174500	185340
											Net Return (Rs/ha)	118000	132890
											B:C Ratio	3.09	3.53
											Soil PH	6.74	6.75
											Soil OC (%)	0.61	0.65
											Soil EC (dS/m)	0.291	0.347
											Available N (Kg/ha)	364.56	373.12
											Available P (Kg/ha)	23.87	28.15
											Available K (Kg/ha)	336.45	350.19
											Soil Microbes (cfu)		
Any other, specify													
Feedback of farmer:													

### Information of Farmer Already Practicing Natural Farming

S. No.	Name of District	Name of Farmer	Name of Village and address with contact No	No. of Indigenous (Desi Cows)	Land Holding (ha)	Normal Crops Grown	No. of Years practicing in Natural Farming	Area (ha) Covered under Natural Farming	Crop Grown under Natural Farming	Natural Farming Technology practicing/ adopted	Observations Recorded		
											Name of parameter	Performance	
												Without NF practice	With NF practice
2	Gumla	Dileshwar Oraon	Borang, Nirasi, Bishunpur, 8986778335	02	2.5	Vegetables, Paddy, Oil seed and Pulses	04	0.4	Vegetables and Maize + Cowpea,	All components of natural farming	Plant height (cm)	209.5	206.2
											Other relevant parameter	1.33	1.33
											• No of cob/plant Cob length in (cm)	14.47	13.5
											Yield (q/ha)	57.31	55.25
											Cost of cultivation (Rs/ha)	48500	43650
											Gross Return (Rs/ha)	127515	122931
											Net Return (Rs/ha)	79015	79281
											B:C Ratio	2.63	2.82
											Soil PH	6.12	6.18
											Soil OC (%)	0.49	0.51
											Soil EC (dS/m)	0.201	0.196
											Available N (Kg/ha)	299.14	306.4
											Available P (Kg/ha)	17.52	18.13
											Available K (Kg/ha)	534.12	560.14
											Soil Microbes (cfu)		
											Any other, specify		

Feedback of farmer:



**Information of Farmer Already Practicing Natural Farming**

S. No.	Name of District	Name of Farmer	Name of Village and address with contact No	No. of Indigenous (Desi Cows)	Land Holding (ha)	Normal Crops Grown	No. of Years practicing in Natural Farming	Area (ha) Covered under Natural Farming	Crop Grown under Natural Farming	Natural Farming Technology practicing/ adopted	Observations Recorded		
											Name of parameter	Performance	
												Without NF practice	With NF practice
3	Gumla	Chuyu Oraon	Borang, Nirasi, Bishunpur, 8580288633	05	2.5	Vegetables, Paddy, Oil seed and Pulses	04	0.4	Vegetables and Maize + Cowpea,	All components of natural farming	Plant height (cm)	208.2	205.5
											Other relevant parameter	1.66	1.33
											• No of cob/plant		
											Cob length in (cm)	12.2	11.9
											Yield (q/ha)	54.39	51.57
											Cost of cultivation (Rs/ha)	48500	43650
											Gross Return (Rs/ha)	121018	114743
											Net Return (Rs/ha)	72518	71093
											B:C Ratio	2.50	2.63
											Soil PH	6.10	6.12
											Soil OC (%)	0.58	0.63
											Soil EC (dS/m)	0.283	0.301
											Available N (Kg/ha)	368.2	375.04
											Available P (Kg/ha)	16.42	20.10
											Available K (Kg/ha)	417.48	440.16
											Soil Microbes (cfu)		
											Any other, specify		

Feedback of farmer:

### Information of Farmer Already Practicing Natural Farming

S. No.	Name of District	Name of Farmer	Name of Village and address with contact No	No. of Indigenous (Desi Cows)	Land Holding (ha)	Normal Crops Grown	No. of Years practicing in Natural Farming	Area (ha) Covered under Natural Farming	Crop Grown under Natural Farming	Natural Farming Technology practicing/ adopted	Observations Recorded		
											Name of parameter	Performance	
												Without NF practice	With NF practice
4	Gumla	Kandaru Oraon	Borang, Nirasi, Bishunpur , 9470163 187	03	3.0	Vegetables, Paddy, Oil seed and Pulses	04	0.4	Vegetables and Maize + Cowpea,	All components of natural farming	Plant height (cm)	214.3	209.5
											Other relevant parameter	2.00	1.66
											• No of cob/plant		
											Cob length in (cm)	18.00	17.20
											Yield (q/ha)	69.53	67.78
											Cost of cultivation (Rs/ha)	48500	43650
											Gross Return (Rs/ha)	154704	150811
											Net Return (Rs/ha)	106204	107161
											B:C Ratio	3.19	3.45
											Soil PH	5.85	5.90
											Soil OC (%)	0.62	0.68
											Soil EC (dS/m)	0.294	0.310
											Available N (Kg/ha)	378.47	385.15
											Available P (Kg/ha)	15.30	18.60
											Available K (Kg/ha)	487.23	520.00
Soil Microbes (cfu)													
Any other, specify													

Feedback of farmer:

## Information of Farmer Already Practicing Natural Farming

S. No.	Name of District	Name of Farmer	Name of Village and address with contact No	No. of Indigenous (Desi Cows)	Land Holding (ha)	Normal Crops Grown	No. of Years practicing in Natural Farming	Area (ha) Covered under Natural Farming	Crop Grown under Natural Farming	Natural Farming Technology practicing/ adopted	Observations Recorded		
											Name of parameter	Performance	
												Without NF practice	With NF practice
5	Gumla	Rajendra Mahali	Borang, Nirasi, Bishunpur, 9234770 905	02	35	Vegetables, Paddy, Oil seed and Pulses	04	0.4	Vegetables and Maize + Cowpea,	All components of natural farming	Plant height (cm)	204.0	199.5
											Other relevant parameter	1.66	1.00
											• No of cob/plant		
											Cob length in (cm)	13.00	12.40
											Yield (q/ha)	56.61	55.34
											Cost of cultivation (Rs/ha)	48500	43650
											Gross Return (Rs/ha)	125957	123132
											Net Return (Rs/ha)	77457	79482
											B:C Ratio	2.60	2.82
											Soil PH	5.17	5.24
											Soil OC (%)	0.64	0.65
											Soil EC (dS/m)	0.189	0.196
											Available N (Kg/ha)	350.14	378.16
											Available P (Kg/ha)	9.87	12.38
											Available K (Kg/ha)	358.62	375.12

Feedback of farmer:

Information of Farmer Already Practicing Natural Farming													
S. No.	Name of District	Name of Farmer	Name of Village and address with contact No	No. of Indigenous (Desi Cows)	Land Holding (ha)	Normal Crops Grown	No. of Years practicing in Natural Farming	Area (ha) Covered under Natural Farming	Crop Grown under Natural Farming	Natural Farming Technology practicing/ adopted	Observations Recorded		
											Name of parameter	Performance	
												Without NF practice	With NF practice
6	Gumla	Bandha Brijiya	Langra Tand, Narma, Bishunpur , 9334629325	05	3.0	Vegetables, Paddy, Oil seed and Pulses	04	0.4	Vegetables and Maize + Cowpea,	All components of natural farming	Plant height (cm)	213.5	210.4
											Other relevant parameter	2.00	1.66
											• No of cob/plant		
											Cob length in (cm)	16.00	14.90
											Yield (q/ha)	61.93	59.00
											Cost of cultivation (Rs/ha)	48500	43650
											Gross Return (Rs/ha)	137794	131275
											Net Return (Rs/ha)	89294	87625
											B:C Ratio	2.84	3.01
											Soil PH	5.97	6.10
											Soil OC (%)	0.79	0.85
											Soil EC (dS/m)	0.099	0.107
											Available N (Kg/ha)	473.19	484.3
											Available P (Kg/ha)	21.06	25.70
											Available K (Kg/ha)	463.17	480.17
Feedback of farmer:											Soil Microbes (cfu)		
											Any other, specify		

**Information of Farmer Already Practicing Natural Farming**

S. No.	Name of District	Name of Farmer	Name of Village and address with contact No	No. of Indigenous (Desi Cows)	Land Holding (ha)	Normal Crops Grown	No. of Years practicing in Natural Farming	Area (ha) Covered under Natural Farming	Crop Grown under Natural Farming	Natural Farming Technology practicing/ adopted	Observations Recorded		
											Name of parameter	Performance	
												Without NF practice	With NF practice
7	Gumla	Ratiya Oraon	Langra Tand, Narma, Bishunpur, 9334629325	04	3.5	Vegetables, Paddy, Oil seed and Pulses	04	0.4	Vegetables and Maize + Cowpea,	All components of natural farming	Plant height (cm)	202.8	198.4
											Other relevant parameter	1.33	1.33
											• No of cob/plant		
											Cob length in (cm)	12.90	11.20
											Yield (q/ha)	49.80	49.35
											Cost of cultivation (Rs/ha)	48500	43650
											Gross Return (Rs/ha)	110805	109804
											Net Return (Rs/ha)	62305	66154
											B:C Ratio	2.28	2.52
											Soil PH	7.15	7.16
											Soil OC (%)	0.68	0.71
											Soil EC (dS/m)	0.185	0.193
											Available N (Kg/ha)	402.15	415.38
											Available P (Kg/ha)	23.87	27.49
											Available K (Kg/ha)	509.43	540.16
											Soil Microbes (cfu)		
											Any other, specify		

Feedback of farmer:

## Information of Farmer Already Practicing Natural Farming

S. No.	Name of District	Name of Farmer	Name of Village and address with contact No	No. of Indigenous (Desi Cows)	Land Holding (ha)	Normal Crops Grown	No. of Years practicing in Natural Farming	Area (ha) Covered under Natural Farming	Crop Grown under Natural Farming	Natural Farming Technology practicing/ adopted	Observations Recorded		
											Name of parameter	Performance	
												Without NF practice	With NF practice
8	Gumla	<b>Laudha Mahali</b>	Langra Tand, Narma, Bishunpur, 9334629325	06	2.5	Vegetables, Paddy, Oil seed and Pulses	02	0.4	Vegetables and Maize + Cowpea,	All components of natural farming	Plant height (cm)	207.5	203.2
											Other relevant parameter	1.33	1.00
											• No of cob/plant		
											Cob length in (cm)	13.20	12.50
											Yield (q/ha)	52.16	50.50
											Cost of cultivation (Rs/ha)	48500	43650
											Gross Return (Rs/ha)	116056	112363
											Net Return (Rs/ha)	67556	68713
											B:C Ratio	2.39	2.57
											Soil PH	6.27	6.34
											Soil OC (%)	0.52	0.55
											Soil EC (dS/m)	0.248	0.261
											Available N (Kg/ha)	308.62	330.43
											Available P (Kg/ha)	13.10	16.84
											Available K (Kg/ha)	199.45	209.11
											Soil Microbes (cfu)		
											Any other, specify		

Feedback of farmer:

Information of Farmer Already Practicing Natural Farming													
S. No.	Name of District	Name of Farmer	Name of Village and address with contact No	No. of Indigenous (Desi Cows)	Land Holding (ha)	Normal Crops Grown	No. of Years practicing in Natural Farming	Area (ha) Covered under Natural Farming	Crop Grown under Natural Farming	Natural Farming Technology practicing/ adopted	Observations Recorded		
											Name of parameter	Performance	
												Without NF practice	With NF practice
9	Gumla	Arun Bhagat	Langra Tand, Narma, Bishunpur , 9334629325	08	2.0	Vegetables, Paddy, Oil seed and Pulses	02	0.4	Vegetables and Maize + Cowpea,	All components of natural farming	Plant height (cm)	199.5	197.2
											Other relevant parameter	1.00	1.00
											• No of cob/plant		
											Cob length in (cm)	14.80	13.90
											Yield (q/ha)	53.28	52.03
											Cost of cultivation (Rs/ha)	48500	43650
											Gross Return (Rs/ha)	118548	115767
											Net Return (Rs/ha)	70048	72117
											B:C Ratio	2.44	2.65
											Soil PH	6.46	6.51
											Soil OC (%)	0.49	0.54
											Soil EC (dS/m)	0.180	0.195
											Available N (Kg/ha)	310.43	318.52
											Available P (Kg/ha)	11.89	15.47
											Available K (Kg/ha)	208.65	217.26
Feedback of farmer:											Soil Microbes (cfu)		
											Any other, specify		

## Information of Farmer Already Practicing Natural Farming

S. No.	Name of District	Name of Farmer	Name of Village and address with contact No	No. of Indigenous (Desi Cows)	Land Holding (ha)	Normal Crops Grown	No. of Years practicing in Natural Farming	Area (ha) Covered under Natural Farming	Crop Grown under Natural Farming	Natural Farming Technology practicing/ adopted	Observations Recorded		
											Name of parameter	Performance	
												Without NF practice	With NF practice
10	Gumla	<b>Pandiya Oraon</b>	Langra Tand, Narma, Bishunpur, 9334629325	06	3.0	Vegetables, Paddy, Oil seed and Pulses	02	0.4	Vegetables and Maize + Cowpea,	All components of natural farming	Plant height (cm)	211.3	208.5
											Other relevant parameter	1.66	1.33
											• No of cob/plant Cob length in (cm)	15.60	14.00
											Yield (q/ha)	64.21	59.47
											Cost of cultivation (Rs/ha)	48500	43650
											Gross Return (Rs/ha)	142867	132321
											Net Return (Rs/ha)	94367	88671
											B:C Ratio	2.95	3.03
											Soil PH	6.73	6.80
											Soil OC (%)	0.51	0.57
											Soil EC (dS/m)	0.197	0.203
											Available N (Kg/ha)	324.52	338.24
											Available P (Kg/ha)	15.07	17.86
											Available K (Kg/ha)	233.41	242.16
											Soil Microbes (cfu)		
											Any other, specify		

Feedback of farmer:





### Information of Farmer Already Practicing Natural Farming

S. No.	Name of District	Name of Farmer	Name of Village and address with contact No	No. of Indigen ous (Desi Cows)	Land Holding (ha)	Normal Crops Grown	No. of Years practicing in Natural Farming	Area (ha) Covered under Natural Farming	Crop Grown under Natural Farming	Natural Farming Technology practicing/ adopted	Observations Recorded		
											Name of parameter	Performance	
												Without NF practice	With NF practice
12	Gumla	Bachandeo Kherwar	Langra Tand, Narma, Bishunpur , 9334629 325	03	4.	Vegetables, Paddy, Oil seed and Pulses	04	0.4	Vegetable s and Maize + Cowpea,	All components of natural farming	Plant height (cm)	103.5	105.5
											Other relevant parameter <ul style="list-style-type: none"><li>No of effective tillers/m2</li></ul>	81.33	84.66
											Panicle length in (cm)	5.26	5.5
											Yield (q/ha)	13.85	14.27
											Cost of cultivation (Rs/ha)	27381	27087
											Gross Return (Rs/ha)	59417	61218
											Net Return (Rs/ha)	32036	34131
											B:C Ratio	2.17	2.26
											Soil PH	5.75	5.87
											Soil OC (%)	0.56	0.59
											Soil EC (dS/m)	0.163	0.12
											Available N (Kg/ha)	300.63	316.73
											Available P (Kg/ha)	16.50	18.13
											Available K (Kg/ha)	470.18	495.10
											Soil Microbes (cfu)		
											Any other, specify		

Feedback of farmer:

**Soil Data information****Soil Parameter for Demo plot at KVK Farm**

Season	Crop	Before crop sowing							After harvesting						
		pH	EC (dS/m)	OC (%)	N (Kg/ha)	P (Kg/ha)	K (Kg/ha)	Soil Microbes (cfu)	pH	EC (dS/m)	OC (%)	N (Kg/ha)	P (Kg/ha)	K (Kg/ha)	Soil Microbes (cfu)
Kharif	Ragi	5.70	0.108	0.51	300.00	9.45	203.84		5.87	0.115	0.59	324.78	10.82	223.15	

**Soil Parameter for Non-Demo plot at KVK Farm**

Season	Crop	Before crop sowing							After harvesting						
		pH	EC (dS/m)	OC (%)	N (Kg/ha)	P (Kg/ha)	K (Kg/ha)	Soil Microbes (cfu)	pH	EC (dS/m)	OC (%)	N (Kg/ha)	P (Kg/ha)	K (Kg/ha)	Soil Microbes (cfu)
Kharif	Maize	5.65	0.098	0.49	286.32	8.57	198.45		5.68	0.100	0.52	288.76	9.05	201.40	

**Soil Parameter for Demo plot at Farmers Field**

Season	Farmer name	Crop	Before crop sowing							After harvesting						
			pH	EC (dS/m)	OC (%)	N (Kg/ha)	P (Kg/ha)	K (Kg/ha)	Soil Microbes (cfu)	pH	EC (dS/m)	OC (%)	N (Kg/ha)	P (Kg/ha)	K (Kg/ha)	Soil Microbes (cfu)
Kharif	Rajesh Sahu	ladyfinger	6.75	0.347	0.65	373.12	28.15	350.19		6.79	0.353	0.68	382.46	29.05	356.13	
2024-25	Dileshwar Oraon	Maize+cowpea	6.18	0.196	0.51	306.40	18.13	560.14		6.21	0.203	0.55	315.43	19.05	561.21	
	Chuyu Oraon	Maize+cowpea	6.12	0.301	0.63	375.04	20.10	440.16		6.18	0.308	0.65	380.13	21.13	442.12	
	Kandaru Oraon	Maize+cowpea	5.90	0.310	0.68	385.15	18.26	520.0		5.96	0.312	0.70	390.05	18.95	523.00	
	Rajendra Mahali	Maize+cowpea	5.24	0.196	0.65	378.16	12.38	375.12		5.30	0.200	0.68	381.20	13.30	376.12	
	Bandha Brijjiya	Maize+cowpea	6.10	0.107	0.85	484.30	25.70	480.17		6.14	0.112	0.86	488.21	26.00	483.17	

Season	Farmer name	Crop	Before crop sowing							After harvesting						
			pH	EC (dS/m)	OC (%)	N (Kg/ha)	P (Kg/ha)	K (Kg/ha)	Soil Microbes (cfu)	pH	EC (dS/m)	OC (%)	N (Kg/ha)	P (Kg/ha)	K (Kg/ha)	Soil Microbes (cfu)
	Bachandeo Kherwar	Ragi	5.87	0.120	0.59	316.73	18.13	495.10		5.90	0.128	0.60	322.18	19.20	495.75	
	Ratiya Oraon	Maize+cowpea	7.16	0.193	0.71	415.38	27.49	540.16		7.20	0.195	0.73	426.20	28.04	541.23	
	Laudha Mahali	Maize+cowpea	6.34	0.261	0.55	330.43	16.84	209.11		6.37	0.263	0.58	338.08	16.90	215.78	
	Arun Bhagat	Maize+cowpea	6.51	0.195	0.54	318.52	15.47	217.26		6.55	0.196	0.56	327.18	16.05	221.35	
	Pandiya Oraon	Maize+cowpea	6.80	0.203	0.57	338.24	17.86	242.16		6.81	0.210	0.60	342.56	18.00	245.74	
	Chamru Oraon	Maize+cowpea	6.95	0.221	0.69	405.13	23.18	367.20		6.98	0.228	0.71	411.23	24.10	370.25	


### Soil Parameter for Non- Demo plot at Farmers Field

Season	Farmer name	Crop	Before crop sowing							After harvesting						
			pH	EC (dS/m)	OC (%)	N (Kg/ha)	P (Kg/ha)	K (Kg/ha)	Soil Microbes (cfu)	pH	EC (dS/m)	OC (%)	N (Kg/ha)	P (Kg/ha)	K (Kg/ha)	Soil Microbes (cfu)
<b>Kharif</b>	Rajesh Sahu	<b>maize</b>	6.40	0.338	0.58	361.62	25.20	331.43		6.56	0.336	0.60	366.43	26.74	337.52	
	Dileshwar Oraon	<b>Ragi</b>	5.83	0.187	0.44	294.90	15.18	541.38		5.98	0.186	0.47	299.40	16.74	542.6	
	Chuyu Oraon	<b>Goda</b>	5.77	0.292	0.56	363.54	17.15	421.40		5.95	0.291	0.57	364.10	18.82	423.51	
	Kandaru Oraon	<b>Black gram</b>	5.55	0.301	0.61	373.65	15.31	501.24		5.73	0.295	0.62	374.02	16.64	504.39	
	Rajendra Mahali	<b>Ragi</b>	4.89	0.187	0.58	366.66	9.43	356.36		5.07	0.183	0.60	365.17	10.99	357.51	
	Bandha Brijjiya	<b>Redgram</b>	5.75	0.098	0.78	472.80	22.75	461.41		5.91	0.095	0.78	472.18	23.69	464.56	
	Bachandeo Kherwar	<b>maize</b>	5.52	0.111	0.52	305.23	15.18	476.34		5.67	0.111	0.52	306.15	16.89	477.14	
	Ratiya Oraon	<b>Black gram</b>	6.81	0.184	0.64	403.88	24.54	521.40		6.97	0.178	0.65	410.17	25.73	522.62	

Season	Farmer name	Crop	Before crop sowing							After harvesting						
			pH	EC (dS/m)	OC (%)	N (Kg/ha)	P (Kg/ha)	K (Kg/ha)	Soil Microbes (cfu)	pH	EC (dS/m)	OC (%)	N (Kg/ha)	P (Kg/ha)	K (Kg/ha)	Soil Microbes (cfu)
	Laudha Mahali	<b>Niger</b>	5.99	0.252	0.48	318.93	13.89	190.35		6.14	0.246	0.50	322.05	14.59	197.17	
	Arun Bhagat	<b>Niger</b>	6.16	0.186	0.47	307.02	12.52	198.50		6.32	0.179	0.48	311.15	13.74	202.74	
	Pandiya Oraon	<b>Niger</b>	6.45	0.194	0.50	326.74	14.91	223.40		6.58	0.193	0.52	326.53	15.69	227.13	
	Chamru Oraon	<b>Niger</b>	6.60	0.212	0.62	393.63	20.23	348.44		6.75	0.211	0.63	395.20	21.79	351.64	

### Financial information

Budget Expenditure (Rs. in Rs)				
Name of activity	Number of activities organized	Budget sanction (Rs)	Budget expenditure (Rs)	Total Budget Expenditure (Rs)
Training		370000.00	370000.00	370000.00
Awareness Programme				
Demonstration				
Miscellaneous				
<b>Total</b>		<b>370000.00</b>	<b>370000.00</b>	<b>370000.00</b>

Glimpses of various Activities (Good Quality Action Photographs)				
Name of activity	1	2	3	4
Training programmes				
Awareness programmes				
Demonstrations (KVK/Farmer filed)				
				



### Glimpses of various Activities (Good Quality Action Photographs)

Any other activities







**11.8 District Agro Meteorological Unit (DAMU)**

S. No	No. of Block agromet advisories send	No. of advisory bulletin published	No. of Farmers Awareness programmes organized	No. of farmers feedback received	No. of farmers received agromet advisory bulletin	No. of publication

**11.9 KSHAMTA : NA**

Number of Adopted Villages	No. of Activities		No. of farmers benefited	
	Demo	Training	Demo	Training

**11.10 Agri-Drone**

S. No.	Name of parameter	Details of parameter
1	Name of the project implementing centre (PIC)	KVK Gumla, Vikas Bharti Bishunpur
2	No. of Agri Drones Sanctioned	01
3	No. of Agri Drones Purchased	01
4	Amount sanctioned (Rs)	10,00,000.00
5	Purchased cost of each Drone (Rs.)	9,96,000.00
6	Company and Model of Drone	IoTech World Avigation Pvt. Ltd. and AGRIBOT
7	Name and contact No of Agri Drone Pilot	Er. Eno Rai Mob.: 6296667259 Rajeev Kr. Singh Mo.: 8210330740
8	Target Area for Agri Drone Demonstration (ha) (1 demo = 1 ha area)	250 ha
9	Amount sanctioned for Agri Drone Demonstrations (Rs.)	7,50,000.00
10	Amount utilised for Agri Drone Demonstrations (Rs.)	7,54,000.00
11	Area covered under demos (area in ha) 2022	316.27 ha
	Area covered under demos (area in ha) 2023	30 ha
	Area covered under demos (area in ha) 2024	*53.4 ha
13	Operation carried out (Pesticide/Weedicide/Nutrient application) in demonstration organised	Pesticide & Nutrient application
14	Number of farmers participated during demonstration (2024)	*102
15	Advantages of using Agri Drones as observed during the demonstrations	Time & Water saving

### Details of Demonstrations under Agri-drone Project

	Name of district	Date of demonstration	Place of demonstration	Crop Name	No. of demos	Area covered under demos (area in ha)	No of farmers participated
Demos on insecticide spray	Gumla	18-01-24	Tilhaitoli	Mustard	9	9	28
	Gumla	19-01-24	Khorajamtoli	Mustard	11	10.6	29
	Gumla	20-01-24	Sehal Bansitoli	Mustard	13	12.8	30
	Gumla	12-04-24	Belaghra	Watermelon	2	1.76	1
Demos on weedicide spray	-	-	-	-	-	-	-
Demos on nutrient spray	Gumla	24-09-25	Shivrajpur	Rice	6	6	15
	Gumla	30-09-25	Shivrajpur	Rice	3	3.2	8

### 11.11 Augmenting Rapeseed- Mustard Production of Tribal Farmers of Jharkhand state for Sustainable Livelihood Security under Scheduled Tribe Component.

Out-scaling	Situations (Irrigated/ Rainfed)	Varieties used in FP	Yield (Kg/ha)		YIOFP (%)	COC (Rs./ha)		GMR (Rs./ha)		ANMR (Rs./ha)	B:C ratio GMR/CoC	
			IP	FP		IP	FP	IP	FP		IP	FP
BBM-1	Irrigated	PM-28	1654	1195	37.66	36750	32250	93451	67518	56701	2.54	2.09

S.N	Item /Activity	Units	Quantity	No of beneficiaries
1	Training (Capacity building /skill development etc)			
1.1	1-3 days	No.	07	
2	Frontline demonstration (FLDs) and other demonstrations			
2.1	Area under FLDs	Hectare	40	110
3	Awareness camps, exposure visit etc	No.	09	194
4	Input Distribution			
4.1	Seeds (Field Crops)	Kg	240	110
4.2	Small equipment's (Upto ₹ 2000)	No.	50	50
4.3	Large equipment's (more than ₹2000)	Nos.	60	60
4.4	Fertilizers (NPK)/ Secondary/ Micro Fertilizers	Kg	5250 kg and 42 lit	110
4.5	Plant Protection chemicals	Lit.	-	-
5	Distribution of Literature	No.	150	150
6	Kisan Mela	No.	01	819
7	Any other (Exposure visit)	No.	01	37
8	Total Budget Utilized	Rs	642151	

## 12. OTHER INFORMATION

### 12.1 Integrated Farming System (IFS)

#### a. Details of KVK Demo. Unit

Sl. No.	Module details (Component-wise)	Area under IFS (ha)	Production (Commodity-wise)	Cost of production in Rs. (Component-wise)	Value realized in Rs. (Commodity-wise)	No. of farmer adopted practicing IFS	% Change in adoption during the year
1	Rainwater harvesting pond	0.12	-	-	-		
2	HD Guava	0.50	-	10710.00	-		
3	Pomegranate	0.31	-	-			
4	Vegetables	0.20	6.69	5132.00	12740.00		
5	Crop	0.20	6.30	14806.00	24000.00		
6	Dairy						
	Milk	0.20	905 lit	285694.00	45250.00		
	Cow & Calf		02 no		10000.00		
	Urine		205 lit		1025.00		
	Cow dung		19.35 q		3870.00		
	Vermicompost		127.35 ...		128820.00		
7	Goat						
	Kids	0.30	07 no	38496.00	14000.00		
	Goat		04 no 09 no		32000.00 54000.00		
	Goat dung		10 q		10000.00		
8	Duck	0.013		2406.00	245.00		
	Duck Egg		35 no				
9	Mushroom	0.0016	-	-	-		
10	Vermicompost	0.0017	109 q	59009.00	105600.00 2520.00		
11	Jeevamruth	0.004	200 lit	-	3000.00		
12	Pig	0.033	01 no 07 no	102117.00	15000.00 105000.00		
	Piglet		36 no		114600.00		
	<b>Total</b>		<b>278.69 q 1310.0 Lit 101.0 no</b>	<b>518370.00</b>	<b>704350.00</b>		

#### b. Activities under IFS

Sl. No.	Component Name	No. of KVKs under the Component	No. of Components established	Area (ha)	No. of Activities		No. of farmers benefited	
					Demo	Training	Demo	Training
1.								
2.								

## 12.2 Report on Digital Farming Initiatives in Agriculture/ Digital Ag. Extension Service : NA

Phase	Database prepared/ covered for		KVK level Committee		Various activity conducted for farmers
	Total no. of villages	Total no. of farmers	Date of formation	Name of members	
I					
II					
Total					

### PPV & FRA Programme : NA

Date of training/awareness programme	Venue	Resource Person	No. of participants

### Details of plant varieties registered

Name of crop Registered	Year of registration	Registration number	Farmer name and details	Adress of the farmers

### 12.3 . a. Observation of Swachhta hi Sewa (2<sup>nd</sup> -31<sup>st</sup> Oct 2024)

Date/ Duration of Observation	Total No of Activities undertaken	No. of Participants			
		Staffs	Farmers	Others	Total
02/10/24	01	01	545		546
09-15/10/24	02	02	180		182
10/10/24	01	01	53		54
11/10/24	01	01	06		07
17/10/24	01	01	08		09
18/10/24	01	02	44		46
19/10/24	01	01	03		04
21/10/24	01	02	48		50
22/10/24	01	01	03		04
23/10/24	01	01	03		04
24/10/24	01	03	19		22
25/10/24	01	01	06		07
26/10/24	01	01	06		07
28/10/24	01	01	08		09
29/10/24	01	04	15		19
30/10/24	01	03	14		17
	17	26	961		987

### b. Observation of Swachta Pakhwada (15 -30 Sep 2024)

Date/ Duration of Observation	Total No of Activities undertaken	No. of Participants			
		Staffs	Farmers	Others	Total
15/09/24	01	01	22		23
16/09/24	01	02	52		54
17/09/24	01	01	43		44
18/09/24	01	02	61		63
19/09/24	01	02	15		17
20/09/24	01	02	20		22

Date/ Duration of Observation	Total No of Activities undertaken	No. of Participants			
		Staffs	Farmers	Others	Total
21/09/24	01	02	26		28
22/09/24	01	02	16		18
23/09/24	01	02	21		23
24/09/24	01	02	64		66
25/09/24	01	03	97		100
26/09/24	01	02	30		32
27/09/24	01	04	225		229
28/09/24	01	04	128		132
29/09/24	01	03	185		188
30/09/24	01	01	15		16
<b>Total</b>	<b>16</b>	<b>35</b>	<b>1020</b>		<b>1055</b>

**c. Details of total budget expenditure on Swachh activities including SAP**

S.No	Activities	No of village covered	Total Expenditure (Rs.in Lakhs)
1.	Vermicomposting		
S.No	Activities	Name of activities conducted	Total Expenditure
1.	Activities under Swachata Other than vermicomposting	Extension activities & Training	4648.00

**12.4 Good quality action photographs with caption in JPEG FORMAT SEPARATELY of overall achievements of KVK during the year**

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