ANNUL REPORT

(January -December 2023)

Submitted at

ICAR-ATARI
Zone-IV, Patna

भाकृअनुप
ICAR

KRISHI VIGYAN KENDRA GUMLA

Vikas Bharti Bishunpur

Dist.: Gumla-835231, Jharkhand

CONTENTS

SL	Description	Page no.
1	GENERAL INFORMATION ABOUT THE KVK	
	1.1 Name and address of KVK with phone, fax and e-mail	1
	1.2 Name and address of host organization with phone, fax and e-mail	1
	1.3 Name of the Senior Scientist & Head with phone & mobile No	1
	1.4 Year of sanction	1
	1.5 Year of start of KVK	1
	1.5. Staff Position	2
	1.6. Total land with KVK	3
	1.7. Infrastructural Development	3-8
	1.8. A). Details SAC meeting conducted in the year	9-12
2.	DETAILS OF DISTRICT	
	2. a. District level data on agriculture, livestock and farming situation (2023)	13-15
	2. (b) Details of operational area / villages (2023)	16-17
	2. (c) Details of village adoption programme	17
	2.1 Priority thrust areas	18
3	TECHNICAL ACHIEVEMENTS	
	3.1 Summary details of target and achievement of mandatory activities by KVK during the year 2023	19-22
	3.2 Achievements on technologies assessed and refined (Summary)	23-24
	3.2.2 OFT (All Discipline)	25-56
	3.3. Achievements of Frontline Demonstration	
	A. Overall achievements of FLDs conducted during the year 2023	57-58
	B. Details of FLDs conducted during the year 2023	
	1. Cereals	58-59
	2. Oilseed	60-61
	3. Pulses	62
	4. Horticultural crops	62
	5. Other crops	63
	6. Demonstration on crop hybrid varieties	63-64
	7. Livestock	65
	8. Fisheries	65
	9. Other enterprises	66
	10. Women empowerment	67
	11. Farm implements	68
	Extension and Training activities under FLD	69-70
	Performance of the demonstration under CFLD	
	Linseed	71-77
	Mustard	77-85
	Redgram	85-91
	Lentil	92-102
	Blackgram	103-110
	Sesame	111-117
	Niger	118-124
	3.4 Achievements on Training/ Capacity building	

A. Farmers and Farm Women (ON Campus)	**125-130**
B. RY Training (On Campus)	**131-132**
C. Extension Personal (ON Campus)	**133**
D. Farmers and Farm women (OFF Campus)	**134-139**
E. Rural Youth (OFF Campus)	**140**
F. . Extension Personal (OFF Campus)	**140**
G. Consolidated table (ON and OFF Campus)	
i) Farm and Farm Women	**142-148**
ii) Rural Youth (ON and OFF Campus)	**148-149**
iii) Extension Personnel (ON and OFF Campus)	**149-150**
H. Vocational training programmes for Rural Youth	**151**
I. Sponsored Training Programmes	**152-155**
J. ASCI Skill Development Training	**156**
K. Skill Development Training	**156**
3.5 A. Achievements of Extension Activities	**157-159**
B. Other Extension/content mobilization activities	**159**
C. Technology week celebration	**159**
D. Celebration of important days in KVKs	**160**
E. Interaction/Live telecast programme of Hon'ble PM/Hon'ble or Argil Minister	**161**
3.5 a Production and supply of Technological products	
A. Seed production at seed village	**162**
B. Seed production at KVK farm	**162**
C. Production of planting materials by the KVKs	**163**
D. Forest species	**164**
E. Fodder crop	**164**
F. Production of Bio-Products	**165**
G. Production of livestock & fisheries materials	**165**
H. SOIL & WATER TESTING	**166**
a. Details of equipment available in Soil and Water Testing Laboratory	**166**
b. Details of samples analyzed so far	**166**
c. Details of Soil Water and Plant analysis at KVK	**166**
d. Details on world soil day	**166**
1. Activities of rain water harvesting structure and micro irrigation system	**167**
3.5 b Seed Hub Programme	**167-168**
3.6 PUBLICATIONS, HUMAN RESOUSES DEVELOPMENT & AWARDS & RECOGNITION	
A. Details of Research papers published by KVK (with full title, author & journal)	**168**
B. Details of Other Publications	**168**
C. Details of HRD programmes undergone by KVK personnel	**169**
D. Details of attachment training (RAWE/ FET for ARS/Others) through KVK	**169**
E. Awards/Recognition	**169-170**
3.7 **TECHNOLOGY DEVLOPMENT**	**170-175**
4. IMPACT	
4.1 Impact of KVK activities till now (Not to be restricted for reporting period).	**176**
4.2 Cases of large-scale adoption	**177-178**
4.3 Details of impact analysis of KVK activities carried out during the reporting period	**179**

	4.4 Details of entrepreneurship development	**180-183**
	4.5 Success Story	**184-210**
5	**LINKAGES**	
	5.1 Functional linkage with different organizations	**212**
	5.2 Details of Externally funded project & Programmes during 2023	**213**
6	**PERFORMANCE INDICATORS**	
	6.1 Performance of demonstration units	**214**
	6.2 Performance of instructional farm (Crops)	**215-218**
	6.3 Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.)	**219**
	6.4 Performance of instructional farm (livestock and fisheries production)	**219**
	6.5 Performance of Automatic Weather station	**219**
	6.6 Utilization of hostel facilities	**219-220**
	6.7 Utilization of staff quarters	
7	**FINANCIAL PERFORMANCE**	**221**
	7.1 Details of KVK Bank accounts	**221**
	7.2 Utilization of funds under CFLD on Oilseed	**221**
	7.3 Utilization of funds under CFLD on Pulses	**221**
	7.4 Utilization of KVK funds during the year 2023	**222**
	7.5 Status of revolving fund (Rs. in lakh) for last three years	**222-223**
	7.6. Number of SHGs formed by KVKs	**224**
	7.7 Joint activity carried out with line departments and ATMA	**225**
	7.8 Revenue generation	**225**
	7.9 Resource generation	**225**
8	**MISCELLANEOUS INFORMATION**	**225**
	8.1 Prevalent diseases in Crops	**225**
	8.2 Prevalent diseases in Livestock	**225**
	8.3 Nehru Yuva Kendra (NYK) Training	**225**
	8.4 PPV & FR Sensitization training Programme	**226**
	8.5 KVK portal & Mobile app	**226**
	8.6 Details of KVK portal	**226**
	8.7 Kisan Mobile Advisory service (KMS)	**226**
	8.8 Kisan Sarathi	**226**
	8.6 a Observation of Swachchta hi sewa	**227**
	b. Observation of Swachta Pakhwada	**227**
	c. Details of quarterly budget expenditure on Swachh activities including SAP	**227**
	8.7. Details of '*Pre-Rabi Campaign'* Programme	**228**
	8.8 Vikisit Viksit Bharat Sanklap Yatra (LLB and ULB)	**228**
	8.9 Contingent crop planning	**228**
9	Information on Visit of Ministers to KVKs, if any	**228**
10	List of other visitors (MP/MLA/DM/VC/Zila Parishad/Other Head of Organization/Foreigners)	**229**
11	**PROJECT-WISE REPORTING**	
	11.1 CSISA	**230**
	11.2 Details of Tribal Sub Plan (TSP)	**230-231**
	11.3 Details of Scheduled Caste Sub Plan (SCSP)	**232**
	11.4 NICRA	**233-235**
	11.5 Formation and Promotion of FPOs	**236**

	11.6 NARI	**237-238**
	11.7 ARYA	**238**
	11.8 Out-scaling of Natural Farming	**239-241**
	11.9 District Agro Meteorological Unit (DAMU)	**241**
	11.10 KSHAMTA	**241**
	1.11 Agri Drone	**241**
	11.12 IFS	**242-243**
	11.13 Report on Digital Farming Initiatives in Agriculture/ Digital Ag. Extension Service	**243**
	11.14 Any other programme organized by KVK, not covered above	**243**
12	**Any other programme organized by KVK not covered above**	
	ANNEXTURE	
	Farmer's List	
	Training Details	
	Activity wise photographs	

ANNUAL REPORT
(1st January to 31st December 2023)

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	06523-278535	06523-278400	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	06523-278306	06523-278400	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	06523-278536	7366082870	drsanjaykumar.kvk@gmail.com

1.4. Year of sanction of KVK: F. No. 6-1/1998-AE-1 dated May 20, 2004

1.5. Staff Position (as on 31st Dec 2023)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale and Level	Date of joining	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1	Senior Scientist & Head	Dr. Sanjay Kumar	Senior Scientist & Head	Agronomy	187200 Level-13A	09/02/06	Permanent	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	Permanent	ST
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)
1	Under Buildings	0.12
2.	Under Demonstration Units	0.13
3.	Under Crops	9.00
4.	Orchard/Agro-forestry	11.00
5.	Others with details	
	Total	**20.25**

1.7. Infrastructure Development:

A) Buildings and others

S. No.	Name of building	Not yet started	Completed up to plinth level	Completed up to lintel level	Completed up to roof level	Totally completed	Plinth area (sq.m)	Under use or not*	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	use	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	
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
17	Mooram road						620 m	Process	ICAR
18	Farm godown					√			NHM
19	Net and polyhouse					√			NHM
20	Medicinal and aromatic plant nursery unit (1 acre)					√			NHM

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total km. Run	Present status
2nd Bolero SLX (JH-01BF 1226)	March 2014	799969.00	27037 km	Good
Motor cycle (JH-07F 6435)	Nov 2015	119580.00	42517 km	Good
Motor cycle (JH-07F 9320)			39712 km	Good
2nd Tractor (JH 08 F 2076)	March 2017	697199.00	304.2 hrs	Good

C) Equipment & AV aids

Name of the equipment		Qty	Head	Year of purchase	Cost (Rs.)	Present status
a. **Farm machinery & implements**	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	2009	27000.00	Working
	Cultivator new	01	ICAR	2009	18300.00	Working
	Sprayer (1/2 HP)	01	ICAR	2009	5800.00	Working
	Zero Tillage	01	ICAR	2009	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
	Tube well					
	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	557763.00	Working
	Rainwater harvesting					
	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^3/hr^2	01	ICAR	2007	10778.77	Working
	Clean water 25m^3/hr^2	01	ICAR	2007	28577.80	Working
	PVC pipe 110 m x 6 k/cm^2	204 m	ICAR	2007	36852.19	Working
	ORC HDPC pipe 75 mx4 kg/cm^2	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
b. Office furniture etc	Table (Conference table)	03	ICAR	2006	16500.00	Working
	Table (Conference table)	08	ICAR	2012	156636.00	Working
	Table (Conference table)	02	ICAR	2013	60360.00	Working
	Table (medium size with drawer)	04	ICAR	2006	13200.00	Working
	Steel Almirah	02	ICAR	2009	13838.00	Working
	Book Shelf	01	ICAR	2009	5456.00	Working

Name of the equipment		Qty	Head	Year of purchase	Cost (Rs.)	Present status
	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 table	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
	Almirah	01	ICAR	2023	30441.00	Working
	Executive chair	01	ICAR	2023	20296.00	Working
	Plato chair	02	ICAR	2023	19101.00	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
	Almiraj	01	ICAR	2023	35919.00	Working
	File cabinet	01	ICAr	2023	17550.00	Working
c. Office equipments	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	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

Name of the equipment		Qty	Head	Year of purchase	Cost (Rs.)	Present status
	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	Working
	Steel 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	Working
	Laptop	01	ICAR	2008	40040.00	Not Working
	Mini Laptop	01	ICAR	2013	19000.00	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	2020	19500.00	Working
	Sound system	01	ICAR	2021	16500.00	Working
	LED	01	ICAR	2017	69000.00	Working
	Kiosk machine	01	ICAR	2017	113650.00	Working
	Projector (K-Yan)	01	ICAR	2017	124750.00	Working
	Projector	01	ICAR	2021	299975.00	Working
	Laptop	01	DBT	2021	60000.00	Working
	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
d. Farmers Hostel	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	Not Working
	Bed	02	ICAR	2013	18810.00	Working
	Mattress	40	ICAR	2008	54800.00	Not Working
	Mattress	02	ICAR	2013	11742.00	Working
	Kurlon Pillow	40	ICAR	2008	4600.00	Working
	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**

C) Equipments and AV aids

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
a. Lab equipment				
Soil & water testing lab	2017	1700063.00	Working	ICAR
Mini Lab	2017	86000.00	Working	ICAR
b. Farm machinery				
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.
2nd Tractor	2017	697199.00	Working	ICAR
Lac processing machine	2018		Working	ICAR-ARYA
Drip irrigation system				
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-

D) Farm implements

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
Disk Plough	2005	7407.41	Not working	ICAR
Leveler	2005	6481.48	Not working	ICAR
Cultivator	2005	10185.20	Not working	ICAR
Disk harrow	2005	10185.18	Not working	ICAR
Seed drill	2005	12962.96	Not working	ICAR
Case well	2005	4629.63	Not working	ICAR
Disk harrow	2009	27000.00	Not working	ICAR
Cultivator	2009	18300.00	Not working	ICAR
Zero Tillage	2009	32700.00	Not working	ICAR
Rotavator 4’	2012	80000.00	Not working	ICAR
Rotovater 3’	2013			Dist. Soil Conservation, Gumla
Pit Digger	2013		Working	Dist. Soil Conservation, Gumla
Multi Crop planter			Not working	CIMMYT

1.8. Details SAC meeting conducted in the year

Date -09/09/2022

Number of participants – 81

Total statutory member present (State line dept.) - 24

SN	Salient Recommendations	Action taken	If not conducted, state reason
1	Scented rice cultivation should be promoted organically, especially in Dumri, Bishunpur, Jari and Chainpur.	In accordance with the recommendation, the frontline demonstration of the scented improved Rice variety- Rajendra Kasturi have done through organic method in an area of 25 hectares of land among 13 farmers in 09 villages of Bishunpur, Sisai and Gumla blocks. In which, average yield has been obtained at 29.5 q/ha. Along with this, cultivation of Kalajeera, Jeeraphool and Bhutku varieties of paddy also has been done among 45 farmers on 15 hectare of land in Banalat village of Bishunpur block and farmers get average production of 12.5 kg/ha.	NA
2	Finding of OFT should be provided to ATMA.	In the light of the suggestion, On Firm Trial based technology has been sent to ATMA Gumla by the Centre and timely field follow up have been conducted.	
3	Intercropping should be promoted in Mango plantation.	The Center has promoted the cultivation of mustard, wheat, potato and vegetables along with mango crops under intercropping farming system in 30 acres among 35 farmers in villages of Gunia, Belagara, Jargatoli, Shivrajpur, Sarnatoli and Kataidamar.	
4	Focus should be given on development pear planting material.	Upon the initiative, this year the center has prepared 500 Pears saplings which will be planted in the farmers' garden in the month of July 2024.	
5	KVK should be developed a nodal in-charge for developing the farmer’s success stories of the District.	In the light of the suggestion, 100 millionaire farmers have been identified by the Centre. Along with this, a conference of Millionaire Young Farmers has also been organized at Krishi Vigyan Kendra on 05 April 2022. Mr. Sushant Gaurav, Deputy Commissioner Gumla was also present as the chief guest in the said conference. Everyone's success story will be prepared very soon.	
6	Seed production program details should be provided to the concern department.	The Center organize Kharif and Rabi crop seed production program every year complies with the guidelines of State Govt. Seed Certification Agency. Whose information is given to the concerned officer of the district. Seed production of paddy variety - Swarna Shreya (C/S), CR-305 (F/S), Pigeon pea variety - Birsa Arhar-2 (C/S), Ragi variety Birsa Maduwa-3 (C/S) in the has been done in an area of 26 hectares by the center in 2023-24.	
7	Year round production model of nutritional garden should be developed at farmer’s field as well as KVK farm.	Upon the initiative, the Center has developed 10 Nutritional gardens on the fields of 10 farmer’s field in Hasrag Banalat, Bedi and Chatakpur villages and also in KVK farm unit.	
8	Focus should be given on Fisheries production.	To promote fish farming, the Center has given 7 days training to 20 fish farmers and after 07 days of training, 25 kg fingerlings have been distributed for 09 ponds of 09 farmers. In the said training, training was also given by District Fisheries Officer Gumla.	

SN	Salient Recommendations	Action taken	If not conducted, state reason
9	Focus should be given on strengthening of FPO.	The Center is continuously paying attention to the strengthening of both of its FPOs, due to which Raidih FPO has done a business of about Rs 3 lakh in the year 2023, as well as a total of 850 farmers have joined both the FPOs as members so far. Training work has also been carried out to enhance the capacity of the members associated with FPOs. For capacity building of BOD, CEO and Accountant, training cum external visit has been conducted in BAU Ranchi.	
10	Focus should be given on fruit plant cultivation also.	Based on the proposal, the Center is promoting mango, guava, papaya and litchi. In the last 09 years, the Center has planted 5155 mango (varieties Amrapali and Langra) plants among 332 farmers from 36 villages. Due to which farmers have been able to earn income ranging from Rs 25000 to Rs 1.5 lakh. In the year 2023, 500 mango and 100 papaya plants have been distributed among 85 farmers. Besides, in coordination with the National Research Centre on Litchi, Mushahari, Muzaffarpur, under the TSP scheme, 2200 litchi saplings of Sahi variety have been grown which will be planted at the farmers' field. In which priority will be given to the aspirational block Dumri.	
11	Brood lac treatment technique should be demonstrated.	Under ARYA Project, 450 host plants (Ber) have been treated by 50 farmers in 05 villages of Kataidamar, Lalmati, Gokulpur and Gunatoli of Sisai block in the month of July before applying brood Lac.	
12	Sweet corn Maize should be promoted	Upon the initiative, the Center has tested the sweet corn maize variety KSCH 333 at KVK farm unit on 04 hectares of land in Rabi season this year so that more and more farmers can learn and motivate to cultivate sweet corn maize at their field.	
13	Micro nutrient application in mango should be promoted.	Pursuant to the suggestion, spraying of Sulfur and Jeevamruth by Agri Drone was done on mango plants, in total 51 acres in village Shivrajpur (16 acres), Belagara (05 acres), Gumla (05 acres), Murkanda (15 acres), Balatu Farm (05 Acre), and KVK Farm (05 Acre). Along with this, an OFT has also been conducted at the farmer's field to show the effect of micro elements, due to which 64% increase in productivity was also achieved.	
14	FLD on control of Fruit fly in Guava and mango should be undertaken.	In the light of the suggestions, the center used Pheromon Trap for the control of fruit fly in 25 hectares of mango and 0.5 hectares of guava in April 2023 at Shivrajpur and its KVK farm unit, due to which 80-85 fruitfly per night were safely captured	
15	Colocasia should be undertaken under FLD in Nutritional garden.	In accordance with the recommendation, front line demonstration on Colocasia was conducted in 2 acres of land by the Center in Kharif 2023 at the field of 05 farmers in Banari and Gunia villages. In which 65 kg/ha productivity was achieved.	
16	Bio-fortified crop varieties should be undertaken in FLD.	In the light of the suggestion, the Centre have done Front line demonstration in Rabi 2023, under the bio-fortified crop variety of mustard - PM 30 and lentil Variety - IPL 220, in the area of 30 hectare and 20 hectare, in Block Bishunpur, Ghaghra, Kamdara, Dumri, Gumla, Raidih.	

SN	Salient Recommendations	Action taken	If not conducted, state reason
17	Millet should be promoted in FLD and OFT	In the light of the suggestion, by establishing coordination with ATMA and J.S.L.P.S. in all the blocks of Gumla district, organized a training program on Millet cultivation. In which a total of 654 women farmers participated. Accordingly the suggestion of Krishi Vigyan Kendra Gumla the district administration ordered 555 q of seeds of Ragi variety GPU-28 and ML-365 and distributed among the farmers across the district. As a result, this year Ragi cultivation has been promoted in 11100 hectares in Gumla district. At its own level, the Center has conducted demonstration on Ragi variety - GPU-28 and BM-3 among 127 farmers in 22 hectares of land in 11 villages of Ghaghra, Raidih and Gumla blocks. Earlier, only 1600 hectares of Ragi were cultivated in the district. Whereas in the year 2023, it has been cultivated in 11123 hectares i.e. 595% more area.	

Scientific Advisory Committee Meeting Proceeding

On December 22, 2023, the 16th Scientific Advisory Committee meeting of Krishi Vigyan Kendra Gumla, Vikas Bharti Bishunpur, was organized at KVK Headquarter Bishunpur in the gracious presence of Dr. Anjani Kumar Singh, Director ICAR-ATARI, Zone-IV-Patna. At the outset, Padmashree Dr. Ashok Bhagat, Chairman of Krishi Vigyan Kendra Gumla, Vikas Bharti Bishunpur, welcomed the committee members and in light of the proposals suggested by the committee members in the last year's meeting, the Chairman gave permission to Dr. Sanjay Kumar, Senior Scientist and Head, to present a comprehensive overview of the work conducted by KVK to the committee members. The previous proceedings were passed unanimously by the members, and future actions were determined as follows:

1. Krishi Vigyan Kendra should provide support in the Sidho-Kanho forest produce conservation awareness programme.
2. Canopy management of old gardens should be Promoted.
3. Spraying of pesticides should be done through drones in mango orchards.
4. Farmers should be trained and prepared as master trainers in the field of crop production and animal husbandry.
5. In case of less rainfall, farmers should be trained to cultivate paddy through the aerobic method instead of transplanting paddy cultivation.
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.
7. Promotion of millets cultivation should be done.
8. Promote the cultivation of turmeric as intercropping in mango orchards.
9. KVK should organize training on canopy management, and scientists from Plandu will go and train the farmers.
10. KVKs should organize training on the INM subject.
11. Efforts should be made to stop migration.
12. Training on hatchery management should be organized for the youth, and after training, a visit should be made to BAU.
13. To ensure the availability of a good breed of pigs in the district, farmers should be developed as breeders.
14. The nutritive value of traditional aromatic paddy and improved variety of paddy has to be examined to see which paddy is better at the nutritional level.
15. There should be a publicity division in KVK.
16. Products with nutritional value are to be promoted. In the next SAC meeting, two-three slides of whose success should also be given.
17. The sunflower project has to be promoted.
18. Millet processing plant from TSP can be provided to SG.

2. a. District level data on agriculture, livestock and farming situation (2023)

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

S. No	Farming system/enterprise
Integrated crop – livestock – fish farming system	
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	The soil of plateau is nutritionally poor & organic matter rapidly declining due to deforestation, leaching & 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 & Clay loam. The farming situation of the district is rainfed the cropping pattern is mainly monocropping & kharif based

4. Agro ecological situation

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

5. Soil type/s

Soil type	Characteristics	Area in ha
Red laterite to sandy clay & clay loam	The soil is universally poor in N & K due to high excessive leaching. They have high P fixation capacity due to the presence of Kaolinitic along with sesquioxides. Hence high degree of soil management and soil husbandry have become imperative for intensive cultivation in the existing soil of the plateau	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 Cereal	175809	4529841	22.98
2.	Total Pulses	33559	353828	9.10
3.	Total Oilseeds	21623	129404	5.43
4.	Vegetables	16911	2504880	148.12
5.	Paddy	149793	3939556	26.30
6.	Maize	6517	340187	54.20
7.	Ragi	8897	105874	11.90
8.	Wheat	9802	137424	14.02
9.	Redgram	8909	122053	13.70
10.	Blackgram	6261	72001	11.05
11.	Green gram	648	5249	8.10
12.	Chickpea	9875	100725	10.20
13.	Lentil	2388	17552	7.35
14.	Pea	4278	28448	6.65
15.	Groundnut	4153	57934	13.95
16.	Sesame	260	533	2.05
17.	Niger	503	493	0.98
18.	Mustard	16107	66844	4.15
19.	Bean	1850	386610	209.0
20.	Bottle gourd	75	9700	129.0
21.	Bittergourd	100	10800	108.0
22.	Tomato	1100	114000	103.63
23.	Potato	2600	318490	122.50
24.	Pea (Green pos)	3040	461200	151.71
25.	Onion	531	133100	250.66
26.	Okra	580	53200	91.72
27.	Green Chilli	2450	323150	131.89
28.	Cauliflower	1290	242000	187.59
29.	Ginger	120	13420	111.83

** As per DAO and DHO Data 2023

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

Month	Rainfall (mm)	No. of rainy days	Temperature ^{0} C		Relative Humidity (%)
			Maximum	Minimum	
January 23	0	0	21.6	10.5	38.2
February 23	0	0	26.3	11.6	32.3
March 23	21	5	33.0	15.2	20.3
April 23	0		36.3	20.4	26.9
May 23	0	0	36.8	23.5	44.4
June 23	115	14	35.1	24.0	61.5
July 23	170.2	27	30.5	22.4	71.9
August 23	166.4	24	29.3	22.3	76.1
September 23	220.8	26	30.0	22.0	81.8
October 23	38.3	9	30.9	19.0	68.6
November 23	5.9	2	29.7	14.0	54.1
December 23	38.3	5	24.6	10.7	52.5
Total	**775.9**	**112**			

** 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
Cattle			
Cattle	**559.717**	--	--
Crossbred	--	--	--
Indigenous	--	--	--
Buffalo	90.996	--	--
Sheep	7.975	--	--
Crossbred	--	--	--
Indigenous	--	--	--
Goats	613.738	--	--
Pigs	109.066	--	--
Crossbred	--	--	--
Indigenous	--	--	--
Rabbits	--	--	--
Poultry	1330.117	--	--
Hens	--	--	--
Desi	--	--	--
Improved	--	--	--
Ducks	**34.819**	--	--

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

2 (b) Details of operational area / villages (2023)

Sl. No.	Name of the block	Name of the villages	Major crops & enterprises	Major problems identified (crop-wise)	Identified Thrust Areas
1	Ghaghra	Khatanga, Nawatoli, Nawadih, Shivrajpur, Nawatoli,Kubatoli, Chundari, Nawadih, Lalmati	Redgram, Porso millets, Ragi	1. Generally monocropping due to poor irrigation facilities and open grazing. 2. Poor adoption of improved technology due to scare 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. 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	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. 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
		Belagara, Ghaghra, Totambi, Lahastanr, Sehal Bansitoli	Blackgram		
		Barakhatanga, Sikwar, Chengari, Duko, Lahastand, Cheto, Shivrajpur, Dardag, Duko, Chota Ajiyatu, Ghutti	Sesame		
		Gunia, Podi	Niger		
		Shivrajpur, Gunia	Linseed		
		Khambhiya, Naradih, Katanga, Belagara, Dardag, Hapamuni, Bendi, Mokro, Sikwar, Dewaki, Barang	Ragi		
2	Bishunpur	Borang, Benti, Jori. Bari Samdari, Chapatoli, Tumse, Role, Langratand, Arangloya, Karamtoli, Kubatoli, Chatakpur, Serka, Banari	Redgram		
		Serka, Katiya, Chatam, Helta, Kubatoli, Serka, Chapatoli, Chirodih, Bishunpur	Blackgram		
		Hesrag, Jehangutwa, Salam, Bhathipath, Jawari, Jawadih, Dumberpath, Gobarsela, Sato	Niger		
		Chatam, Kubatoli, Manjira, Salam, Banalat, Bendi, Beti, Helta, Amatipani, Oreya, Chatakpur	Linseed		
		Jori	Sesame		
3	Sisai	Bhadauli, Badgown, Sammal, Nagar, Khajurtoli, Semra Hrratoli, Pandariya, Lakeya Gharatoli, asaitoli, Jakutoli, Kataidamar, Kusumtoli	Redgram		
		Sainda,	Blackgram		
		Sammal	Sesame		
		Nagar, Lalmati, Bargaown	Linseed		
		Kataidamar, Lalmati, Bhandartoli, Gokhulpur, Olmunda	Lac		
4	Gumla	Konatoli, Bangaru, Telgaon, Toto Dhaknatoli, Nawadih, Toto Nawatoli, Phori Jungatoli, Kulabira, Sawaria, Phati, Khorajamtoli	Redgram		
		Kulabira, Telgown, Tirra dumartoli, Gardhsaru. Pugu, Basua, Kalinga, PatgacchaKolambi,, Kumhariya	Blackgram		
		Gumla, Dhangaon , Nawatoli, Kotam, Kasira, Paharpanari	Pig		

Sl. No.	Name of the block	Name of the villages	Major crops & enterprises	Major problems identified (crop-wise)	Identified Thrust Areas
5	Raidih	Manjhatoli, Keradih, Bertoli, Katkaya	Blackgram		
		Manjhatoli, Bansdih, Baglata, Marda baigatoli, Sipringa, Masgown, Mariyamtoli	Blackgram, Mustard, Sunflower		
6	Jari	Tilhaitoli, Singpur, Jarda	Redgram		
7	Dumri	Nawadih	Redgram		
		Ratantoli	Mustard		
8	Palkot	Matimtoli, Karounda kheda, Tapkara, Orbenga, Nathpur, Nawatoli, Korkotoli, Tengariya, Panisani, Kulukera	Sesame		
		Kasira, Nathpur, Pinjradipa	Niger		
9	Bharno	Turiamba, Kumbhro, Bharno, Amboa	Linseed		
10	Chainpur	Duttra, Lalmati, Chitarpur, Tintangar	Niger		
11	Basia	Bambiyari	Sesame		
12	Kamdara	Turbul, Arhara	Mustard		

2(c) Details of village adoption programme during 2023:

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

Name of village	Block	Action taken for development
Shivrajpur	Ghaghra	Promotion of resilient agriculture & training
Tapkara	Palkot	FLD & OFT conducted
Borang	Bishunpur	CFLD, Natural farming & installation of irrigation lift device
Kubatoli	Bishunpur	Mushroom cultivation
Nagar	Sisai	Entrepreneur development under lac cultivation, CFLD & Goat farming
Chota Ajiyatu	Ghaghra	Goat & FLD on Kisan drone
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

2.1 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

3. TECHNICAL ACHIEVEMENTS

3. 1. Summary details of target and achievement of mandatory activities by KVK during the year 2023

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
16	16	200	0	0	80	56	35	29	115	85	200

	FLD										
	No. of technologies tested:										
	Target (ha)	Achievement (ha)	No. of technologies demonstrated:								
			Target (No. of FLD)	Achievement							
				SC		ST		Others		Total	
				M	F	M	F	M	F	M	F	T
CFLD Kharif Pulses (2023-24)	70	60.00	150	0	0	62	108	27	24	89	132	**221**
CFLD Kharif Oilseed (2023-24)	50	50.00	125	1	0	54	26	7	18	62	44	**106**
CFLD Rabi Pulses (2023-24)	20	20.00	50	0	0	82	6	13	8	95	14	**109**
CFLD Rabi Oilseeds (2023-24)	60	60.00	150	8	0	96	68	4	7	114	76	**190**
CFLD Summer (2023-24)	05	5.00	13	1	0	8	5	4	1	13	6	**19**
Cereals 2023	23.4	15.90	40	0	0	40	26	0	0	40	26	**66**
Millets 2023	19	25.00	63	1	0	38	82	0	0	39	82	**121**
Vegetables	2.0	0.82	02	0	0	2	1	0	0	2	1	**03**
Fruits	1.0	0.20	01	1	0	16	3	0	0	17	3	**20**
Flower	0.4	0.40	01	0	0	1	2	0	0	1	2	**03**
Napier	0.4	0.30	01	0	0	30	11	3	36	33	47	**80**
Nutritional Garden	0.4	0.40	20	0	0	0	20	0	0	0	20	**20**
AICRP Niger	16	16.00	40	0	0	39	1	0	0	39	1	**40**
DRMR (Rabi 2023-24)	40	40.00	100	1	0	65	32	12	0	78	32	**110**
Drone Technology	300	294.28	738	1	0	269	105	34	3	304	108	**412**
Fodder	05	5.00	13	0	0	8	17	20	55	28	72	**100**
Natural Farming (Rabi 2023-24)	4.8	4.80	12	0	0	11	0	1	0	12	0	**12**
Natural Farming (Kharif 2023-24)	3.2	3.20	08	0	0	07	0	01	0	08	0	**08**
Fish	10	09 no	09	0	0	8	0	1	0	9	0	**09**
Poultry	03	3 no	03	0	0	1	2	0	0	1	2	**03**
Mushroom	25	25 no.	25	0	0	0	25	0	0	0	25	**25**
Total	**658.6**	**601.3ha 37 no.**	**1564**	**14**	**0**	**837**	**540**	**127**	**152**	**984**	**693**	**1677**

Training												
	Number of Courses		Number of Participants									
	Target	Achievement	Target	Achievement								
				SC		ST		Others		Total		
				M	F	M	F	M	F	M	F	T
PF	89	171	2143	31	21	1993	1490	363	325	2347	1836	4183
RY & Vocational + School Dropout + ASCI	60	34	1116	4	2	304	206	125	48	433	278	711
EF	19	03	570	0	0	52	105	18	3	71	55	126
Total	**143**	**208**	**3355**	**35**	**23**	**2349**	**1801**	**506**	**376**	**2851**	**2169**	**5014**

Extension activities

Nature of Extension Activity	Number of activities		Number of participants									
				Achievement								
				SC		ST		Others		Total		
	Target	Achievement	Target	M	F	M	F	M	F	M	F	T
Kisan Mela organized	2	2	610	100	50	3243	2481	702	500	4045	3031	7076
Kisan Mela participated	2	2	150	2	1	44	53	38	11	84	65	149
Field Day	30	28	780	1	0	428	205	51	13	480	218	698
Kisan Ghosthi	24	18	744	0	1	427	359	36	16	463	376	839
Exhibition organized	2	1	300	20	5	225	310	100	20	345	335	680
Participation in exhibition	0	0	0	0	0	0	0	0	0	0	0	0
Film Show	12	8	240	2	0	48	63	37	22	87	85	172
Method Demonstrations	06	13	126	2	0	72	9	20	11	94	20	114
Farmers Seminar	0	0	0	0	0	0	0	0	0	0	0	0
Workshop	0	0	0	0	0	0	0	0	0	0	0	0
Group discussion	0	0	0	0	0	0	0	0	0	0	0	0
Lectures delivered as resource persons	0	1	0	3	0	30	5	10	2	43	7	50
Advisory Services	120	53	1200	1	0	291	87	1	3	293	90	383
Scientific visit to farmers field	120	163	1200	0	3	448	108	68	12	516	123	639
Farmers visit to KVK	240	108	1200	47	19	648	757	412	209	1107	985	2092
Diagnostic visits	0	0	0	0	0	0	0	0	0	0	0	0
Exposure visits	01	15	20	5	0	142	100	130	43	277	143	420
Ex-trainees Sammelan	02	4	102	1	0	12	34	12	11	25	45	70
Soil health Camp	05	3	226	0	0	42	33	0	0	42	33	75
Animal Health Camp	06	13	182	1	0	51	12	5	1	57	13	70
Agri mobile clinic	0	0	0	0	0	0	0	0	0	0	0	0
Soil test campaigns	01	1	20	0	0	20	1	1	0	21	1	22
Farm Science Club Conveners meet	0	0	0	0	0	0	0	0	0	0	0	0
Self Help Group Conveners meetings	04	3	80	0	0	0	47	0	0	0	47	47
Mahila Mandals Conveners meetings	0	0	0	0	0	0	0	0	0	0	0	0
Special day celebration	0	0	0	0	0	0	0	0	0	0	0	0
Sankalp Se Siddhi	0	0	0	0	0	0	0	0	0	0	0	0
Swatchta Hi Sewa	12	22	242	3	3	293	269	33	18	329	290	619
Celebration of important date	0	0	0	0	0	0	0	0	0	0	0	0
Others	0	0	0	0	0	0	0	0	0	0	0	0
Helpline	300	47	580	2	1	47	2	19	7	68	10	78
Clinical Service	12	163	240	1	2	110	29	15	13	126	44	170
FAP conducted	20	18	400	0	5	159	268	23	35	182	308	490
Mahila Gosthi	5	7	100	0	2	20	136	0	31	20	169	189
Group meeting	5	7	100	0	0	81	24	8	0	89	24	113
Natural farming awareness	12	61	365	30	7	1226	1273	308	136	1564	1416	2980
Agriculture knowlwdge in rural school	10	5	300	2	1	81	138	10	15	93	154	247

Nature of Extension Activity	Number of activities		Number of participants									
				Achievement								
				SC		ST		Others		Total		
	Target	Achievement	Target	M	F	M	F	M	F	M	F	T
Kisan Mela organized	2	2	610	100	50	3243	2481	702	500	4045	3031	7076
PM live telecast	0	4	0	2	1	94	132	37	5	133	138	271
Input distribution under TSP	5	7	100	1	3	40	89	26	2	67	94	161
FPO meeting	4	4	400	14	68	168	119	43	27	225	214	439
Rabi Workshop	1	1	50	1	0	16	6	12	0	29	6	35
Workshop on Expert Sensitization programme	0	1	0	0	0	25	10	5	0	30	10	40
Exposure visit of KGBV students	0	6	0	0	16	0	279	0	98	0	393	393
Awareness programme under INM	0	6	0	0	16	0	279	0	98	0	393	393
Drone awareness programme	2	2	100	0	0	27	24	39	3	66	27	93
Lifestyle for environment	15	14	750	4	1	235	411	33	47	272	459	731
Kharif workshop	2	2	500	0	0	32	11	55	10	87	21	108
Live telecast of mega conclave of FPOs	0	2	0	0	0	26	24	5	6	31	30	61
FPO meeting	1	1	0	0	0	1	3	4	2	5	5	10
Organic rice awareness	0	1	0	0	0	36	10	0	0	36	10	46
Receipe contest	2	7	200	1	5	18	197	10	32	29	234	263
Stall exhibition in other agencies programme	0	1	0	0	0	0	0	2	0	2	0	2
Nutrition awareness week	7	9	210	0	0	21	221	9	6	30	227	257
PRA	1	1	30	0	0	10	20	0	0	10	20	30
Viksit Bharat Sankalp Yatra	100	100	60000	0	0	25235	34238	528	711	25763	34949	60712
Total	**1093**	**935**	**71847**	**246**	**210**	**34172**	**42876**	**2847**	**2176**	**37265**	**45262**	**82527**

Impact of capacity building										
Number of Participants trained		Number of Trainees got employment (self/ wage/ entrepreneur/ engaged as skilled manpower)								
Target	Achievement	SC		ST		Others		Total		
		M	F	M	F	M	F	M	F	T
100	72	0	0	53	11	08	0	61	11	72

Impact of Extension activities										
Number of Participants attended		Number of participants got employment (self/ wage/ entrepreneur/ engaged as skilled manpower)								
Target	Achievement	SC		ST		Others		Total		
		M	F	M	F	M	F	M	F	T
100	52	0	0	20	18	8	6	28	24	52

Seed production (q)				Planting material (Nos. in lakh)		
	Target (Crop and variety)	Achievement (q)	Sold	Target (Crop and variety)	Achievement	Sold (number)
	139.0	64.88	6.71	0.64700	1.98330	12140

Livestock strains and fish fingerlings produced (in lakh)*		Soil, water, plant, manures samples tested (in lakh)	
Target	Achievement	Target	Achievement
Piglet-30 no.	56 no.	600	487
Goat-15 no.	02 no.		
Duck egg-300 no.	191 no.		
Fingerlings	10 Lakh		

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	1	10	3
2	Varietal Evaluation			
3	Integrated Pest Management			
4	Integrated Crop Management			
5	Integrated Disease Management			
6	Small Scale Income Generation Enterprises			
7	Weed Management			
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	1	10	2
17	Farm Mechanization	1	10	2
18	Others			
	Total	**3**	**30**	**05**
B	**Technologies assessed under various crops (Hort crops.)**			
	Thematic areas	**Number of the technologies (Technology Interventions)**	**No. of trials**	**No. of Locations**
1	Integrated Nutrient Management	**2**	**20**	**6**
2	Varietal Evaluation			
3	Integrated Pest Management	**2**	**20**	**11**
4	Integrated Crop Management			
5	Integrated Disease Management	**2**	**20**	**7**
6	Small Scale Income Generation Enterprises			
7	Weed Management			
8	Resource Conservation Technology	**1**	**10**	**1**
9	Post-harvest Technology / Value addition			
10	NRM	**2**	**20**	**7**
	Total	**9**	**90**	**32**
C	**Technologies assessed under livestock & Fisheries by**			

	KVKs			
	Thematic areas	**No. of technologies (Technology Interventions)**	**No. of trials**	**No. of locations**
1	Disease & Health Management	1	10	3
2	Breeding management/Evaluation of Breeds			
3	Feed and Fodder management	1	10	3
4	Nutrition Management			
5	Production and Management			
6	Processing and Value addition			
7	Fisheries management			
8	Others (waste, ITK etc)			
	Total	**2**	**20**	**6**
D	**Technologies assessed under miscellaneous enterprises by KVKs**			
	Thematic areas	**No. of technologies (Technology Interventions)**	**No. of trials**	**No. of locations**
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			
	Total	**0**	**0**	**0**
E	**Technologies assessed under various enterprises for women empowerment**			
	Thematic areas	**No. of technologies (Technology Interventions)**	**No. of trials**	**No. of locations**
1	Drudgery Reduction			
2	Entrepreneurship Development			
3	Health and Nutrition			
4	Value Addition	2	10	05
5	Others			
	Total	**2**	**10**	**05**

3.2.2 OFT (All Discipline)

OFT -1 (Horticulture)

Rabi 2022-23

Thematic area : Integrated Disease Management

Problem definition/ Name of OFT : Assessment of microbial consortia against wilting in solenceous crop (Brinjal)

1. **Title of On farm trial : Assessment of microbial consortia against wilting in solenceous crop (Brinjal) .**

2. Problem diagnose : Wilting of brinjal is one of the major problem in gumla district causes high loss in brinjal production.

3. Details of technologies selected for assessment/refinement:

FP : Chemical pesticide

TO_1 : IIHR (Arka microbial consortia)

TO_2 : NRC Litchi Trichoderma

Design: RBD Replication: 10

4. Source of Technology: NRC Litchi Muzafferpur

5. Production system and thematic area : Crop based production system and Integrated Disease Management.

6. Performance of the Technology with performance indicators:

Table – Assessment of microbial consortia against wilting in solenceous crop (Brinjal).

Technology option	No. of replication	Data related problem addresses											Yield compo-nents	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross income (Rs./ha)	Net income (Rs / ha)	BC Ratio
		Initial plant population	Number of wilting Plant days after transplanting					Wilting % at days after transplanting										
			15 days	30 days	45 days	60 days	75 days	15 days	30 days	45 days	60 days	75 days						
FP : Chemical pesticide	**10**	18750	1220	2090	3040	3400	3980	6.50	11.14	16.21	18.13	21.22		163.63	60500	163956	103456	2.71
TO_1 : IIHR (Arka microbial consortia)		18750	0.0	1420	1720	1900	2150	0.0	7.57	9.17	10.13	11.46		170.89	65500	205068	139568	3.13
TO_2 : NRC Litchi *Trichoderma*		18750	0.0	0.0	980	1150	1225	0.0	0.0	5.22	6.13	6.53		217.14	70500	260568	190068	3.69
SEm+														**1.39**				
CD(P=0.05)														**4.18**				

7. Final recommendation for micro level situation:

The On farm trial was conducted on 10 farmers' field of village Nagar Lalmati, Nagar Dasaitoli, Nagar Kusumtoli and Nagar Jogiyatoli of Sisai block during Rabi 2022-23 to find out Microbial consortia/ Trichoderma use against control of wilting and maximizing the fruit yield and income. The date collected during the trial clearly indicated that minimum wilting percentage (6.53%) at 75 days after transplanting, Maximum fruit yield (217.14 q/ha), net income (190068) and B:C ratio (3.69) was found under Technology option 2 I'e NRC Litchi *Trichoderma.* The percent yield enhancement of 32.70 and 27.06 was found over FP and technology option 1. Hence TO2 (NRC Litchi *Trichoderma)* is being recommended.

8. Constraints identified and feedback for research:

- Lack of knowledge about consortia and NRC Litchi *Trichoderma.*
- More number of awareness is required about consortia and NRC Litchi *Trichoderma*.

9. Process of farmers participation and their reaction:

1. Participatory and interactive
2. Awareness about consortia through field training
3. By seeing the result of NRCL trichoderma farmers of adjoining village was highly impressive.

B. Result with Table and good quality photographs in jpg

Thematic area: Integrated disease management (IDM)

Problem definition: : Wilting of brinjal is one of the major problem in gumla district causes high loss in brinjal production.

Table – Assessment of microbial consortia against wilting in solenceous crop (Brinjal).

Technology option	No. of replic	Wilting % at days after transplanting					Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross income (Rs./ha)	Net income (Rs / ha)	BC Ratio
		15 days	30 days	45 days	60 days	75 days					
FP : Chemical pesticide	**10**	6.50	11.14	16.21	18.13	21.22	163.63	60500	163956	103456	2.71
TO_1 : IIHR (Arka microbial consortia)		0.0	7.57	9.17	10.13	11.46	170.89	65500	205068	139568	3.13
TO_2 : NRC Litchi *Trichoderma*		0.0	0.0	5.22	6.13	6.53	217.14	70500	260568	190068	3.69
SEm+							**1.39**				
CD(P=0.05)							**4.18**				

Results:

The On farm trial was conducted on 10 farmers' field of village Nagar Lalmati, Nagar Dasaitoli, Nagar K… and Nagar Jogiyatoli of Sisai block during Rabi 2022-23 to find out Microbial consortia/ Trichoderma use against control of wilting and maximizing the fruit yield and income. The date collected during the trial clearly indicated that minimum wilting percentage (6.53%) at 75 days after transplanting, Maximum fruit yield (217.14 q/ha), net income (190068) and B:C ratio (3.69) was found under Technology option 2 I'e NRC Litchi *Trichoderma.* The percent yield enhancement of 32.70 and 27.06 was found over FP and technology option 1. Hence TO2 (NRC Litchi *Trichoderma)* is being recommended.

OFT-2

Rabi – 2022-23 (Soil Science)

Thematic area : Organic Cultivation

Problem definition/ Name of OFT : Evaluation of organic cultivation package in cauliflower

1. **Title of On farm trial :** Evaluation of organic cultivation package in cauliflower.
2. **Problem diagnose :** Excessive use of fertilizers in cauliflower.
3. **Details of technology selected for assessment/refinement :**

FP - Application of 5 MT FYM/ha. + 32 kg N+23 kg P_2O_5 +15 kg K_2O/ha through inorganic source.

TO_1 - Application of 5 MT FYM/ha. + 25% of RDF (NPK) through organic source. **(RDF 200:150:100),** for 50kg N supply through organic sources 625 kg Karanj cake and 2500 kg Vermicompost.

TO_2 - Seed and seedling treatment with Beejamrit + 3 Spray of Jeevamrit at 21 days interval + application Ghanjeevamrit @ 1q./ha as basal application and 30DAS.

* Calculation of RDF on the basis of N only.

* 25% RDF with be applied through karanj cake and vermicompost. (N in Karanj cake 4.0% and N in Vermicompost 1.0%)

Design : RBD **Replication :** 10

4. **Source of Technology :** RKM KVK Ranchi & National centre on organic farming, Gaziabad.
5. **Production system and thematic area :** Maize/Black gram based production system and organic cultivation.
6. **Performance of the Technology with performance indicators :**

Table : Evaluation of organic cultivation package in cauliflower.

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)					
FP - Application of 5 MT FYM/ha. + 32 kg N +23 kg P_2O_5 +15 kg K_2O/ha through inorganic source	**10**		12.38	0.616	151.16	80946	256973	176027	3.17
TO_1 - Application of 5 MT FYM/ha.+25% of RDF (NPK) through organic source			13.23	0.721	174.63	88500	300212	211712	3.39
TO_2 - Seed and seedling treatment with Beejamrit + 3 Spray of Jeevamrit at 21 days interval + application Ghanjeevamrit @ 1q./ha as basal application and 30DAS			11.34	0.557	133.99	72350	211895	139545	2.93
SE(m)			**0.324**	**0.024**	**5.106**				
C.D.			**0.969**	**0.071**	**15.288**				

7. Final recommendation for micro level situation:

The trial was conducted during rabi season 2022 on 10 farmers field in village Nawadih and Sehal Banshitoli of Ghaghra Block to find out the suitable technological option for enhancing crop yield and income. Data collected during the trial clearly indicated that the maximum yield (174.63q/ha), net income (Rs 211712/ha) and B:C ratio (3.39) was found under technology option 1 i.e. **TO_1** - Application of 5 MT FYM/ha. + 25% of RDF (NPK) through organic source.

The percentage yield enhancement of 15.53 and 30.33 was recorded under TO1 over FP and TO2. Hence TO1 is being recommended for better yield and income recovery.

8. Constraints identified and feedback for research:

- Organic sources like vermicompost and karanj cake is not easily available at all places and cost effective.

9. Process of farmers participation and their reaction:

1. Participatory and interactive
2. Field day
3. Farmer to Farmer interaction

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

Thematic area: organic cultivation

Problem definition: Excessive use of fertilizers in cauliflower.

Technology assessed: Evaluation of organic cultivation package in cauliflower.

Table – Evaluation of organic cultivation package in cauliflower.

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)					
FP - Application of 5 MT FYM/ha. + 32 kg N +23 kg P_2O_5 +15 kg K_2O/ha through inorganic source	**10**		12.38	0.616	151.16	80946	256973	176027	3.17
TO_1 - Application of 5 MT FYM/ha.+25% of RDF (NPK) through organic source			13.23	0.721	174.63	88500	300212	211712	3.39
TO_2 - Seed and seedling treatment with Beejamrit + 3 Spray of Jeevamrit at 21 days interval + application Ghanjeevamrit @ 1q./ha as basal application and 30DAS			11.34	0.557	133.99	72350	211895	139545	2.93
SE(m)			**0.324**	**0.024**	**5.106**				
C.D.			**0.969**	**0.071**	**15.288**				

Results:

The trial was conducted during rabi season 2022 on 10 farmers field in village Nawadih and Sehal Banshitoli of Ghaghra Block to find out the suitable technological option for enhancing crop yield and income. Data collected during the trial clearly indicated that the maximum yield (174.63q/ha),

net income (Rs 211712/ha) and B:C ratio (3.39) was found under technology option 1 i.e. **TO_1 -** Application of 5 MT FYM/ha. + 25% of RDF (NPK) through organic source.

The percentage yield enhancement of 15.53 and 30.33 was recorded under TO1 over FP and TO2. Hence TO1 is being recommended for better yield and income recovery.

Balance Sheet

Sampling Time	**OC%**	**pH**	**Av. N kg/ha**	**Av. P_2O_5 kg/ha**	**Av. K_2O kg/ha**
Before Transplanting	0.56	5.85	294.60	10.25	239.15
After harvesting					
FP	0.57	5.82	300.25	11.50	241.20
T_1	0.60	5.87	309.54	12.47	242.65
T_2	0.59	5.86	298.36	11.78	233.57

Activities Photos












OFT-03

Kharif – 2023-24 (Soil Science)

Thematic area : Integrated Nutrient Management
Problem definition/ Name of OFT : Improvement of Nitrogen use efficiency in rice

1. **Title of OFT: Improvement of Nitrogen use efficiency in rice.**
2. **Problem diagnose :** Excessive use of chemical fertilizers and spiraling price of urea leads to increase in cost of cultivation.
3. **Details of technology selected for assessment/refinement:**

FP : RDF (100:40:20)kg/ha.

TO_1: 50% of RDN & 100% PK + Nano urea @ 4 ml/Lt. water (Single spray of pre flowering stage)

TO_2 : 50% of RDN & 100% PK + 2 sprays of Nano urea at (25 to 30 days) and (60-65 days) 4 ml/Lt. water.

Design : RBD **Replication :** 10

4. **Source of Technology :** BAU Sabour / BAU Ranchi
5. **Production system and thematic area :** Rice based production system & INM
6. **Performance of the Technology with performance indicators :**

Technology option	No of replication	Data related problem addressed	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^2	Test weight (in gram)	Panicle length (in cm).	No. of Grain/panicle						
FP : 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
TO_1: 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
TO_2 : 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
SE(m)			**1.24**	**0.13**	**0.16**	**1.33**	**0.35**	**0.53**				
C.D.			**3.71**	**0.40**	**0.48**	**3.99**	**1.06**	**1.57**				

7. Final recommendation for micro level situation:

The experiment was conducted on 10 farmers field in village Chatti Serka, Goratoli, Nawagarh Serka, Rehetoli, Karamtoli and Salam Nawatoli of Bishunpur block during kharif season 2023-24. 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_1. The variety used was Sahbhagi dhan.

8. Constraints identified and feedback for research: Nano urea is not available everywhere in Gumla district. Faced problems in motivating them to apply it.

9. Process of farmers participation and their reaction:

1. Participatory and interactive
2. On field training
3. Regular field visit and feedback
3. By seeing the result in term of plant establishment minimum weed infestation and yield farmers' showed happiness and encouragement.

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

Thematic area : ***Integrated Nutrient Management***

Problem definition : Excessive use of chemical fertilizers and spiraling price of urea leads to increase in cost of cultivation.

Technology assessed : Response of liquid urea (Nano urea) application on the yield of transplanted improved variety of rice.

Table – Improvement of Nitrogen use efficiency in rice.

Technology option	No. of replication	Yield (q/ha)	Net Return (Rs/ha)
FP : RDF (100:40:20)kg/ha.	10	31.94	35856.48
TO_1: 50% of RDN & 100% PK + Nano urea @ 4 ml/Lt. water (Single spray of pre flowering stage)		34.31	40073.92
TO_2 : 50% of RDN & 100% PK + 2 sprays of Nano urea at (25 to 30 days) and (60-65 days) 4 ml/Lt. water.		37.10	45234.97
SE(m)		0.35	
C.D.		1.06	

Results : The experiment was conducted on 10 farmers field in village Chatti Serka, Goratoli, Nawagarh Serka Rehetoli, Karamtoli and Salam Nawatoli of Bishunpur block during kharif season 2023-24. The variety used was Sahbhagi. The data collected during the trial clearly indicated that the maximum grain yield (37.10 q/ha), net return (Rs.45235/ha) and B:C ratio (1.96) was found under Technology option 2 i'e FP + 2 spray of Nano urea @ 0.4%. The percent yield enhancement was 16.16 and 8.13 over FP and TO_1. The variety used was Sahbhagi dhan.

Balance Sheet

Soil Sampling time		pH	OC%	Available in kg/ha		
				N	P_2O_5	K_2O
Before transplanting		5.94	0.53	278.45	9.50	235.25
After transplanting	**FP**	5.92	0.55	280.10	10.05	240.34
	TO_1	5.96	0. 57	279.80	10.85	241.50
	TO_2	5.95	0.58	285.27	12.05	242.30

Activities Photos

OFT-04
(Plant Protection)

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

1. **Title of On farm Trial : 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**
   Farmer Practice: Use of chemical pesticides Imidacloprid @1gm/liter of water at 60 DAT
   TO1
   • Application of Bio consortia (Soil application)
   • Seed treatment by *P. fluorescens*@10 g/kg
   • Nursery bed treatment *by P. fluorescens*@20 g/ m2
   • Soil application *P. fluorescens*@5 kg/ha mixed with 500 kg vermi-compost/ha at 30 days after transplanting
   • Spray of HNPV @ 250 LE /ha
   TO2
   • Soil application of Bio consortia (Soil application)
   • Seed treatment by *Trichoderma viride* @10 g/kg
   • Nursery bed treatment by *Trichoderma viride* @50 g/ m2
   • Soil application *Trichoderma viride* @5 kg/ha mixed with 500 kg vermi-compost/ha at 30 days after transplanting
   • Spray of HNPV@ 250 LE /ha
4. **Source of Technology :** BAU Sabuor
5. **Production system and thematic area :** Rice-Tomato & IPM
6. **Performance of the Technology with performance indicators :** 1. Use of bio pesticides 2. %Wilted plants, % fruit damage by borer, %larval population,% larvae, Yield (q/ha) & B:C

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 DAT	90 DAT	60 DAT	90 DAT	Before spray	10 day after II end spray						
FP	10	9.83	11.9	14.53	18.7	26.4	5.0	8.0	0.00	163.70	41750	98220	56470	2.35
TO1		4.63	4.4	5.56	10.1	8.5	5.7	2.4	68.71	265.40	47500	159240	111740	3.35
TO2		3.60	7.1	9.166	8.4	11.5	5.5	4.3	47.45	233.37	46400	140022	93622	3.02

7. **Final recommendation for micro level situation :** On farm trial was conducted on 10 farmers' field of village Belagarhs, Vhatam, Rol, Jargatoli and Gunia during Rabi 2023 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 (4.4%) and minimum fruit damage through borer 90 DAT (8.5%) was found under Technology option TO_1 but wilted plant in nursery was found minimum (3.60%) in Technology option TO_2. In same Technology option (TO_1) maximum yield (265.40 q/ha), net income (Rs. 111740) and B:C ratio (3.35) was found. Which is significantly superior over FP and TO_2. The percent yield enhancement 62.12 and 13.72 over FP and TO_2.

   Hence **TO_1** i.e Application of Bio consortia (Soil application) , Seed treatment by *P. fluorescens*@10 g/kg , Nursery bed treatment by *P. fluorescens*@20 g/ m2 , Soil application *P. fluorescens*@5 kg/ha mixed with 500 kg *vermi-compost*/ha at 30 days after transplanting , Spray of HNPV @ 250 LE /ha is being recommended for better management for major pests in Tomato.

8. **Constraints identified and feedback for research :**
   a. Lack of awareness about commercial Tomato farming and their management practices.
   b. More no. of awareness cum skill training is required for better fruit harvest.
9. **Process of farmers participation and their reaction :**
   a. Farmers meeting, interaction & field day
   b. Unavaibility of bio inputs in local market.

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

Thematic area : Integrated Pest Management

Table : Assessment of bio-intensive management practices for major pests in Tomato

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 DAT	90 DAT	60 DAT	90 DAT	Before spray	10 day after II end spray						
FP	10	9.83	11.9	14.53	18.7	26.4	5.0	8.0	0.00	163.70	41750	98220	56470	2.35
TO1		4.63	4.4	5.56	10.1	8.5	5.7	2.4	68.71	265.40	47500	159240	111740	3.35
TO2		3.60	7.1	9.166	8.4	11.5	5.5	4.3	47.45	233.37	46400	140022	93622	3.02

Result : On farm trial was conducted on 10 farmers' field of village Belagarhs, Vhatam, Rol, Jargatoli and Gunia during Rabi 2023 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 (4.4%) and minimum fruit damage through borer 90 DAT (8.5%) was found under Technology option TO_1 but wilted plant in nursery was found minimum (3.60%) in Technology option TO_2. In same Technology option (TO_1) maximum yield (265.40 q/ha), net income (Rs. 111740) and B:C ratio (3.35) was found. Which is significantly superior over FP and TO_2. The percent yield enhancement 62.12 and 13.72 over FP and TO_2.

Hence TO1 i.e Application of Bio consortia (Soil application) , Seed treatment by P. fluorescens@10 g/kg , Nursery bed treatment by P. fluorescens@20 g/ m2 , Soil application P. fluorescens@5 kg/ha mixed with 500 kg vermi-compost/ha at 30 days after transplanting , Spray of HNPV @ 250 LE /ha is being recommended for better management for major pests in Tomato.

Photographs

OFT -05
(Plant Protection)

- **Thematic area: Integrated Pest Management**
- **Problem definition/Name of OFT: Assessment of management practices for Red banded caterpillar in Mango.**

1. **Title of On farm Trial : Assessment of management practices for Red banded caterpillar in Mango.**
2. **Problem diagnosed :** Major yield losess due to wilt disease and fruit borer
3. **Details of technologies selected for assessment :**
   Farmer Practice: Spray of Chlorpyriphos 20 EC (2 ml/lit) as and when when symptoms appear
   TO1
   • Collection and destruction of all fallen fruits
   • Spray Deltamethrin 0.0028 % (Deltamethrin 2.8 EC@ 1ml/lit) at marble size and repeat after two weeks
   TO2 : • Two sprays of Thiacloprid 21.7 SC 0.04 % (@ 2ml/lit) at 25-30 days interval.
4. **Source of Technology :** BAU Sabour
5. **Production system and thematic area :** Mango & IPM
6. **Performance of the Technology with performance indicators :**
   Use of noble pesticides
   % yield loses, % infected fruits before spray , % infected fruits 10 days after 1st spray %,% infected fruits 10 days after 2nd spray , Yield (q/ha) & B:C
7. **Final recommendation for micro level situation :** On farm trial was conducted on 10 farmers' field of village Blatu, Langratand, Aragloya, Range and Shivrajpur of Ghaghra and Bishunpur block on Mango (Variety-Amrapali) during 2023 to find out appropriate management practices against red banded caterpillars in mango. The data collected during the trial clearly indicated that the minimum **infected fruits 10 days after 1st spray** (4.87%) and minimum **infected fruits 10 days after 2nd spray** (1.77%) and **yield Losses percentage** (00%) was found under Technology option $T0_2$, though **infected fruits percentage was maximum (8.13%) before spray** in Technology option $T0_2$. In same Technology option (TO_2) maximum yield (159.33 q/ha), net income (Rs. 177595) and B:C ratio (3.89) was found. Which is significantly superior over FP and TO_1. The percent yield enhancement 47.34 and 15.77 over FP and TO_1
8. **Constraints identified and feedback for research :** Lack of awareness about commercial mango farming and their management practices. More no. of awareness cum skill training is required for better fruit harvest.
9. **Process of farmers participation and their reaction :**
   1. Farmers meeting, interaction & field day
   2. Farmers told new molecule easily not available in local market.

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

***Thematic Area :* Integrated Pest Management**

Table : Assessment of management practices for Red banded caterpillar in Mango

Technology option	No of trials	% yield Losses	% infected fruits before spray	% infected fruits 10 days after 1st spray	% infected fruits 10 days after 2nd spray	Yield (Kg/tree)	Yield (q/ha)	Gross cost (Rs/ha)	Gross Return (Rs/ha)	Net Return (Rs/ha)	B:C
FP	10	41.04	7.43	9.50	6.47	0.00	93.73	53200	140595	87395	2.64
TO1		17.77	7.87	6.67	3.77	68.71	130.93	58350	196395	138045	3.36
TO2		0.00	8.13	4.87	1.77	47.45	159.33	61400	238995	177595	3.89

Result : On farm trial was conducted on 10 farmers' field of village Blatu, Langratand, Aragloya, Range and Shivrajpur of Ghaghra and Bishunpur block on Mango (Variety-Amrapali) during 2023 to find out appropriate management practices against red banded caterpillars in mango. The data collected during the trial clearly indicated that the minimum **infected fruits 10 days after 1st spray** (4.87%) and minimum **infected fruits 10 days after 2nd spray** (1.77%) and **yield Losses percentage** (00%) was found under Technology option $T0_2$, though **infected fruits percentage was maximum (8.13%) before spray** in Technology option $T0_2$. In same Technology option (TO_2) maximum yield (159.33 q/ha), net income (Rs. 177595) and B:C ratio (3.89) was found. Which is significantly superior over FP and TO_1. The percent yield enhancement 47.34 and 15.77 over FP and TO_1

Photographs

Field follow-up

OFT -06 (Agriculture Engineering)

Rabi 2022-23

- **Thematic area: Water Management**
- **Problem definition/Name of OFT: Assessment of different methods irrigation on productivity of tomato in medium land.**

1. **Title of On farm trial : Assessment of different methods irrigation on productivity of tomato in medium land.**

2. Problem diagnose : More no. of irrigation and bed making resulted cost of cultivation

3. Details of technologies selected for assessment/refinement:

FP : Furrow/bed irrigation

TO_1 : Drip irrigation with crop residue mulch

TO_2 : Drip irrigation with plastic mulching

Design: RBD **Replication: 10**

4. Source of Technology: RPCAU, Pusa

5. Production system and thematic area : Vegetable based production system and water management area

6. Performance of the Technology with performance indicators:

Table – Assessment of different methods irrigation on productivity of tomato

Technology option	No. of replication	Data related problem addresses		Yield components	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross income (Rs./ha)	Net income (Rs / ha)	BC Ratio
		No of irrigation	Number of fruits per plant (in gm)	No. of fruits weight per plant					
FP : Furrow/bed irrigation	**10**	12.3	11.60	505	253	76899	151800	74901	1.97
TO_1 : Drip irrigation with crop residue mulch		10.9	14.77	560	264	69599	158400	88801	2.28
TO_2 : Drip irrigation with plastic mulching		8.9	15.80	701	271	66799	162600	95801	2.43
SEm±									
CD(P=0.05)									

7. Final recommendation for micro level situation:

On farm trial was conducted on 10 farmers' field of village Dartoli, Majhatoli & Majhatoli (Raidih) during Rabi 2022-23 to find out the cost effective weeding method in tomato. The data collected during the trial clearly indicated that the minimum **No of irrigation** (8.9), maximum **Number of fruits per plant** (15.80) and maximum **No. of fruits weight per plant** (701 gms) was found under Technology option 2 i'e Use of Drip irrigation with

plastic mulching. In same Technology option (TO_2) maximum yield (271 q/ha), net income (Rs.95801) and B:C ratio (2.43) was found. Which is significantly superior over FP and TO_1. The percent yield enhancement 7.12 and 2.65 over FP and TO_1

8. Constraints identified and feedback for research:

- Unavailability of drip and plastic mulching sheet in locality.

9. Process of farmers participation and their reaction:

1. Participatory and interactive
2. Regular field visit
3. Field day
4. Farmers' reaction was satisfactory

B. Result with Table and good quality photographs in jpg

Thematic area: Water Management

Problem definition: : More no. of irrigation and bed making resulted cost of cultivation.

Table – Assess Assessment of different methods irrigation on productivity of tomato

Technology option	No. of replication	Yield(q/ha)	Net Return (Rs / ha)
FP : Furrow/bed irrigation	10	253	74901
TO_1 : Drip irrigation with crop residue mulch		264	88801
TO_2 : Drip irrigation with plastic mulching		271	95801
SEm±			
CD(P=0.05)			

Results:

On farm trial was conducted on 10 farmers' field of village Dartoli, Majhatoli & Majhatoli (Raidih) during Rabi 2022-23 to find out the cost effective weeding method in tomato. The data collected during the trial clearly indicated that the minimum **No of irrigation** (8.9), maximum **Number of fruits per plant** (15.80) and maximum **No. of fruits weight per plant** (701 gms) was found under Technology option 2 i'e Use of Drip irrigation with plastic mulching. In same Technology option (TO_2) maximum yield (271 q/ha), net income (Rs.95801) and B:C ratio (2.43) was found. Which is significantly superior over FP and TO_1. The percent yield enhancement 7.12 and 2.65 over FP and TO_1

OFT -07 (Agriculture Engineering)
Kharif 2023

- **Thematic area: Farm Mechanization**
- **Problem definition/Name of OFT: To assess the performance of different type of cost effective weeding methods of paddy in kharif.**

1. **Title of On farm trial : To assess the performance of different type of cost effective weeding methods of paddy in kharif.**
2. **Problem diagnose** : Traditional weeding method of paddy resulted high cost of cultivation
3. **Details of technologies selected for assessment/refinement:**

FP : Hand weeding

TO_1 : Cono weeder (Hand push)

TO_2 : Power weeder

Design: RBD **Replication: 10**

4. **Source of Technology: TNAU Coimbatour**
5. **Production system and thematic area :** Crop based production system and farm Mechanization
6. **Performance of the Technology with performance indicators:**

Table – Assessment of of different type of cost effective weeding methods of paddy.

Technology option	No. of replication	Data related problem addresses		Yield compo-nents	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross income (Rs./ha)	Net income (Rs / ha)	BC Ratio
		Dry weight of weed/m^2	Weed control efficiency (%)	No. of effective tiller/m^2					
FP : Hand weeding	**10**	12.70	-	6.73	27.86	36849.00	60818	23969	1.65
TO_1 : Cono weeder (Hand push)		10.17	24.87	9.27	29.58	37449.00	64573	27124	1.72
TO_2 : Power weeder		7.81	62.82	10.47	31.96	35699.00	69768	34069	1.95
SEm±									
CD(P=0.05)									

7. Final recommendation for micro level situation:

On farm trial was conducted on 10 farmers' field of village Bansdin (Raidih) and Kubatoli (Bishunpur) during Kharif 2023 to find out the cost effective weeding method in paddy. The data collected during the trial clearly indicated that the maximum weed control efficiency (62.82%) and minimum dry weight (7.81 gm) was found under Technology option 2 i'e Use of Power weeder. In same Tchnology option (TO_2) maximum yield

(31.96 q/ha), net income (Rs. 34069) and B:C ratio (1.95) was found. Which is significantly superior over FP and TO_1. The percent yield enhancement 14.72 and 8.05 over FP and TO_1

8. Constraints identified and feedback for research:

- Unavailability of power weeded in locality.

9. Process of farmers participation and their reaction:

1. Participatory and interactive
2. Regular field visit
3. Field day
4. Farmers' reaction was satisfactory

B. Result with Table and good quality photographs in jpg

Thematic area: Farm Mechanization

Problem definition: : Traditional weeding method of paddy resulted high cost of cultivation.

Table – Assessment of of different type of cost effective weeding methods of paddy.

Technology option	No. of replication	Yield(q/ha)	Net Return (Rs / ha)
FP : Hand weeding	10	27.86	23969
TO_1 : Cono weeder (Hand push)		29.58	27124
TO_2 : Power weeder		31.96	34069
SEm±			
CD(P=0.05)			

Results:

On farm trial was conducted on 10 farmers' field of village Bansdin (Raidih) and Kubatoli (Bishunpur) during Kharif 2023 to find out the cost effective weeding method in paddy. The data collected during the trial clearly indicated that the maximum weed control efficiency (62.82%) and minimum dry weight (7.81 gm) was found under Technology option 2 i'e Use of Power weeder. In same Tchnology option (TO_2) maximum yield (31.96 q/ha), net income (Rs. 34069) and B:C ratio (1.95) was found. Which is significantly superior over FP and TO_1. The percent yield enhancement 14.72 and 8.05 over FP and TO_1

OFT 08 (Home Science)

Rabi (2022-23)

1.	**Title of OFT**	Assessment of maize and ragi based weaning food to overcome malnutrition among children
2.	**Problem diagnose**	Prevalence of malnutrition among children < 5 years in Gumla District because of lack of knowledge about locally nutritional rich foods. (Source: POSHAN Led by IFPRI)
3.	**Details of technology selected for assessment/refinement**	**FP** Inadequate dietary pattern and unbalanced intake of nutrients **TO_1** Roasted maize flour (50 gm)+ roasted green gram flour (25 gm) + roasted groundnut (10 gm)+ sugar (15 gm) + 1/2 cup milk **TO_2** Roasted Ragi flour (50gm) + roasted green gram (25 gm)+ roasted groundnut (10gm)+ sugar (15gm)+1/2 cup milk.
4.	**Source of technology**	ACRIP, Directorate of maize research, ICAR
5.	**Production system and thematic area**	Weaning food for children (3 to 6 years), Nutrition Education, Value Addition
6.	**Performance of technology with performance indicator**	**Technical Indicator :** ➢ Organoleptic assessment on 5 point acceptability scale. ➢ Anthropometric measurement in selected children **Economic Indicator:** ➢ Benefit Cost Ratio

Performance of technology with performance indicator

The trial was conducted in 05 villages namely Role, Bendi, Arangloya, Banari, Bahagara and Serka, Block-Bishunpur. The trial was conducted for 6 months from December 22 to May 2023 and selection of children were done on the basis of height and weight of children between the age group of 3 to 5 years. These selected 30 children were categorized equally in these technology options depending on their height and weight. Ten children were put under Farmers Practice, ten children were provided Maize based weaning mixture and other ten children were provided Ragi based weaning mixture. Height and weight of these children were taken before and after providing weaning mixtures and accordingly data were recorded and analyzed.

Table 1: Assessment of maize and ragi based weaning food on the basis of technical parameters

Technology Option		No. of respondents	Organoleptic parameters (under 5 point hedonic scale)			Avg. height (cm)			Avg. weight (Kg)		
			Taste	Colour	Acceptability	Before	After 6 months	Increase in height	Before	After 6 months	Increase in weight
FP	Inadequate dietary pattern and unbalanced intake of nutrients.	10	3.6	2.2	3.2	87.2	87.5	0.3	10.2	11.1	0.9
TO_1	Roasted maize flour (50 gm)+ roasted green gram flour (25gm) + roasted groundnut (10gm) + sugar 15 gm +with ½ cup milk	10	5	4.4	4.8	96.7	97.3	0.6	12.2	13.1	0.9
TO_2	Roasted Ragi flour (50gm) + roasted green gram flour (25gm) + roasted groundnut (10gm) + sugar 15 gm +with ½ cup milk	10	4.4	4	5	85.2	86.8	1.6	10.5	12.3	1.8

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: Assessment of maize and ragi based weaning food on the basis of economical parameters

Technology Option		No. of respondents	Cost of cultivation Rs/kg	Gross return (Rs /Kg)	Net Return (Rs /Kg)	BC ratio
FP	Inadequate dietary pattern and unbalanced intake of nutrients.	10	65	90	25	1.38
TO_1	Roasted maize flour (50 gm) + roasted green gram flour (25gm) + roasted groundnut (10gm) + sugar 15 gm +with ½ cup milk	10	120	170	50	1.41
TO_2	Roasted Ragi flour (50gm) + roasted green gram flour (25gm) + roasted groundnut (10gm) + sugar 15 gm +with ½ cup milk	10	135	200	65	1.48

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

Children of age group (3 to 5 years) liked the ragi based weaning mixture more than maize based weaning mixture and their mothers also preferred. After including weaning mixtures in their diet for six months the increase in height and weight of the children in TO_2 were found more than TO_1 that is 1.6 cm and 1.8 kg respectively. It is clear from the Table 1, TO_2 showed good response. The Technology option 2 was found more remunerative and nutritive by the farm women because of its acceptability and profitability.

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

1.Prevalence of malnutrition among children < 5 years in Gumla District because of lack of knowledge about locally nutritional rich foods
2. Unawareness towards nutritional importance of locally available nutri- cereals.

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

Farm women were easily learned and adopted this weaning food for children which is made from locally available crops.

B. Results with Tables

Thematic Area: Nutrition education and value addition

Table 1: Assessment of maize and ragi based weaning food on the basis of technical parameters

Technology Option		No. of respondents	Organoleptic parameters (under 5 point hedonic scale)			Avg. height (cm)			Avg. weight (Kg)		
			Taste	Colour	Acceptability	Before	After 6 months	Increase in height	Before	After 6 months	Increase in weight
FP	Inadequate dietary pattern and unbalanced intake of nutrients.	10	3.6	2.2	3.2	87.2	87.5	0.3	10.2	11.1	0.9
TO_1	Roasted maize flour (50 gm)+ roasted green gram flour (25gm) + roasted groundnut (10gm) + sugar 15 gm +with ½ cup milk	10	5	4.4	4.8	96.7	97.3	0.6	12.2	13.1	0.9
TO_2	Roasted Ragi flour (50gm) + roasted green gram flour (25gm) + roasted groundnut (10gm) + sugar 15 gm +with ½ cup milk	10	4.4	4	5	85.2	86.8	1.6	10.5	12.3	1.8

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

Result :

Children of age group (3 to 5 years) liked the ragi based weaning mixture more than maize based weaning mixture and their mothers also preferred. After including weaning mixtures in their diet for six months the increase in height and weight of the children in TO_2 were found more than TO_1 that is 1.6 cm and 1.8 kg respectively. It is clear from the Table 1, TO_2 showed good response. The Technology option 2 was found more remunerative and nutritive by the farm women because of its acceptability and profitability.


कृषि विज्ञान केन्द्र गुमला
विकास भारती बिशुनपुर
प्रक्षेत्र परीक्षण
प्रशिक्षण एवं इनपुट वितरण कार्यक्रम
कृषि विज्ञान केन्द्र गुमला


विकास भारती बिशुनपुर
प्रक्षेत्र परीक्षण
प्रशिक्षण एवं इनपुट वितरण कार्यक्रम
कृषि विज्ञान केन्द्र गुमला
विकास भारती बिशुनपुर

OFT 09 (Home Science)
(Rabi 2022-23)

1.Title of OFT

Assessment of different treatment preservation methods on preparation of oyster mushroom powder for enhancing the shelf-life.

2. Problem diagnoses

Spoilage of mushroom due to poor shelf life.

3. Details of technology selected for assessment/refinement

FP	Drying & Powdering of mushroom without any treatment.
TO_1	Drying & Powdering of mushroom by pre-treating with 0.5% citric acid.
TO_3	Drying & Powdering of mushroom by pre-treating with 1% KMS

4. Source of technology

DRPCAU, Pusa

5. Production system and thematic area

Rice fellow and Food Preservation

6. Performance of technology with performance indicator

Technical Indicator :

- Organoleptic evaluation
  - Taste
  - Clour
  - Shelf-life

Economic Indicator:

- Benefit Cost Ratio

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	99	Dull	Semi soft	Average
TO_1: Drying & Powdering of mushroom by pre-treating with 0.5% citric acid.	10	133	Good	Soft	Good
TO_2: Drying & Powdering of mushroom by pre-treating with 1% KMS	10	175	Very Good	Soft	Very Good

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	1.2
TO_1: Drying & Powdering of mushroom by pre-treating with 0.5% citric acid.	10	1200	1400	200	1.16
TO_2: Drying & Powdering of mushroom by pre-treating with 1% KMS	10	1250	1400	150	1.12

The trial was conducted in Role village among mushroom growers. The farm women were grouped into 3 categories that is Farmer's practice, Technology option 1and 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_2 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.

7. Final Recommendation at micro level situation

The mushroom powder under TO_2 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.

8. Constraints identified and feedback for research

Spoilage of mushroom due to poor shelf life.

9. **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 Table

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	99	Dull	Semi soft	Average
TO_1: Drying & Powdering of mushroom by pre-treating with 0.5% citric acid.	10	133	Good	Soft	Good
TO_2: Drying & Powdering of mushroom by pre-treating with 1% KMS	10	175	Very Good	Soft	Very Good

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	1.2
TO_1: Drying & Powdering of mushroom by pre-treating with 0.5% citric acid.	10	1200	1400	200	1.16
TO_2: Drying & Powdering of mushroom by pre-treating with 1% KMS	10	1250	1400	150	1.12

The mushroom powder under TO_2 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.


प्रक्षेत्र परीक्षण
गृह विज्ञान
कृषि विज्ञान केन्द्र गुमला


प्रक्षेत्र परीक्षण
गृह विज्ञान
कृषि विज्ञान केन्द्र गुमला


TO1
मशरुम को 0.5 %
साइट्रिक एसिड के घोल
में खालना एवं सुखाना


प्रक्षेत्र परीक्षण
गृह विज्ञान


प्रक्षेत्र परीक्षण
गृह विज्ञान


TO2
मशरुम को 1%

OFT –10 (Home Science)

Kharif 2023-24

1. **Title of OFT** — **Assessment of preparation methods of ripe jack fruit papad (bar)**
2. **Problem diagnose** — i. Distress sale of jackfruit due to surplus production during peak time.
   ii. Unawareness about value added products of jackfruit.
3. **Details of technology selected for assessment/refinement** — **FP**- Local people consume ripe jackfruit as such.

   TO_1 – Jackfruit pulp (1 kg) + Sugar (100 gm) + Citric acid (5 gm) + Sodium benzoate (1 gm)

   TO_2 – Jackfruit pulp (500 gm) + Mango pulp (500 gm) + Sugar (100 gm) + Citric acid (5 gm) + Sodium benzoate (1 gm)
4. **Source of technology** — DRPCAU, Pusa Samastipur
5. **Production system and thematic area** — Rice fallow and Value Addition of Jackfruit
6. **Performance of technology with performance indicator** — i. Sensory analysis (Taste, Texture, Colour, Flavour, Overall acceptability)
   ii. Shelf life at 15, 30, 45, 60 & 75 days
   iii. B:C ratio

Table 1. Assessment of preparation methods of ripe jack fruit papad (bar)

Treatment	Sensory Evaluation (5-point hedonic scale)					Shelf life (days)					
	Taste	Texture (Crispness)	Colour	Flavour	Overall acceptability	0	15	30	45	60	75
FP- Local people consume ripe jackfruit as such.	-	-	-	--	-	-	-	-	--	-	-
TO_1 – Jackfruit pulp (1 kg) + Sugar (100 gm) + Citric acid (5 gm) + Sodium benzoate (1 gm)	2.9	3.5	2.9	3.1	3.1	G	G	G	G	G	G
TO_2 – Jackfruit pulp (500 gm) + Mango pulp (500 gm) + Sugar (100 gm) + Citric acid (5 gm) + Sodium benzoate (1 gm)	3.7	3.7	3.6	4	4.4	G	G	G	G	G	Slightly sticky

- ❖ G means Good
- ❖ Scores given during organoleptic test: Not appealing (1), Fair (2), Good (3), Very Good (4), Excellent (5)

Table 2. Economics of preparing ripe jack fruit papad (bar) through different methods

Technological options	No. of trials	Cost of Preparation Rs/Kg	Gross return Rs/kg	Net return	B:C ratio
FP- Local people consume ripe jackfruit as such.	10	-	-	--	-
TO_1 – Jackfruit pulp (1 kg) + Sugar (100 gm) + Citric acid (5 gm) + Sodium benzoate (1 gm)		85	150	65	1.7
TO_2 – Jackfruit pulp (500 gm) + Mango pulp (500 gm) + Sugar (100 gm) + Citric acid (5 gm) + Sodium benzoate (1 gm)		105	200	95	1.9

The study was conducted in three locations viz. role, banari and serka villages of Bishunpur block and number of farm women in each Technology options were 10.

The method of preparing bar is as followed:

- Take pulp of jackfruit and mango with 1:1 ratio.
- Add sugar powder and mix it well.
- Add citric acid 5g and sodium benzoate 1g to the paste and mix it properly.
- Pour on the cloth and keep it for sun drying till it dry properly.

7. Final Recommendation at micro level situation

Papad (bar) prepared under Technology option 2 was more acceptable than Papad bar prepared under Technology option 1 because its tatse, colour, flavour and texture were found good according to the scores given by the respondents.

8. Constraints identified and feedback for research

i. Distress sale of jackfruit due to surplus production during peak time.

ii. Unawareness about value added products of jackfruit.

9. Process of farmer's participation and their reaction

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

B. Results with Table

Thematic area: Value Addition

Table 1. Assessment of preparation methods of ripe jack fruit papad (bar)

Treatment	Sensory Evaluation (5-point hedonic scale)					Shelf life (days)					
	Taste	Texture (Crispness)	Colour	Flavour	Overall acceptability	0	15	30	45	60	75
FP- Local people consume ripe jackfruit as such.	-	-	-	--	-	-	-	-	--	-	-
TO_1 – Jackfruit pulp (1 kg) + Sugar (100 gm) + Citric acid (5 gm) + Sodium benzoate (1 gm)	2.9	3.5	2.9	3.1	3.1	G	G	G	G	G	G
TO_2 – Jackfruit pulp (500 gm) + Mango pulp (500 gm) + Sugar (100 gm) + Citric acid (5 gm) + Sodium benzoate (1 gm)	3.7	3.7	3.6	4	4.4	G	G	G	G	G	Slightly sticky

- G means Good
- Scores given during organoleptic test: Not appealing (1), Fair (2), Good (3), Very Good (4), Excellent (5)

Table 2. Economics of preparing ripe jack fruit papad (bar) through different methods

Technological options	No. of trials	Cost of Preparation Rs/Kg	Gross return Rs/kg	Net return	B:C ratio
FP- Local people consume ripe jackfruit as such.	10	-	-	--	-
TO_1 – Jackfruit pulp (1 kg) + Sugar (100 gm) + Citric acid (5 gm) + Sodium benzoate (1 gm)		85	150	65	1.7
TO_2 – Jackfruit pulp (500 gm) + Mango pulp (500 gm) + Sugar (100 gm) + Citric acid (5 gm) + Sodium benzoate (1 gm)		105	200	95	1.9

The study was conducted in three locations viz. role, banari and serka villages of Bishunpur block and number of farm women in each Technology options were 10.

The method of preparing bar is as followed:

- Take pulp of jackfruit and mango with 1:1 ratio.
- Add sugar powder and mix it well.
- Add citric acid 5g and sodium benzoate 1g to the paste and mix it properly.
- Pour on the cloth and keep it for sun drying till it dry properly.

Papad (bar) prepared under Technology option 2 was more acceptable than Papad bar prepared under Technology option 1 because its tatse, colour, flavour and texture were found good according to the scores given by the respondents.



OFT- 11

(Animal Science)
Rabi (2023)

1. **Title of On farm trial : Evaluation of concentrate and urea treated wheat straw supplement on milk yield of cow.**

2. Problem diagnose: Poor feed management leads to lower milk production

3. Details of technologies selected for assessment/refinement :

FP : Grazing (Free grazing)

TO_1 : FP + Urea treated wheat straw for 30 days

TO_2 : FP + Concentrate@50gm/liter of milk production/day for 30 days

Design: RBD **Replication : 10**

4. Source of Technology: BAU Ranchi

5. Production system and thematic area : Mixed crop (Livestock production system)

6. Performance of the Technology with performance indicators :

Table – Evaluation of concentrate and urea treated wheat straw supplement on milk yield of cow

Technology option	No. of replication	Milk yield (Before treatment) (Milk yield /day/animal)	Milk yield (Milk yield /day/animal)			Average milk yield	Milk productivity enhancement (%)
			10 days	20 days	30 days		
FP: Grazing (Free grazing)	10	2.0	2.20	2.15	2.30	2.33	
TO_1 : FP + Urea treated wheat straw for 30 days		2.6	4.60	4.80	5.20	4.37	87.55
TO_2 : FP + Concentrate@50gm/liter of milk production/day for 30 days		2.4	5.40	5.90	6.40	5.90	153.22

7. Final recommendation for micro level situation:

The trial was conducted on 30 cows of cross breed in village Nawagarh serka, Chatti serka & Serka of Bishunpur block among 10 farmers field during 2022-23 to find out the Evaluation of concentrate and urea treated wheat straw supplement on milk yield of cow. Data observed during the trial reveals that Technology option 2 i'e use of FP + Concentrate@50gm/liter of milk production/day for 30 days is more beneficial as compared to farmers practice and TO_1 in terms of milk yield enhancement.

8. Constraints identified and feedback for research:

- Knowledge gap
- 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

Thematic area: Livestock production system

Problem definition: Poor feed management leads to lower milk production.

Technology assessed: Evaluation of concentrate and urea treated wheat straw supplement on milk yield of cow

Table – Evaluation of concentrate and urea treated wheat straw supplement on milk yield of cow

Technology option	No. of replication	Milk yield (Before treatment) (Milk yield /day/animal)	Milk yield (Milk yield /day/animal)			Average milk yield	Milk productivity enhancement (%)
			10 days	20 days	30 days		
FP: Grazing (Free grazing)	10	2.0	2.20	2.15	2.30	2.33	
TO_1 : FP + Urea treated wheat straw for 30 days		2.6	4.60	4.80	5.20	4.37	87.55
TO_2 : FP + Concentrate@50gm/liter of milk production/day for 30 days		2.4	5.40	5.90	6.40	5.90	153.22

Results: :

The trial was conducted on 30 cows of cross breed in village Nawagarh serka, Chatti serka & Serka of Bishunpur block among 10 farmers field during 2022-23 to find out the Evaluation of concentrate and urea treated wheat straw supplement on milk yield of cow. Data observed during the trial reveals that Technology option 2 i'e use of FP + Concentrate@50gm/liter of milk production/day for 30 days is more beneficial as compared to farmers practice and TO_1 in terms of milk yield enhancement.

3.3 ACHIEVEMENTS OF FRONTLINE DEMONSTRATIONS (FLD)

C. Overall achievements of FLDs conducted during the year 2023

S.No	Crop category	No. of FLD	Area	No of beneficiaries	Yield in Demo (q/ha)	Yield in check (q/ha)
A	**Cereals**					
1	Rice	22	8.70	66	34.64	29.32
B	**Millets**	0	0	0		
1	Porso millets	13	5.0	14	7.88	6.06
2	Ragi	50	20.0	107	19.40	16.50
C	**Oil Seeds**	0	0	0		
1	Mustard (DRMR)	100	40	110	Siliqua formation stage	
2	Sesame (CFLD)	50	20	51	7.14	4.83
3	Niger (CFLD)	75	30	55	4.60	3.31
4	Mustard (CFLD)	75	30	65	Siliqua formation stage	
5	Linseed (CFLD)	25	10	21	Flowring stage	
D	**Pulses**	0	0	0		
1	Blackgram (CFLD)	75	30	70	10.42	8.10
2	Redgram (CFLD)	100	40	151	Flowring stage	
3	Lentil (CFLD)	50	20	109	Flowring stage	
E	**Horticulture Crops**	0	0	0		
1	Brinjal	2	0.07	2	171.82	111.36
2	Chilli	1	0.012	2	89.36	57.24
3	Papaya	20	0.2	20	Flowring stage	
4	Merigold	1	0.40	3	Flowring stage	
F	**Fodder crop**	0	0	0		
1	Napier	80	0.30	08	315	165
2	Maize	12	4.50	90	220	165
3	Ricebean	10	0.50	10	212	165
4	Hybrid crop	0	0	0		
5	Rice	375	150	388	34.30	28.40
G	**Sunflower (CFLD)**	50	20	104	Flowring stage	
	Tomato	875	350	1722		
	Chilli	80	32	201		

S.No	Crop category	No. of FLD	Area	No of beneficiaries	Yield in Demo (q/ha)	Yield in check (q/ha)
	Napier	80	0.30	80	315	165
	Okra	5	2.0	10	94.10	62.30
H	Livestock	0	0	0		
I	Fisheries	6	6	9	7.55	4.20
J	Poultry	3	3	3	172	135
K	Other enterprises	0	0	0		
1	Mushroom	15	15	15	5.35	4.10
2	Apiculture (ARYA)	4	55	4	13.4kg/hive	8.00
3	Lac cultivation (ARYA)	50	50	50		
L	Women empowerment	5	05	40		
M	Farm Machinery	02	294	412	0.4 hr	40hr
	Grand Total	**2311**	**1241.982**	**3992**		

B. Details of FLDs conducted during the year 2023

1. Cereals

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
Rabi 2022-23															
Wheat	ICM	Variety -DBW-187	07	2.48	38.4	33.70	13.95	43300	81600	38300	1.88	42350	71612.50	29262.50	1.69
Wheat	ICM	Variety – Sabour Nirjal	04	1.02	36.2	32.40	11.73	42860	76925	34065	1.79	42350	68850	26500	1.63
Kharif 2023-24															
Paddy	INM	Green Manuring	34	0.8	43.8	36.70	19.34	49450	95615	46165	1.93	46500	80116	33616	1.72
Paddy	ICM	Variety – Swarna Shreya	18	05	40.8	36.70	11.17	47350	89066	41716	1.88	46500	80116	33616	1.72
Paddy	ICM	Variety – Rajendra Kasturi	13	2.5	26.76	20.57	30.09	41900	80280	38380	1.92	41900	61710	19810	1.47
Paddy	NRM	Aerobic method	01	0.4	27.20	23.30	16.74	39049	59377	20328	1.52	47499	50863	11814	1.30
Finger Millet	ICM	Variety – GPU-28	107	20.0	19.4	16.50	17.57	32580	58200	25620	1.79	32380	49500	17120	1.53
Porso Millets	ICM	Scientific production of Proso millets	14	5.0	7.88	6.06	30.03	13085	35460	22375	2.71	11050	27270	16220	2.47
Natural farming (Rabi 2022-23)															
Potato	Natural farming	Natural farming component	01	0.4	105.0	135	(-) 22.22	74669	12600	51331	1.69	83100	162000	78900	1.95
Gram			03	1.2	11.5	13.65	(-) 15.75	35560	55670	25140	1.82	32500	71389	38889	2.19
Wheat			01	0.4	25.6	32.5	(-) 21.23	34775	51584	16809	1.48	38400	65487	27087	1.71
Onion			03	1.2	95.0	124	(-) 23.39	55575	11400	58425	2.05	66400	148800	82400	2.24

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 (Kharif 2023-24)															
Maize+Cowpea	Natural farming	Natural farming component	06	2.4	39.19	43.17	(-)9.22	42500	81907	39407	1.93	47850	90225	42375	1.88
Blackgram			01	0.4	7.54	6.95	8.49	31650	52403	20753	1.66	35200	48302	15802	1.49
Groundnut			01	0.2	15.18	14.35	5.78	46550	96803	50253	2.08	48450	91510	43060	1.89
Okra			01	0.2	64.50	56.42	14.32	5400	161250	106750	2.96	56700	141050	84350	2.49
Natural farming (Rabi 2023-24)															
Wheat + Chickpea	Natural farming	Natural farming component	12	4.8	Growth stage										
Potato															
Onion															
Pea															
Total 2022-23 cereals			**11**	**3.5**											
Total 2023-24 Cereals			**66**	**8.7**											
Total millets 2023-24			**121**	**25.0**											
Total 2022-23 Naturi Farming			**08**	**3.2**											
Total 2023-24 Naturi Farming			**21**	**8.0**											

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
AICRP Kharif 2023-24															
Niger	ICM	Var-Birsa Niger-3 with whole package	10	04	4.8	3.2	50	19407	38400	18993	1.98	13560	25600	12040	1.89
Niger	INM	Var-Birsa Niger-3 with Fertilizer management	10	04	4.65	3.21	44.86	17290	37200	19910	2.15	14670	25680	11010	1.75
Niger	INM	Var-Birsa Niger-3 with & Local with (20:20:20 kg NPK/ha)	10	04	3.8	3.3	15.15	14707	30400	15693	2.06	14497	26400	11903	1.82
Niger	NRM	Var-Birsa Niger-3 with Line sowing	05	04	4.3	3.4	26.47	15417	34400	18983	2.23	14587	27200	12613	1.86
Niger	IWM	Var-Birsa Niger-3 with Weed control	05	04	4.46	3.5	27.42	17967	35680	17713	1.99	15067	28000	12933	1.86
Total			**40**	**20**											
DRMR Rabi 2022-23															
Masturd	ICM	ICM & PM-30	71	24.24	15.80	11.54	36.92	35750	79790.0	44040.0	2.23	30550	58277.0	27727.0	1.91
Masturd	ICM	ICM & PM-26	31	11.6	15.26	11.35	34.45	35450	77063.0	41613.0	2.17	30250.0	57317.0	27067.0	1.89
Masturd	ICM	ICM & BBM-1	06	4.16	16.12	11.90	35.46	36500	81406	44906	2.23	30800.0	60095.0	29295.0	1.95
Total			**108**	**40.0**											
DRMR Rabi 2023-24															
Mustard	ICM	Variety BBM-1	110	40				Siliqua formation stage							
Total			**110**	**40**											
CFLD Rabi 2022-23															
Mustard	ICM	Var.- PM-30	67	40.0	14.70	11.80	24.57	35610.00	74235.00	38625.00	2.08	32150.00	59590.00	27440.00	1.85
Linseed	ICM	Var.- JLS-95	45	10.0	10.20	6.95	46.76	26140.00	54060.00	27920.00	2.06	23640.00	36835.00	13195.00	1.55
Total			**112**	**50**											

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 Kharif 2023-24															
Sesame	ICM	Var.-GJT-5 & ICM	32	11.6	7.44	4.95	50.30	27115	64244	37129	2.37	23275	42743	19468	1.84
		Var.-Kanke Safed	19	8.4	6.85	4.71	45.43	26443	59149	32706	2.24	23275	40670	17395	1.75
Niger	ICM	Ver.- Birsa Niger-1	55	30.0	4.60	3.31	38.97	21210	35576	14366	1.67	19280	25599	6319	1.33
Total			**106**	**50.0**											
CFLD Rabi 2023-24															
Mustard	ICM	Var.- PM-30	65	30.0				Siliqua formation stage							
Linseed	ICM	Priyam	9	6.0				Flowaring stage							
		Birsa Tisi-1	12	4.0											
Sunflower	ICM	LSFH-171	104	20.0				Flowaring stage							
Total			**190**	**60**											
Total Rabi 2022-23			**220**	**90**											
Total Kharif & Rabi 2023-24			**446**	**170**											

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

3. Pulses

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 2022-23															
Redgram	ICM	Var.- IPA 15-2	12	5.0	15.07	11.40	32.19	38870	99462	60592	2.56	35800	75240	39440	2.1
		Var.-Rajeev lochan	19	9.25	14.58	10.90	33.76	38890	96228	57338	2.47	35800	71940	36140	2.0
		Var.- IPA 203	14	5.75	14.30	10.44	36.97	39590	94380	54790	2.38	35800	68640	32800	1.92
Lentil	ICM	Var.-IPL 220	126	20	12.30	9.80	25.51	39603	73800	34197	1.86	35125	58800	23675	1.67
Total			**171**	**40**											
CFLD Rabi 2023-24															
Redgram	ICM	Var.-Rajeev Lochan	140	35.54				Flowring Stage							
		Var.- IPA 203	10	4.50											
Blackgram	ICM	Var.- PU-31	70	30.00	10.42	8.10	28.64	30600	72419	41819	2.37	27800	56295	28495	2.02
Lentil	ICM	Var.- IPL-220	109	20.00				Flowring Stage							
Total			**329**	**90.04**											

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

4. Horticultural crops (separately Fruit, Vegetables, Flower, Medicinal and aromatics, etc.

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
Brinjal	ICM	Variety- Swarna Shyamali	01	0.03	168.29	110.45	52.36	62500	201948	139448	3.23	58500	132540	74040	2.26
Brinjal	ICM	Variety- RCBR-22	01	0.04	175.35	112.27	56.18	60500	210420	149920	3.47	56500	134724	78224	2.38
Chilli	Vegetable cultivation	Variety-Swarna aparna	01	0.012	89.36	57.24	56.11	68500	223400	154900	3.26	62500	143100	80600	2.28
Papaya	Fruit Production	Variety- Ranchi Papaya	20	0.2	Flowering										
Marigold	Flower Cultivation	Variety-Pusa Narangi	03	0.4	Flowering										
	Total		**26**	**0.682**											

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

5. Other crops

Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	Other parameters		*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demonstration	Check		Demo	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Napier	Fodder Cultivation	Variety- Pusa Jaint	80	0.3	315	165	90.90			41200	94500	53300	2.29	25000	49500	24500	1.98
Maize	Fodder Cultivation	Variety – J 1006	90	4.5	220	165	33.33			28500	66000	37500	2.31	25000	49500	24500	1.98
Rice bean	Fodder Cultivation	Variety – Bidhan -2	10	0.5	212	165	28.48			26000	63600	37600	2.45	25000	49500	24500	1.98
		Total															

6. Demonstration details on crop hybrid varieties

Crop	Name of the Hybrid	No. of Farmers	Area (ha)	Yield (kg/ha) / major parameter			Economics (Rs./ha)			
				Demo	Local check	% change	Gross Cost	Gross Return	Net Return	BCR
Cereals										
Bajra										
Maize										
Paddy (DAO)	PAC 801	388	150	34.30	28.40	20.77	36200	74876	38676	2.07
Sorghum										
Wheat										
Others (Pl. specify)										
Total Cereals		388	150							
Oilseeds										
Castor										
Mustard										
Safflower	LSFH-171(CFLD)	104	20	Flowring stage						
Sesame										
Sunflower										
Groundnut										
Soybean										
Others (Pl. specify)										
Total Oilseeds		104	20							
Pulses										
Greengram										
Blackgram										
Bengalgram										
Redgram										

Crop	Name of the Hybrid	No. of Farmers	Area (ha)	Yield (kg/ha) / major parameter			Economics (Rs./ha)			
				Demo	Local check	% change	Gross Cost	Gross Return	Net Return	BCR
Others (Pl. specify)										
Total Pulses										
Vegetable crops										
Bottle gourd										
Chilli 1006	NSC Alfa	201	32	Growth stage						
Cucumber										
Tomato	NSC -2160	1722	350	Growth stage						
Brinjal										
Okra	Anukranti	10	2.0	94.10	62.30	47.26	48650	188200	129550	3.20
Onion										
Potato										
Field bean										
Others (Pl. specify)										
Total Veg. Crops		1933	384							
Commercial Crops										
Cotton										
Coconut										
Others (Pl. specify)										
Total Commercial Crops										
Fodder crops										
Napier (Fodder)	Pusa joint	80	0.3	315	165	90.90	41200	94500	53300	2.29
Maize (Fodder)										
Sorghum (Fodder)										
Others (Pl. specify)										
Total Fodder Crops		80	0.3							

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

7. Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Dairy																	
Cow																	
Buffalo																	
Poultry	Backyard Poultry	Sonali	03	03	172	135	27.40			285	1032	748	3.62	225	810	585	3.60
Rabbitry																	
Piggery																	
Sheep and goat																	
Duckery																	
Others (Pl. specify)																	
Total			03	03													

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

8. Fisheries

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Common carps																	
Mussels																	
Ornamental fishes																	
Composite fish	Fish farming	Composite fish	9	6 no	7.55	4.20	79.76	-	-	46200	188750	142550	4.08	42800	105000	62200	2.45
		Total	9	6 no													

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

9. Other enterprises

Category	Name of the technology demonstrated	No. of Farmer	No.of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.) or Rs./unit				*Economics of check (Rs.) or Rs./unit			
				Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Oyster mushroom	Enterprise development	15	15	553.5 kg					109700	27953	81747	3.92				
Button mushroom																
Vermicompost																
Sericulture																
Apiculture	Apiculture	04	55 box	13.40 kg/hive	8.0 kg/hive	62.50			1550	5350	3810	3.45	1355	3200	1845	2.36
Lac cultivation	Lac cultivation	50	50	15.5kg /tree	10.40	49.03			2640	10075	7435	3.82	2300	6760	4460	2.94
Total																

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

10. Women empowerment

Name of technology	No. of demonstrations	Name of technology	Observations		No. of Beneficiaries
			Check	**Demonstration**	
Women					
Drudgery Reduction					
Enterprises					
Farming System					
Health and nutrition	01	Ragi Laddu	Taste of laddu was not so good and shelf life was 02 days	Taste of Ragi laddu was good and shelf life was 15-20 days	11
Kitchen Garden					
Nutrigarden	04	Nutri garden	36097.09 Kcal	46081.34 Kcal	20
Storage Technique					
Value addition					
Women Empowerment					
Others					
Total - Women					
Children					
Health and nutrition					
Others					
Total - Children					
Other if any					
Total others					
Grand Total	0	0			

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	01	Zero tillage	Mustard (PM30)	01	01	544	672	23.52%	68	35280
Intercultural operation tools and machineries										
Irrigation management tools and machineries										
Plant protection tools and machineries										
Harvesting tools and machineries										
Postharvest processing tools and machineries										
Total mechanization tools and machineries										
Others										
Agri Drone	735	Agri Drone	Wheat, Rice, Niger, Mustard	412	294	0.41 hrs	40 hrs		39.59 hr	250/ha
Total of Others	**736**			**413**	**295**					

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Extension and Training activities under FLD

Sl.No.	Activity	Date	No. of activities organized	Number of participants	Remarks
	Others than Oilseed and Pulses				
1.	Field days	13/04/23, 12/05/23, 19/10/23, 04/10/23, 05/10/23, 10/11/23, 23/11/23, 20/12/23, 12/01/23, 12/01/23, 17/01/23, 26/03/23, 29/03/23	13	230	
2.	Farmers Training	24/06/23, 27/06/23, 19/06/23, 19/06/23, 22/06/23, 22/06/23, 23/06/23, 23/06/23	08	114	
3.	Media coverage		04		
4.	Training for extension functionaries				
	Pulses				
1.	Field days	07/10/23, 14/02/23, 24/03/23	03	143	
2.	Farmers Training	24/06/23, 13/07/23, 14/07/23, 16/07/23, 17/07/23, 08/07/23, 31/10/23, 04/11/23, 08/11/23, 08/11/23	10	166	
3.	Media coverage		03		
4.	Training for extension functionaries				
	Oilseeds				
1.	Field days	06/10/23, 01/11/23, 03/11/23, 04/11/23, 18/11/23, 20/01/23, 23/01/23, 24/01/23, 24/01/23, 02/02/23, 06/02/23, 15/03/23	12	325	
2.	Farmers Training	06/07/23, 17/07/23, 20/07/23, 23/08/23, 23/08/23, 23/08/23, 23/08/23, 28/08/23, 17/10/23, 30/10/23, 01/11/23, 03/11/23, 03/11/23, 07/11/23	14	191	
3.	Media coverage		03		
4.	Training for extension functionaries				

Technical Feedback on the demonstrated technologies (if any)

S. 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

A. PERFORMANCE OF THE DEMONSTRATION UNDER CFLD ON PULSE AND OILSEED CROPS (CFLD)
(During Kharif, Rabi and Summer)
Rabi 2022-23

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	Neelum	6.95	215	428	(-) 180	ICM+JLS-95	45	10	11.3	8.80	10.20	21.78	41.96	(-) 15.00

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	JLS-95 & ICM	23640.00	36835.00	13195.00	1.55	26140.00	54060.00	27920.00	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.	Linseed (Var-JLS-95)	848	828	53	15	5	Additional income	20
2.	Linseed (Var-JLS-95)	800	772	53	20	8	Additional income	20
3.	Linseed (Var-JLS-95)	408	388	53	15	5	Additional income	10
4.	Linseed (Var-JLS-95)	352	327	53	20	5	Additional income	10
5.	Linseed (Var-JLS-95)	428	412	53	10	6	Additional income	10
6.	Linseed (Var-JLS-95)	392	369	53	15	8	Additional income	10
7.	Linseed (Var-JLS-95)	44	24	53	15	5	Additional income	1

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)
8.	Linseed (Var-JLS-95)	90	75	53	10	5	Additional income	2
9.	Linseed (Var-JLS-95)	81	61	53	15	5	Additional income	2
10.	Linseed (Var-JLS-95)	192	172	53	20	0	Additional income	5
11.	Linseed (Var-JLS-95)	84	59	53	20	5	Additional income	2
12.	Linseed (Var-JLS-95)	43	28	53	15	0	Additional income	1
13.	Linseed (Var-JLS-95)	87	72	53	10	5	Additional income	2
14.	Linseed (Var-JLS-95)	40	25	53	15	0	Additional income	1
15.	Linseed (Var-JLS-95)	44	21	53	15	8	Additional income	1
16.	Linseed (Var-JLS-95)	40	25	53	15	0	Additional income	1
17.	Linseed (Var-JLS-95)	84	49	53	25	10	Additional income	2
18.	Linseed (Var-JLS-95)	40	15	53	25	0	Additional income	1
19.	Linseed (Var-JLS-95)	79	59	53	15	5	Additional income	2
20.	Linseed (Var-JLS-95)	40	13	53	15	12	Additional income	1
21.	Linseed (Var-JLS-95)	42	25	53	12	5	Additional income	1
22.	Linseed (Var-JLS-95)	83	53	53	20	10	Additional income	2
23.	Linseed (Var-JLS-95)	72	57	53	15	0	Additional income	2
24.	Linseed (Var-JLS-95)	87	55	53	20	12	Additional income	2
25.	Linseed (Var-JLS-95)	80	65	53	15	0	Additional income	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/household)
26.	Linseed (Var-JLS-95)	45	13	53	20	12	Additional income	1
27.	Linseed (Var-JLS-95)	60	40	53	15	5	Additional income	1.5
28.	Linseed (Var-JLS-95)	42	12	53	20	10	Additional income	1
29.	Linseed (Var-JLS-95)	43	18	53	25	0	Additional income	1
30.	Linseed (Var-JLS-95)	88	58	53	20	10	Additional income	2
31.	Linseed (Var-JLS-95)	126	111	53	15	0	Additional income	3
32.	Linseed (Var-JLS-95)	97	82	53	15	0	Additional income	2.5
33.	Linseed (Var-JLS-95)	235	215	53	20	0	Additional income	6
34.	Linseed (Var-JLS-95)	303	273	53	30	0	Additional income	7
35.	Linseed (Var-JLS-95)	226	211	53	15	0	Additional income	6
36.	Linseed (Var-JLS-95)	257	237	53	20	0	Additional income	6
37.	Linseed (Var-JLS-95)	380	347	53	25	8	Additional income	10
38.	Linseed (Var-JLS-95)	400	385	53	15	0	Additional income	10
39.	Linseed (Var-JLS-95)	848	818	53	20	10	Additional income	20
40.	Linseed (Var-JLS-95)	396	374	53	17	5	Additional income	10
41.	Linseed (Var-JLS-95)	388	353	53	35	0	Additional income	10
42.	Linseed (Var-JLS-95)	392	360	53	25	7	Additional income	10
43.	Linseed (Var-JLS-95)	436	414	53	22	0	Additional income	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/household)
44.	Linseed (Var-JLS-95)	408	383	53	20	5	Additional income	10
45.	Linseed (Var-JLS-95)	408	385	53	15	8	Additional income	10

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

E. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
Moderately resistant to *Alternaria blight*, Powdery mildew & bud fly	Good	More no of capsules & branches 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)	6/11/2022,10/11/2022,18/1/2022, 28/11/2022	52
02	Field day (01)	15/03/2023	26

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

<table>
<tr><td> 
</td><td>  </td><td>  </td></tr>
<tr><td>Germination Stage</td><td>Growth Stage</td><td>Flowering Stage</td></tr>
<tr><td> 
</td><td>  </td><td>  </td></tr>
<tr><td>Pod formation Stage</td><td></td><td>Pod mature stage</td></tr>
</table>

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	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Niger	i) Critical input	100000.00	90000.00	0.00
	ii) TA/DA/POL etc. for monitoring		10000.00	
	iii) Extension Activities (Field day)			
	iv) Publication of literature			
	Total	**100000.00**	**100000.00**	**0.00**

Crop - Mustard

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	Mustard	Shivani	11.80	502	507	(-) 768	PM-30+ICM	67	40	15.8	12.8	14.70	34.14	35.17	(-) 34.31

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	PM-30 and ICM (Improved variety, INM & IPM)	32150.00	59590.00	27440.00	1.85	35610.00	74235.00	38625.00	2.08

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.	Mustard (Var-PM-30)	1141	1061	50.50	23	57	Strengthening of livelihood	48
2.	Mustard (Var-PM-30)	1168	1086	50.50	23	58	Strengthening of livelihood	48
3.	Mustard (Var-PM-30)	1200	1116	50.50	24	60	Strengthening of livelihood	48
4.	Mustard (Var-PM-30)	1155	1074	50.50	23	58	Strengthening of livelihood	48
5.	Mustard (Var-PM-30)	624	580	50.50	12	31	Strengthening of livelihood	24
6.	Mustard (Var-PM-30)	836	777	50.50	17	42	Strengthening of livelihood	36
7.	Mustard (Var-PM-30)	1141	1061	50.50	23	57	Strengthening of livelihood	48
8.	Mustard (Var-PM-30)	1099	1022	50.50	22	55	Strengthening of livelihood	48
9.	Mustard (Var-PM-30)	569	529	50.50	11	28	Strengthening of livelihood	24
10.	Mustard (Var-PM-30)	1197	1114	50.50	24	60	Strengthening of livelihood	48
11.	Mustard (Var-PM-30)	1219	1133	50.50	24	61	Strengthening of livelihood	48
12.	Mustard (Var-PM-30)	1176	1094	50.50	24	59	Strengthening of livelihood	48
13.	Mustard (Var-PM-30)	512	476	50.50	10	26	Strengthening of livelihood	24
14.	Mustard (Var-PM-30)	565	526	50.50	11	28	Strengthening of livelihood	24
15.	Mustard (Var-PM-30)	621	578	50.50	12	31	Strengthening of livelihood	24
16.	Mustard (Var-PM-30)	1104	1027	50.50	22	55	Strengthening of livelihood	48
17.	Mustard (Var-PM-30)	1203	1118	50.50	24	60	Strengthening of livelihood	48
18.	Mustard (Var-PM-30)	1248	1161	50.50	25	62	Strengthening of livelihood	48

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)
19.	Mustard (Var-PM-30)	593	552	50.50	12	30	Strengthening of livelihood	24
20.	Mustard (Var-PM-30)	1203	1118	50.50	24	60	Strengthening of livelihood	48
21.	Mustard (Var-PM-30)	605	563	50.50	12	30	Strengthening of livelihood	24
22.	Mustard (Var-PM-30)	872	811	50.50	17	44	Strengthening of livelihood	36
23.	Mustard (Var-PM-30)	600	558	50.50	12	30	Strengthening of livelihood	24
24.	Mustard (Var-PM-30)	920	856	50.50	18	46	Strengthening of livelihood	36
25.	Mustard (Var-PM-30)	1195	1111	50.50	24	60	Strengthening of livelihood	48
26.	Mustard (Var-PM-30)	1168	1086	50.50	23	58	Strengthening of livelihood	48
27.	Mustard (Var-PM-30)	920	856	50.50	18	46	Strengthening of livelihood	36
28.	Mustard (Var-PM-30)	1120	1042	50.50	22	56	Strengthening of livelihood	48
29.	Mustard (Var-PM-30)	1189	1106	50.50	24	59	Strengthening of livelihood	48
30.	Mustard (Var-PM-30)	571	531	50.50	11	29	Strengthening of livelihood	24
31.	Mustard (Var-PM-30)	573	533	50.50	11	29	Strengthening of livelihood	24
32.	Mustard (Var-PM-30)	1200	1116	50.50	24	60	Strengthening of livelihood	48
33.	Mustard (Var-PM-30)	584	543	50.50	12	29	Strengthening of livelihood	24
34.	Mustard (Var-PM-30)	619	575	50.50	12	31	Strengthening of livelihood	24
35.	Mustard (Var-PM-30)	607	564	50.50	12	30	Strengthening of livelihood	24
36.	Mustard (Var-PM-30)	876	815	50.50	18	44	Strengthening of livelihood	36

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)
37.	Mustard (Var-PM-30)	930	865	50.50	19	47	Strengthening of livelihood	36
38.	Mustard (Var-PM-30)	900	837	50.50	18	45	Strengthening of livelihood	36
39.	Mustard (Var-PM-30)	560	521	50.50	11	28	Strengthening of livelihood	24
40.	Mustard (Var-PM-30)	592	551	50.50	12	30	Strengthening of livelihood	24
41.	Mustard (Var-PM-30)	607	564	50.50	12	30	Strengthening of livelihood	24
42.	Mustard (Var-PM-30)	611	568	50.50	12	31	Strengthening of livelihood	24
43.	Mustard (Var-PM-30)	588	547	50.50	12	29	Strengthening of livelihood	24
44.	Mustard (Var-PM-30)	588	547	50.50	12	29	Strengthening of livelihood	24
45.	Mustard (Var-PM-30)	1216	1131	50.50	24	61	Strengthening of livelihood	48
46.	Mustard (Var-PM-30)	900	837	50.50	18	45	Strengthening of livelihood	36
47.	Mustard (Var-PM-30)	564	525	50.50	11	28	Strengthening of livelihood	24
48.	Mustard (Var-PM-30)	882	820	50.50	18	44	Strengthening of livelihood	36
49.	Mustard (Var-PM-30)	560	521	50.50	11	28	Strengthening of livelihood	24
50.	Mustard (Var-PM-30)	1128	1049	50.50	23	56	Strengthening of livelihood	48
51.	Mustard (Var-PM-30)	277	257	50.50	6	14	Strengthening of livelihood	12
52.	Mustard (Var-PM-30)	1141	1061	50.50	23	57	Strengthening of livelihood	48
53.	Mustard (Var-PM-30)	544	506	50.50	11	27	Strengthening of livelihood	24
54.	Mustard (Var-PM-30)	1221	1136	50.50	24	61	Strengthening of livelihood	48

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)
55.	Mustard (Var-PM-30)	1157	1076	50.50	23	58	Strengthening of livelihood	48
56.	Mustard (Var-PM-30)	619	575	50.50	12	31	Strengthening of livelihood	24
57.	Mustard (Var-PM-30)	1264	1176	50.50	25	63	Strengthening of livelihood	48
58.	Mustard (Var-PM-30)	1259	1171	50.50	25	63	Strengthening of livelihood	48
59.	Mustard (Var-PM-30)	600	558	50.50	12	30	Strengthening of livelihood	24
60.	Mustard (Var-PM-30)	1237	1151	50.50	25	62	Strengthening of livelihood	48
61.	Mustard (Var-PM-30)	1232	1146	50.50	25	62	Strengthening of livelihood	48
62.	Mustard (Var-PM-30)	1232	1146	50.50	25	62	Strengthening of livelihood	48
63.	Mustard (Var-PM-30)	535	497	50.50	11	27	Strengthening of livelihood	24
64.	Mustard (Var-PM-30)	581	541	50.50	12	29	Strengthening of livelihood	24
65.	Mustard (Var-PM-30)	577	537	50.50	12	29	Strengthening of livelihood	24
66.	Mustard (Var-PM-30)	822	764	50.50	16	41	Strengthening of livelihood	36
67.	Mustard (Var-PM-30)	842	783	50.50	17	42	Strengthening of livelihood	36

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 *Alterneria blight* and *White blister*	Yes	Short duration variety

J. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
PM-30 variety : Plant height is165-185 cm & maturity 135-154 Days	High yielding variety Suitable for irrigated condition	High yielding variety Suitable for irrigated condition	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	04/11/2022 at KVK	12
02	Training	03/12/2022 at KVK	11
03	Training	06/12/2022 at KVK	34
04	Field day	02/01/2023 at Nagar	72

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

		
Germination Stage	**Growth Stage**	**Flowering Stage**
		
Pod formation Stage	**Field day**	**Pod 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	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Mustard	i) Critical input	2,40,000.00	2,16,000.00	0.00
	ii) TA/DA/POL etc. for monitoring		24,000.00	
	iii) Extension Activities (Field day)			
	iv) Publication of literature			
	Total	**2,40,000.00**	**2,40,000.00**	**0.00**

Crop - Redgram

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	Red gram	Asha	11.40	177	363	(-) 493	IPA 15-2 + ICM & IPM	12	5.0	16.3	13.6	15.07	7.76	24.09	(-)24.65
02	Red gram		10.90	68	314	(-) 442	Rajeev lochan + ICM & IPM	19	9.25	15.6	13.5	14.58	4.66	21.53	(-)23.26
03	Redgram		10.44	40	286	(-) 516	IPA 203 + ICM & IPM	14	5.75	15.60	11.80	14.30	2.79	20.00	(-)26.51

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	IPA 15-2 + ICM & IPM	35800	75240	39440	2.1	38870	99462	60592	2.56
02	Rajeev lochan+ ICM & IPM	35800	71940	36140	2.0	38890	96228	57338	2.47
03	IPA 203 + ICM & IPM	35800	68640	32800	1.92	39590	94380	54790	2.38

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	Pigeon pea (Var-IPS 15-2)	296	278	6600	15	3	Additional income	
2	Pigeon pea (Var-IPS 15-2)	888	835	6600	25	28	Additional income	
3	Pigeon pea (Var-IPS 15-2)	600	564	6600	34	2	Additional income	
4	Pigeon pea (Var-IPS 15-2)	632	594	6600	30	8	Additional income	
5	Pigeon pea (Var-IPS 15-2)	608	572	6600	25	11	Additional income	
6	Pigeon pea (Var-IPS 15-2)	544	511	6600	20	13	Additional income	
7	Pigeon pea (Var-IPS 15-2)	620	583	6600	30	7	Additional income	
8	Pigeon pea (Var-IPS 15-2)	572	538	6600	30	4	Additional income	
9	Pigeon pea (Var-IPS 15-2)	652	613	6600	35	4	Additional income	
10	Pigeon pea (Var-IPS 15-2)	624	587	6600	35	2	Additional income	
11	Pigeon pea (Var-IPS 15-2)	740	696	6600	35	9	Additional income	
12	Pigeon pea (Var-IPS 15-2)	760	715	6600	45	0	Additional income	
13	Pigeon pea (Var-Rajeev Lochan)	1248	1173	6600	35	40	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/household)
14	Pigeon pea (Var-Rajeev Lochan)	858	807	6600	25	26	Additional income	
15	Pigeon pea (Var-Rajeev Lochan)	858	807	6600	20	31	Additional income	
16	Pigeon pea (Var-Rajeev Lochan)	810	761	6600	25	24	Additional income	
17	Pigeon pea (Var-Rajeev Lochan)	876	823	6600	20	33	Additional income	
18	Pigeon pea (Var-Rajeev Lochan)	435	409	6600	20	6	Additional income	
19	Pigeon pea (Var-Rajeev Lochan)	710	667	6600	20	23	Additional income	
20	Pigeon pea (Var-Rajeev Lochan)	584	549	6600	25	10	Additional income	
21	Pigeon pea (Var-Rajeev Lochan)	1120	1053	6600	20	47	Additional income	
22	Pigeon pea (Var-Rajeev Lochan)	600	564	6600	32	4	Additional income	
23	Pigeon pea (Var-Rajeev Lochan)	604	568	6600	36	0	Additional income	
24	Pigeon pea (Var-Rajeev Lochan)	584	549	6600	30	5	Additional income	
25	Pigeon pea (Var-Rajeev Lochan)	584	549	6600	30	5	Additional income	
26	Pigeon pea (Var-Rajeev Lochan)	608	572	6600	36	0	Additional income	
27	Pigeon pea (Var-Rajeev Lochan)	584	549	6600	30	5	Additional income	
28	Pigeon pea (Var-Rajeev Lochan)	592	556	6600	25	11	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/household)
29	Pigeon pea (Var-Rajeev Lochan)	760	715	6600	45	0	Additional income	
30	Pigeon pea (Var-Rajeev Lochan)	560	526	6600	30	4	Additional income	
31	Pigeon pea (Var-Rajeev Lochan)	572	538	6600	25	9	Additional income	
32	Pigeon pea (Var-IPA 203)	512	481	6600	25	6	Additional income	
33	Pigeon pea (Var-IPA 203)	472	444	6600	28	0	Additional income	
34	Pigeon pea (Var-IPA 203)	608	572	6600	20	16	Additional income	
35	Pigeon pea (Var-IPA 203)	624	587	6600	15	22	Additional income	
36	Pigeon pea (Var-IPA 203)	588	553	6600	20	15	Additional income	
37	Pigeon pea (Var-IPA 203)	544	511	6600	25	8	Additional income	
38	Pigeon pea (Var-IPA 203)	588	553	6600	30	5	Additional income	
39	Pigeon pea (Var-IPA 203)	608	572	6600	15	21	Additional income	
40	Pigeon pea (Var-IPA 203)	584	549	6600	18	17	Additional income	
41	Pigeon pea (Var-IPA 203)	414	389	6600	20	5	Additional income	
42	Pigeon pea (Var-IPA 203)	304	286	6600	18	0	Additional income	
43	Pigeon pea (Var-IPA 203)	675	635	6600	25	16	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/household)
44	Pigeon pea (Var-IPA 203)	876	823	6600	30	23	Additional income	
45	Pigeon pea (Var-IPA 203)	820	770	6600	20	29	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	IPA15-2 + ICM & IPM	Resistant to SMD & wilt	Good cooking quality	Yes	Pod borer	Yes	Pod borer resistant variety
02	Rajeev Lochan + ICM & IPM	Resistant to SMD & wilt	Bold seeded	Yes	Pod borer & pod fly	Yes	Short duration variety
03	IPA 203 + ICM & IPM	Resistant to Phytopthora blight & wilt	Good cooking quality	Yes	Pod borer	Yes	Short duration variety

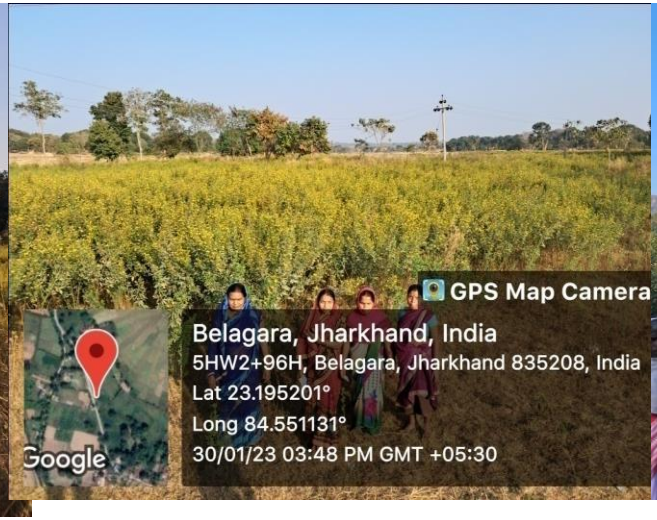
E. Specific Characteristics of Technology and Performance

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
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:

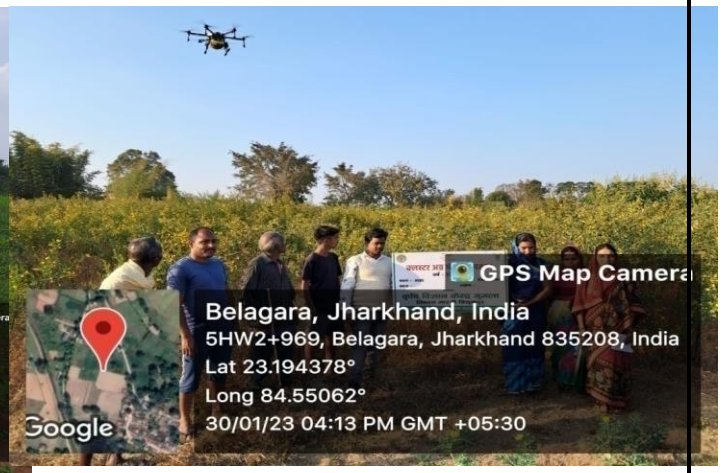
Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
01	Field day	14/02/2023	92

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	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Redgram	i) Critical input	1,80,000.00	1,62,000.00	1,80,000.00
	ii) TA/DA/POL etc. for monitoring		18,000.00	
	iii) Extension Activities (Field day)			
	iv)Publication of literature			
	Total	**1,80,000.00**	**1,80,000.00**	**1,80,000.00**

Crop- Lentil

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**	9.80	500	424	(-)170	IPL-220+ICM	126	20.0	13.90	10.80	12.30	40.65	49.27	(-) 12.14

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	35125	58800	23675	1.67	39603	73800	34197	1.86

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 (Var-IPL 220)	500	425	6000	25	75	Additional Income	
2	Lentil (Var-IPL 220)	488	415	6000	20	73	Additional Income	
3	Lentil (Var-IPL 220)	234	199	6000	25	35	Additional Income	
4	Lentil (Var-IPL 220)	484	411	6000	20	73	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/household)
5	Lentil (Var-IPL 220)	508	432	6000	30	76	Additional Income	
6	Lentil (Var-IPL 220)	246	209	6000	20	37	Additional Income	
7	Lentil (Var-IPL 220)	1032	877	6000	26	155	Additional Income	
8	Lentil (Var-IPL 220)	252	214	6000	20	38	Additional Income	
9	Lentil (Var-IPL 220)	524	445	6000	25	79	Additional Income	
10	Lentil (Var-IPL 220)	224	190	6000	20	34	Additional Income	
11	Lentil (Var-IPL 220)	216	184	6000	15	32	Additional Income	
12	Lentil (Var-IPL 220)	464	394	6000	20	70	Additional Income	
13	Lentil (Var-IPL 220)	242	206	6000	10	36	Additional Income	
14	Lentil (Var-IPL 220)	250	213	6000	12	38	Additional Income	
15	Lentil (Var-IPL 220)	242	206	6000	15	36	Additional Income	
16	Lentil (Var-IPL 220)	752	639	6000	20	113	Additional Income	
17	Lentil (Var-IPL 220)	834	709	6000	20	125	Additional Income	
18	Lentil (Var-IPL 220)	762	648	6000	15	114	Additional Income	
19	Lentil (Var-IPL 220)	524	445	6000	30	79	Additional Income	
20	Lentil (Var-IPL 220)	509	433	6000	20	76	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/household)
21	Lentil (Var-IPL 220)	496	422	6000	15	74	Additional Income	
22	Lentil (Var-IPL 220)	239	203	6000	25	36	Additional Income	
23	Lentil (Var-IPL 220)	78	66	6000	20	12	Additional Income	
24	Lentil (Var-IPL 220)	93	79	6000	15	14	Additional Income	
25	Lentil (Var-IPL 220)	531	451	6000	10	80	Additional Income	
26	Lentil (Var-IPL 220)	94	80	6000	15	14	Additional Income	
27	Lentil (Var-IPL 220)	81	69	6000	10	12	Additional Income	
28	Lentil (Var-IPL 220)	81	69	6000	15	12	Additional Income	
29	Lentil (Var-IPL 220)	81	69	6000	10	12	Additional Income	
30	Lentil (Var-IPL 220)	76	65	6000	20	11	Additional Income	
31	Lentil (Var-IPL 220)	69	59	6000	10	10	Additional Income	
32	Lentil (Var-IPL 220)	65	56	6000	15	10	Additional Income	
33	Lentil (Var-IPL 220)	79	67	6000	25	12	Additional Income	
34	Lentil (Var-IPL 220)	78	66	6000	30	12	Additional Income	
35	Lentil (Var-IPL 220)	71	61	6000	15	11	Additional Income	
36	Lentil (Var-IPL 220)	67	57	6000	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/household)
37	Lentil (Var-IPL 220)	66	56	6000	20	10	Additional Income	
38	Lentil (Var-IPL 220)	67	57	6000	25	10	Additional Income	
39	Lentil (Var-IPL 220)	74	63	6000	20	11	Additional Income	
40	Lentil (Var-IPL 220)	109	93	6000	15	16	Additional Income	
41	Lentil (Var-IPL 220)	71	61	6000	20	11	Additional Income	
42	Lentil (Var-IPL 220)	75	64	6000	10	11	Additional Income	
43	Lentil (Var-IPL 220)	72	61	6000	12	11	Additional Income	
44	Lentil (Var-IPL 220)	71	61	6000	15	11	Additional Income	
45	Lentil (Var-IPL 220)	71	60	6000	20	11	Additional Income	
46	Lentil (Var-IPL 220)	79	67	6000	10	12	Additional Income	
47	Lentil (Var-IPL 220)	78	66	6000	15	12	Additional Income	
48	Lentil (Var-IPL 220)	75	64	6000	20	11	Additional Income	
49	Lentil (Var-IPL 220)	72	61	6000	25	11	Additional Income	
50	Lentil (Var-IPL 220)	69	58	6000	30	10	Additional Income	
51	Lentil (Var-IPL 220)	70	60	6000	35	11	Additional Income	
52	Lentil (Var-IPL 220)	71	60	6000	30	11	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/household)
53	Lentil (Var-IPL 220)	74	63	6000	20	11	Additional Income	
54	Lentil (Var-IPL 220)	543	461	6000	20	81	Additional Income	
55	Lentil (Var-IPL 220)	201	171	6000	15	30	Additional Income	
56	Lentil (Var-IPL 220)	253	215	6000	20	38	Additional Income	
57	Lentil (Var-IPL 220)	269	229	6000	10	40	Additional Income	
58	Lentil (Var-IPL 220)	246	209	6000	12	37	Additional Income	
59	Lentil (Var-IPL 220)	246	209	6000	15	37	Additional Income	
60	Lentil (Var-IPL 220)	221	188	6000	20	33	Additional Income	
61	Lentil (Var-IPL 220)	218	185	6000	10	33	Additional Income	
62	Lentil (Var-IPL 220)	249	211	6000	15	37	Additional Income	
63	Lentil (Var-IPL 220)	253	215	6000	20	38	Additional Income	
64	Lentil (Var-IPL 220)	225	192	6000	25	34	Additional Income	
65	Lentil (Var-IPL 220)	261	222	6000	30	39	Additional Income	
66	Lentil (Var-IPL 220)	246	209	6000	20	37	Additional Income	
67	Lentil (Var-IPL 220)	219	186	6000	15	33	Additional Income	
68	Lentil (Var-IPL 220)	227	193	6000	20	34	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/household)
69	Lentil (Var-IPL 220)	262	223	6000	10	39	Additional Income	
70	Lentil (Var-IPL 220)	533	453	6000	12	80	Additional Income	
71	Lentil (Var-IPL 220)	181	154	6000	15	27	Additional Income	
72	Lentil (Var-IPL 220)	132	112	6000	20	20	Additional Income	
73	Lentil (Var-IPL 220)	84	72	6000	10	13	Additional Income	
74	Lentil (Var-IPL 220)	215	183	6000	15	32	Additional Income	
75	Lentil (Var-IPL 220)	125	106	6000	20	19	Additional Income	
76	Lentil (Var-IPL 220)	209	178	6000	15	31	Additional Income	
77	Lentil (Var-IPL 220)	130	111	6000	20	20	Additional Income	
78	Lentil (Var-IPL 220)	36	30	6000	10	5	Additional Income	
79	Lentil (Var-IPL 220)	39	33	6000	12	6	Additional Income	
80	Lentil (Var-IPL 220)	61	52	6000	15	9	Additional Income	
81	Lentil (Var-IPL 220)	125	107	6000	20	19	Additional Income	
82	Lentil (Var-IPL 220)	37	32	6000	10	6	Additional Income	
83	Lentil (Var-IPL 220)	89	76	6000	20	13	Additional Income	
84	Lentil (Var-IPL 220)	58	49	6000	15	9	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/household)
85	Lentil (Var-IPL 220)	35	30	6000	20	5	Additional Income	
86	Lentil (Var-IPL 220)	183	155	6000	10	27	Additional Income	
87	Lentil (Var-IPL 220)	38	32	6000	12	6	Additional Income	
88	Lentil (Var-IPL 220)	33	28	6000	15	5	Additional Income	
89	Lentil (Var-IPL 220)	38	32	6000	20	6	Additional Income	
90	Lentil (Var-IPL 220)	166	141	6000	10	25	Additional Income	
91	Lentil (Var-IPL 220)	205	174	6000	15	31	Additional Income	
92	Lentil (Var-IPL 220)	221	188	6000	20	33	Additional Income	
93	Lentil (Var-IPL 220)	89	76	6000	25	13	Additional Income	
94	Lentil (Var-IPL 220)	91	78	6000	30	14	Additional Income	
95	Lentil (Var-IPL 220)	249	211	6000	35	37	Additional Income	
96	Lentil (Var-IPL 220)	117	99	6000	30	18	Additional Income	
97	Lentil (Var-IPL 220)	74	63	6000	20	11	Additional Income	
98	Lentil (Var-IPL 220)	79	67	6000	20	12	Additional Income	
99	Lentil (Var-IPL 220)	218	185	6000	15	33	Additional Income	
100	Lentil (Var-IPL 220)	39	33	6000	20	6	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/household)
101	Lentil (Var-IPL 220)	207	176	6000	10	31	Additional Income	
102	Lentil (Var-IPL 220)	38	32	6000	12	6	Additional Income	
103	Lentil (Var-IPL 220)	119	101	6000	15	18	Additional Income	
104	Lentil (Var-IPL 220)	76	64	6000	20	11	Additional Income	
105	Lentil (Var-IPL 220)	109	93	6000	10	16	Additional Income	
106	Lentil (Var-IPL 220)	77	66	6000	15	12	Additional Income	
107	Lentil (Var-IPL 220)	160	136	6000	20	24	Additional Income	
108	Lentil (Var-IPL 220)	38	32	6000	25	6	Additional Income	
109	Lentil (Var-IPL 220)	39	33	6000	30	6	Additional Income	
110	Lentil (Var-IPL 220)	73	62	6000	35	11	Additional Income	
111	Lentil (Var-IPL 220)	77	65	6000	20	12	Additional Income	
112	Lentil (Var-IPL 220)	80	68	6000	15	12	Additional Income	
113	Lentil (Var-IPL 220)	241	205	6000	20	36	Additional Income	
114	Lentil (Var-IPL 220)	440	374	6000	10	66	Additional Income	
115	Lentil (Var-IPL 220)	192	163	6000	12	29	Additional Income	
116	Lentil (Var-IPL 220)	203	173	6000	15	31	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/household)
117	Lentil (Var-IPL 220)	434	369	6000	20	65	Additional Income	
118	Lentil (Var-IPL 220)	222	189	6000	10	33	Additional Income	
119	Lentil (Var-IPL 220)	219	186	6000	15	33	Additional Income	
120	Lentil (Var-IPL 220)	108	92	6000	20	16	Additional Income	
121	Lentil (Var-IPL 220)	109	92	6000	25	16	Additional Income	
122	Lentil (Var-IPL 220)	39	33	6000	30	6	Additional Income	
123	Lentil (Var-IPL 220)	37	32	6000	35	6	Additional Income	
124	Lentil (Var-IPL 220)	78	66	6000	30	12	Additional Income	
125	Lentil (Var-IPL 220)	37	31	6000	20	5	Additional Income	
126	Lentil (Var-IPL 220)	385	327	6000	25	58	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	ICM	Minimum wilt infestation	Better test	Yes	Poor yield	Yes	Need flood tolerant and high yielding variety

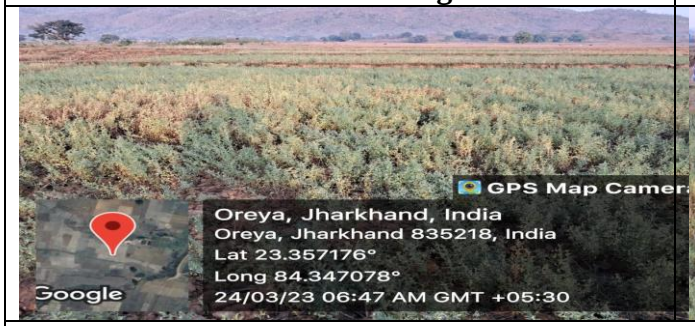
E. Specific Characteristics of Technology and Performance

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	Field day	24/03/2023	30

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

<table>
<tr><td> 
</td><td> 
</td><td>  </td></tr>
<tr><td>Germination stage</td><td>Growth stage</td><td>Field day on ripening stage</td></tr>
<tr><td> 
</td><td>  </td><td>  </td></tr>
<tr><td colspan="2">Ripening stage</td><td>Crop cutting</td></tr>
</table>

9. Farmers' training photographs

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

11. Details of budget utilization

Crop	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Lentil	i) Critical input	180000.00	162000.00	0.00
	ii) TA/DA/POL etc. for monitoring		18000.00	
	iii) Extension Activities (Field day)			
	iv)Publication of literature			
	Total	**180000.00**	**180000.00**	**0.00**

Crop-Blackgram (Kharif 2023-24)

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	**Black Gram**	**Local**	8.10	420	200	448	PU-31+ICM	70	30	12.50	8.20	10.42	40.43	19.19	(-) 30.11

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	PU-31 +ICM	27800	56295	28495	2.02	30600	72419	41819	2.37

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	Blackgram Var.- PU-31	198	178	69.50	10	10	Additional Income	15
2	Blackgram Var.- PU-31	222	197	69.50	15	10	Additional Income	15
3	Blackgram Var.- PU-31	109	79	69.50	15	15	Additional Income	7
4	Blackgram Var.- PU-31	200	180	69.50	10	10	Additional	15

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)
							Income	
5	Blackgram Var.- PU-31	236	204	69.50	20	12	Additional Income	15
6	Blackgram Var.- PU-31	232	202	69.50	10	20	Additional Income	15
7	Blackgram Var.- PU-31	214	189	69.50	15	10	Additional Income	15
8	Blackgram Var.- PU-31	218	188	69.50	20	10	Additional Income	15
9	Blackgram Var.- PU-31	214	189	69.50	10	15	Additional Income	15
10	Blackgram Var.- PU-31	87	62	69.50	15	10	Additional Income	7
11	Blackgram Var.- PU-31	106	71	69.50	20	15	Additional Income	7
12	Blackgram Var.- PU-31	104	74	69.50	10	20	Additional Income	7
13	Blackgram Var.- PU-31	82	42	69.50	20	20	Additional Income	7
14	Blackgram Var.- PU-31	116	86	69.50	15	15	Additional Income	7
15	Blackgram Var.- PU-31	104	74	69.50	20	10	Additional Income	7
16	Blackgram Var.- PU-31	99	69	69.50	20	10	Additional Income	7
17	Blackgram Var.- PU-31	250	218	69.50	20	12	Additional Income	15
18	Blackgram Var.- PU-31	208	178	69.50	15	15	Additional Income	15
19	Blackgram Var.- PU-31	194	159	69.50	15	20	Additional Income	15

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)
20	Blackgram Var.- PU-31	678	653	69.50	10	15	Additional Income	44
21	Blackgram Var.- PU-31	400	365	69.50	15	20	Additional Income	30
22	Blackgram Var.- PU-31	432	392	69.50	20	20	Additional Income	30
23	Blackgram Var.- PU-31	396	361	69.50	15	20	Additional Income	30
24	Blackgram Var.- PU-31	408	378	69.50	15	15	Additional Income	30
25	Blackgram Var.- PU-31	440	405	69.50	20	15	Additional Income	30
26	Blackgram Var.- PU-31	384	344	69.50	20	20	Additional Income	30
27	Blackgram Var.- PU-31	220	195	69.50	15	10	Additional Income	15
28	Blackgram Var.- PU-31	188	163	69.50	15	10	Additional Income	15
29	Blackgram Var.- PU-31	412	377	69.50	20	15	Additional Income	30
30	Blackgram Var.- PU-31	412	370	69.50	30	12	Additional Income	30
31	Blackgram Var.- PU-31	400	370	69.50	20	10	Additional Income	30
32	Blackgram Var.- PU-31	416	383	69.50	25	8	Additional Income	30
33	Blackgram Var.- PU-31	488	468	69.50	10	10	Additional Income	30
34	Blackgram Var.- PU-31	412	387	69.50	10	15	Additional Income	30
35	Blackgram Var.- PU-31	396	371	69.50	15	10	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/household)
36	Blackgram Var.- PU-31	440	410	69.50	15	15	Additional Income	30
37	Blackgram Var.- PU-31	228	198	69.50	20	10	Additional Income	15
38	Blackgram Var.- PU-31	210	185	69.50	15	10	Additional Income	15
39	Blackgram Var.- PU-31	200	180	69.50	10	10	Additional Income	15
40	Blackgram Var.- PU-31	206	176	69.50	15	15	Additional Income	15
41	Blackgram Var.- PU-31	202	172	69.50	20	10	Additional Income	15
42	Blackgram Var.- PU-31	204	177	69.50	12	15	Additional Income	15
43	Blackgram Var.- PU-31	444	424	69.50	10	10	Additional Income	30
44	Blackgram Var.- PU-31	208	178	69.50	20	10	Additional Income	15
45	Blackgram Var.- PU-31	404	364	69.50	20	20	Additional Income	30
46	Blackgram Var.- PU-31	220	185	69.50	15	20	Additional Income	15
47	Blackgram Var.- PU-31	186	151	69.50	20	15	Additional Income	15
48	Blackgram Var.- PU-31	202	167	69.50	25	10	Additional Income	15
49	Blackgram Var.- PU-31	218	188	69.50	20	10	Additional Income	15
50	Blackgram Var.- PU-31	218	188	69.50	15	15	Additional Income	15
51	Blackgram Var.- PU-31	285	265	69.50	10	10	Additional Income	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/household)
52	Blackgram Var.- PU-31	315	280	69.50	20	15	Additional Income	22
53	Blackgram Var.- PU-31	224	199	69.50	15	10	Additional Income	15
54	Blackgram Var.- PU-31	200	165	69.50	20	15	Additional Income	15
55	Blackgram Var.- PU-31	408	386	69.50	12	10	Additional Income	30
56	Blackgram Var.- PU-31	424	397	69.50	15	12	Additional Income	30
57	Blackgram Var.- PU-31	412	384	69.50	18	10	Additional Income	30
58	Blackgram Var.- PU-31	372	342	69.50	20	10	Additional Income	30
59	Blackgram Var.- PU-31	436	401	69.50	20	15	Additional Income	30
60	Blackgram Var.- PU-31	404	379	69.50	15	10	Additional Income	30
61	Blackgram Var.- PU-31	384	359	69.50	10	15	Additional Income	30
62	Blackgram Var.- PU-31	416	381	69.50	20	15	Additional Income	30
63	Blackgram Var.- PU-31	424	399	69.50	15	10	Additional Income	30
64	Blackgram Var.- PU-31	400	370	69.50	20	10	Additional Income	30
65	Blackgram Var.- PU-31	408	368	69.50	30	10	Additional Income	30
66	Blackgram Var.- PU-31	384	354	69.50	20	10	Additional Income	30
67	Blackgram Var.- PU-31	440	405	69.50	15	20	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/household)
68	Blackgram Var.- PU-31	400	355	69.50	20	25	Additional Income	30
69	Blackgram Var.- PU-31	404	384	69.50	10	10	Additional Income	30
70	Blackgram Var.- PU-31	228	198	69.50	15	15	Additional Income	15

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	Blackgram+ICM	Minimum YVMV	Less fertilizer	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 YMV	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	13/07/2023 at KVK HQ	25
02	Training	16/07/2023 at KVK HQ	17
03	Training	17/07/2023 at KVK HQ	13
04	Field day	05/11/2023 at Telgawn	21

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	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Blackgram	i) Critical input	0.00	96950.00	(-) 111132.00
	ii) TA/DA/POL etc. for monitoring		14182.00	
	iii) Extension Activities (Field day)			
	iv)Publication of literature			
	Total	**0.00**	**111132.00**	**(-) 111132.00**

Crop - Sesame

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	Local	4.95	276	326	(-) 1600	GJT-5 & ICM	32	11.6	8.30	6.50	7.44	37.09	43.81	(-) 68.26
02		Local	4.71	217	267	(-) 165	Kanke Safed & ICM	19	8.4	7.70	6.00	6.85	29.20	38.98	(-) 19.41

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	GJT-5 & ICM	23275	42743	19468	1.84	27115	64244	37129	2.37
02	Kanke Safed & ICM	23275	40670	17395	1.75	26443	59149	32706	2.24

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 (Var-Gujrat Til-5)	292	287	86.35	3	2	Additional income	21
2.	Sesame (Var-Gujrat Til-5)	304	298	86.35	3	3	Additional income	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)
3.	Sesame (Var-Gujrat Til-5)	276	270	86.35	4	2	Additional income	21
4.	Sesame (Var-Gujrat Til-5)	300	292	86.35	5	3	Additional income	21
5.	Sesame (Var-Gujrat Til-5)	284	276	86.35	3	5	Additional income	21
6.	Sesame (Var-Gujrat Til-5)	560	554	86.35	2	4	Additional income	42
7.	Sesame (Var-Gujrat Til-5)	284	278	86.35	3	3	Additional income	21
8.	Sesame (Var-Gujrat Til-5)	292	286	86.35	4	2	Additional income	21
9.	Sesame (Var-Gujrat Til-5)	320	312	86.35	5	3	Additional income	21
10.	Sesame (Var-Gujrat Til-5)	156	150	86.35	3	3	Additional income	10
11.	Sesame (Var-Gujrat Til-5)	154	146	86.35	4	4	Additional income	10
12.	Sesame (Var-Gujrat Til-5)	316	309	86.35	4	3	Additional income	21
13.	Sesame (Var-Gujrat Til-5)	164	156	86.35	5	3	Additional income	10
14.	Sesame (Var-Gujrat Til-5)	140	132	86.35	3	5	Additional income	10
15.	Sesame (Var-Gujrat Til-5)	77	71	86.35	3	3	Additional income	5
16.	Sesame (Var-Gujrat Til-5)	158	152	86.35	4	2	Additional income	10
17.	Sesame (Var-Gujrat Til-5)	72	64	86.35	5	3	Additional income	5
18.	Sesame (Var-Gujrat Til-5)	332	321	86.35	3	8	Additional income	21
19.	Sesame (Var-Gujrat Til-5)	148	135	86.35	3	10	Additional income	10
20.	Sesame (Var-Gujrat Til-5)	144	128	86.35	4	12	Additional income	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)
21.	Sesame (Var-Gujrat Til-5)	152	140	86.35	4	8	Additional income	10
22.	Sesame (Var-Gujrat Til-5)	158	152	86.35	3	3	Additional income	10
23.	Sesame (Var-Gujrat Til-5)	156	150	86.35	3	3	Additional income	10
24.	Sesame (Var-Gujrat Til-5)	284	275	86.35	4	5	Additional income	21
25.	Sesame (Var-Gujrat Til-5)	288	281	86.35	4	3	Additional income	21
26.	Sesame (Var-Gujrat Til-5)	284	273	86.35	5	6	Additional income	21
27.	Sesame (Var-Gujrat Til-5)	276	269	86.35	3	4	Additional income	21
28.	Sesame (Var-Gujrat Til-5)	300	293	86.35	4	3	Additional income	21
29.	Sesame (Var-Gujrat Til-5)	624	614	86.35	5	5	Additional income	42
30.	Sesame (Var-Gujrat Til-5)	520	509	86.35	5	6	Additional income	42
31.	Sesame (Var-Gujrat Til-5)	444	436	86.35	5	3	Additional income	31
32.	Sesame (Var-Gujrat Til-5)	292	282	86.35	5	5	Additional income	21
33.	Sesame (Var-Kanke Safed)	240	230	86.35	4	6	Additional income	21
34.	Sesame (Var-Kanke Safed)	520	511	86.35	4	5	Additional income	42
35.	Sesame (Var-Kanke Safed)	420	410	86.35	5	5	Additional income	31
36.	Sesame (Var-Kanke Safed)	240	232	86.35	4	4	Additional income	21
37.	Sesame (Var-Kanke Safed)	592	580	86.35	6	6	Additional income	42
38.	Sesame (Var-Kanke Safed)	308	298	86.35	5	5	Additional income	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)
39.	Sesame (Var-Kanke Safed)	284	275	86.35	4	5	Additional income	21
40.	Sesame (Var-Kanke Safed)	396	385	86.35	6	5	Additional income	31
41.	Sesame (Var-Kanke Safed)	288	279	86.35	5	4	Additional income	21
42.	Sesame (Var-Kanke Safed)	284	275	86.35	4	5	Additional income	21
43.	Sesame (Var-Kanke Safed)	304	295	86.35	5	4	Additional income	21
44.	Sesame (Var-Kanke Safed)	284	272	86.35	6	6	Additional income	21
45.	Sesame (Var-Kanke Safed)	276	266	86.35	5	5	Additional income	21
46.	Sesame (Var-Kanke Safed)	272	264	86.35	4	4	Additional income	21
47.	Sesame (Var-Kanke Safed)	136	125	86.35	6	5	Additional income	10
48.	Sesame (Var-Kanke Safed)	122	113	86.35	4	5	Additional income	10
49.	Sesame (Var-Kanke Safed)	268	257	86.35	6	5	Additional income	21
50.	Sesame (Var-Kanke Safed)	280	269	86.35	5	6	Additional income	21
51.	Sesame (Var-Kanke Safed)	264	253	86.35	6	5	Additional income	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	ICM	Yes	Less water requiring crop	Yes	Crop yield affected by caterpillars	Yes	Required high yielding crop variety
2	ICM	Yes	Less water requiring crop	Yes	Phyllody disease	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
85-91 days variety, white seed & Incidence of *Alternaria* & *Cercospora* leaf spots, *Phytopthora* and Powdery mildew diseases	Good	More no of capsules, bold seeded & branches is more than local variety	Overall good performance
80-90 days variety, white seeded & short intermodal distance	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	06/07/2023 at KVK HQ	07
02	Training	17/07/2023 at KVK HQ	19
03	Training	20/07/2023 at KVK HQ	10
04	Field Day	06/10/2023 at Matimtoli	19

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	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Sesame	i) Critical input	100000.00	11250.00	0.00
	ii) TA/DA/POL etc. for monitoring		88750.00	
	iii) Extension Activities (Field day)			
	iv) Publication of literature			
	Total	**100000.00**	**100000.00**	**0.00**

Crop - Niger

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**	Deomali	3.31	362	162	(-) 140	Birsa Niger-1+ ICM	55	30	5.30	3.83	4.60	78.69	35.22	(-) 23.33

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	Birsa Niger -1 + ICM	19280	25599	6319	1.33	21210	35576	14366	1.67

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/household)
1	Niger (Var-Birsa Niger-1)	380	362	77.34	12	6	Additional income	42
2	Niger (Var-Birsa Niger-1)	358	338	77.34	10	10	Additional income	42
3	Niger (Var-Birsa Niger-1)	424	401	77.34	8	15	Additional income	42
4	Niger (Var-Birsa Niger-1)	326	304	77.34	10	12	Additional income	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/household)
5	Niger (Var-Birsa Niger-1)	378	346	77.34	12	20	Additional income	42
6	Niger (Var-Birsa Niger-1)	376	246	77.34	10	120	Additional income	42
7	Niger (Var-Birsa Niger-1)	350	328	77.34	7	15	Additional income	42
8	Niger (Var-Birsa Niger-1)	378	350	77.34	8	20	Additional income	42
9	Niger (Var-Birsa Niger-1)	183	148	77.34	10	25	Additional income	21
10	Niger (Var-Birsa Niger-1)	180	158	77.34	12	10	Additional income	21
11	Niger (Var-Birsa Niger-1)	185	165	77.34	10	10	Additional income	21
12	Niger (Var-Birsa Niger-1)	370	345	77.34	10	15	Additional income	42
13	Niger (Var-Birsa Niger-1)	265	245	77.34	8	12	Additional income	32
14	Niger (Var-Birsa Niger-1)	185	160	77.34	10	15	Additional income	21
15	Niger (Var-Birsa Niger-1)	360	340	77.34	8	12	Additional income	42
16	Niger (Var-Birsa Niger-1)	360	333	77.34	7	20	Additional income	42
17	Niger (Var-Birsa Niger-1)	193	160	77.34	8	25	Additional income	21
18	Niger (Var-Birsa Niger-1)	180	158	77.34	8	14	Additional income	21
19	Niger (Var-Birsa Niger-1)	153	124	77.34	12	17	Additional income	21
20	Niger (Var-Birsa Niger-1)	180	153	77.34	12	15	Additional income	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/household)
21	Niger (Var-Birsa Niger-1)	189	169	77.34	10	10	Additional income	21
22	Niger (Var-Birsa Niger-1)	160	140	77.34	10	10	Additional income	21
23	Niger (Var-Birsa Niger-1)	189	167	77.34	12	10	Additional income	21
24	Niger (Var-Birsa Niger-1)	97	62	77.34	15	20	Additional income	11
25	Niger (Var-Birsa Niger-1)	180	150	77.34	10	20	Additional income	21
26	Niger (Var-Birsa Niger-1)	390	365	77.34	10	15	Additional income	42
27	Niger (Var-Birsa Niger-1)	290	262	77.34	8	20	Additional income	32
28	Niger (Var-Birsa Niger-1)	370	350	77.34	5	15	Additional income	42
29	Niger (Var-Birsa Niger-1)	188	170	77.34	8	10	Additional income	21
30	Niger (Var-Birsa Niger-1)	169	149	77.34	10	10	Additional income	21
31	Niger (Var-Birsa Niger-1)	188	158	77.34	10	20	Additional income	21
32	Niger (Var-Birsa Niger-1)	165	135	77.34	10	20	Additional income	21
33	Niger (Var-Birsa Niger-1)	188	158	77.34	10	20	Additional income	21
34	Niger (Var-Birsa Niger-1)	170	145	77.34	10	15	Additional income	21
35	Niger (Var-Birsa Niger-1)	175	145	77.34	10	20	Additional income	21
36	Niger (Var-Birsa Niger-1)	190	165	77.34	10	15	Additional income	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/household)
37	Niger (Var-Birsa Niger-1)	180	148	77.34	12	20	Additional income	21
38	Niger (Var-Birsa Niger-1)	280	253	77.34	12	15	Additional income	32
39	Niger (Var-Birsa Niger-1)	190	165	77.34	15	10	Additional income	21
40	Niger (Var-Birsa Niger-1)	199	174	77.34	15	10	Additional income	21
41	Niger (Var-Birsa Niger-1)	288	256	77.34	12	20	Additional income	32
42	Niger (Var-Birsa Niger-1)	378	348	77.34	10	20	Additional income	42
43	Niger (Var-Birsa Niger-1)	87	57	77.34	10	20	Additional income	11
44	Niger (Var-Birsa Niger-1)	190	165	77.34	10	15	Additional income	21
45	Niger (Var-Birsa Niger-1)	390	370	77.34	10	10	Additional income	42
46	Niger (Var-Birsa Niger-1)	160	135	77.34	15	10	Additional income	21
47	Niger (Var-Birsa Niger-1)	188	170	77.34	8	10	Additional income	21
48	Niger (Var-Birsa Niger-1)	180	158	77.34	7	15	Additional income	21
49	Niger (Var-Birsa Niger-1)	193	170	77.34	8	15	Additional income	21
50	Niger (Var-Birsa Niger-1)	380	360	77.34	10	10	Additional income	42
51	Niger (Var-Birsa Niger-1)	344	324	77.34	10	10	Additional income	42
52	Niger (Var-Birsa Niger-1)	184	164	77.34	10	10	Additional income	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/household)
53	Niger (Var-Birsa Niger-1)	364	342	77.34	12	10	Additional income	42
54	Niger (Var-Birsa Niger-1)	398	376	77.34	12	10	Additional income	42
55	Niger (Var-Birsa Niger-1)	179	157	77.34	10	12	Additional income	21

D. Oilseed 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	Yes	Less fertilizer	Yes	Crop yield affected by caterpillars & cut worm	Yes	High yielding variety

E. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
110-120 days variety and & stem is purple in color	Good	No. of branches and capsule is more than local field	Long duration 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	23/08/2023	23
		28/08/2023	20
		30/08/2023	10
02	Field day	18/11/2023 at Duttra	32
		20/11/2023 at Gunia	14

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

Growth stage

Application of Nano urea through Drone

Flowering stage

Flowering and capsule formation stage

Mature Stage

9. Farmers' training photographs

Training & input distribution

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

11. Details of budget utilization

Crop	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Niger	i) Critical input	149952.00	15642.00	**0.00**
	ii) TA/DA/POL etc. for monitoring		134310.00	
	iii) Extension Activities (Field day)			
	iv)Publication of literature			
	Total	**149952.00**	**149952.00**	**0.00**

3.4 ACHIEVEMENTS ON TRAINING /CAPACITY BUILDING PROGRAMMES

(Mandated KVK trainings/sponsored training /FLD training programmes):

A) Farmers and farm women including the sponsored training programme (on 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
(A) Farmers & Farm Women													
I. Crop Production													
Weed Management	1	0	0	0	0	0	0	16	1	17	16	1	17
Resource Conservation Technologies													
Cropping Systems													
Crop Diversification	1	0	0	0	0	0	0	19	0	19	19	0	19
Integrated Farming	2	0	0	0	0	0	0	30	0	30	30	0	30
Water management													
Seed production													
Nursery management													
Integrated Crop Management	31	31	15	46	2	1	3	285	175	460	318	191	509
Fodder production													
Production of organic inputs													
Others, (cultivation of crops)													
Total	**35**	**31**	**15**	**46**	**2**	**1**	**3**	**350**	**176**	**526**	**383**	**192**	**575**
II. Horticulture													
a) Vegetable Crops													
Integrated nutrient management													
Water management													
Enterprise development													
Skill development													
Yield increment													
Production of low volume and high value crops	1	1	0	1	0	0	0	5	6	11	6	6	12
Off-season vegetables													
Nursery raising													
Export potential vegetables													
Grading and standardization													
Protective cultivation (Green Houses, Shade Net etc.)													
Others, if any (Cultivation of Vegetable)													
Capacity building	1	0	1	1	0	0	0	21	2	23	21	3	24
Machchan Kheti	1	2	0	2	0	0	0	11	0	11	13	0	13
b) Fruits													
Layout and Management of Orchards													

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													
Cultivation of Fruit	1	0	0		0	0		20	1	21	20	1	21
Management of young plants/orchards													
Rejuvenation of old orchards													
Export potential fruits													
Micro irrigation systems of orchards													
Plant propagation techniques	1	0	1	1	0	0	0	9	0	9	9	1	10
Others, if any(INM)													
c) Ornamental Plants													
Nursery Management													
Management of potted plants	1	0	0	0	0	0	0	12	4	16	12	4	16
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													
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	19	1	20	19	1	20
Post-harvest technology and value addition													
Others, if any													
Total	**7**	**3**	**2**	**5**	**0**	**0**	**0**	**97**	**14**	**111**	**100**	**16**	**116**
III. Soil Health and Fertility Management													

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													
Soil fertility management													
Soil and Water Conservation													
Integrated Nutrient Management	1	1	0	1	0	0	0	1	18	19	2	18	20
Production and use of organic inputs	1	0	0	0	0	0	0	29	6	35	29	6	35
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency													
Soil and Water Testing													
Others, if any													
Liquid fertilizer	1	0	0	0	0	0	0	16	4	20	16	4	20
Balance use of fertilizer	1	0	0	0	0	0	0	1	17	18	1	17	18
Fertilizer management	1	3	0	3	0	0	0	14	0	14	17	0	17
Total	**5**	**4**	**0**	**4**	**0**	**0**	**0**	**61**	**45**	**106**	**65**	**45**	**110**
IV. Livestock Production and Management													
Dairy Management													
Poultry Management													
Piggery Management	2	1	1	2	1	0	1	28	12	40	30	13	43
Rabbit Management													
Disease Management													
Feed management													
Production of quality animal products													
Others, if any Goat farming													
Smart Krishi	1	5	2	7	0	1	1	21	24	45	26	27	53
Animal vaccination	2	0	0	0	0	1	1	44	5	49	44	6	50
Goatry	2	1	1	2	0	0	0	16	12	28	17	13	30
Total	**7**	**7**	**4**	**11**	**1**	**2**	**3**	**109**	**53**	**162**	**117**	**59**	**176**
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening	1	0	0	0	0	0	0	0	16	16	0	16	16
Design and development of low/minimum cost diet	1	0	0	0	0	3	3	0	18	18	0	21	21
Designing and development for high nutrient efficiency diet													
Minimization of nutrient loss in processing													
Gender mainstreaming													

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													
through SHGs													
Storage loss minimization techniques													
Enterprise development													
Value addition	1	0	0	0	0	0	0	0	26	26	0	26	26
Income generation activities for empowerment of rural Women													
Location specific drudgery reduction technologies													
Rural Crafts													
Capacity building	1	0	0	0	0	0	0	0	15	15	0	15	15
Women and child care	1	0	0	0	0	0	0	0	24	24	0	24	24
Others, if any													
Group dynamics	1	0	0	0	0	0	0	0	20	20	0	20	20
Nutritional garden	1	0	0	0	0	0	0	0	20	20	0	20	20
Total	**7**	**0**	**0**	**0**	**0**	**3**	**3**	**0**	**139**	**139**	**0**	**142**	**142**
VI. Agril. Engineering													
Installation and maintenance of micro irrigation systems													
Use of Plastics in farming practices	1	0	0	0	0	0	0	31	7	38	31	7	38
Production of small tools and implements													
Repair and maintenance of farm machinery and implements	1	0	0	0	0	0	0	16	5	21	16	5	21
Small scale processing and value addition													
Post-Harvest Technology													
Others, if any													
Farm mechanization	1	2	0	2	1	0	1	16	0	16	19	0	19
Record keeping	1	0	1	1	0	0	0	1	0	1	1	1	2
Micro irrigation system	1	0	0	0	0	0	0	21	0	21	21	0	21
Water conservation	1	3	8	11	0	0	0	30	2	32	33	10	43
Water harvesting	2	1	1	2	0	1	1	10	44	54	11	46	57
Total	**8**	**6**	**10**	**16**	**1**	**1**	**2**	**125**	**58**	**183**	**132**	**69**	**201**
VII. Plant Protection													
Integrated Pest Management	4	1	1	2	1	2	3	35	33	68	37	36	73
Integrated Disease Management													
Bio-control of pests and diseases													
Production of bio control agents and bio pesticides													

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													
Others, if any													
Seed treatment	1	2	1	3	2	0	2	6	4	10	10	5	15
Integrated Crop Management	1	0	0	0	1	0	1	7	5	12	8	5	13
Weedicide	2	56	14	70	4	0	4	12	14	26	72	28	100
Total	8	59	16	75	8	2	10	60	56	116	127	74	201
VIII. Fisheries													
Integrated fish farming													
Carp breeding and hatchery management													
Carp fry and fingerling rearing													
Composite fish culture & fish disease													
Fish feed preparation & its application to fish pond, like nursery, rearing & stocking pond													
Hatchery management and culture of freshwater prawn													
Breeding and culture of ornamental fishes													
Portable plastic carp hatchery													
Pen culture of fish and prawn													
Shrimp farming													
Edible oyster farming													
Pearl culture													
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													

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													
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	**77**	**110**	**47**	**157**	**12**	**9**	**21**	**802**	**541**	**1343**	**924**	**597**	**1521**

B) Rural Youth including the sponsored training programme (On 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) RURAL YOUTH													
Mushroom Production	3	0	0	0	0	0	0	1	50	51	1	50	51
Bee-keeping	2	8	1	9	0	0	0	5	17	22	13	18	31
Integrated farming													
Seed production													
Production of organic inputs													
Integrated Farming													
Planting material production													
Vermi-culture	4	10	4	14	0	0	0	58	31	89	68	35	103
Sericulture													
Protected cultivation of vegetable crops													
Commercial fruit production													
Repair and maintenance of farm machinery and implements													
Nursery Management of Horticulture crops	1	8	0	8	0	0	0	6	3	9	14	3	17
Training and pruning of orchards	1	1	0	1	0	0	0	12	0	12	13	0	13
Value addition	1	0	2	2	0	0	0	0	17	17	0	19	19
Production of quality animal products													
Dairying	1	1	0	1	0	0	0	6	3	9	7	3	10
Sheep and goat rearing													
Quail farming													
Piggery	2	1	0	1	0	0	0	32	15	47	33	15	48
Rabbit farming				0			0			0	0	0	0
Poultry production	1	1	2	3	0	1	1	9	12	21	10	15	25
Ornamental fisheries													
Enterprise development													
Para vets	3	3	19	22	0	1	1	20	22	42	23	42	65
Para extension workers													
Composite fish culture													
Freshwater prawn culture													
Shrimp farming													
Pearl culture													
Cold water fisheries													
Fish harvest and													

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) RURAL YOUTH													
processing technology													
Fry and fingerling rearing													
Small scale processing													
Post-Harvest Technology													
Tailoring and Stitching	1	0	5	5	0	0	0	0	16	16	0	21	21
Rural Crafts													
Lac cultivation	4	3	0	3	0	0	0	50	8	58	53	8	61
Fruit production	3	7	1	8	0	0	0	54	18	72	61	19	80
Plant propagation technique	1	1	0	1	0	0	0	9	0	9	10	0	10
Soil testing	1	0	1	1	0	0	0	0	15	15	0	16	16
Fish-cum-Duck farming	1	1	2	3	0	0	0	17	0	17	18	2	20
Micro irrigation	2	15	2	17	0	0	0	13	1	14	28	3	31
Integrated Nutrient Management	2	65	9	74	4	0	4	12	0	12	81	9	90
Total	**34**	**125**	**48**	**173**	**4**	**2**	**6**	**304**	**228**	**532**	**433**	**278**	**711**

C) Extension Personnel Including the sponsored training programmes (on 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
(C) Extension Personnel													
Productivity enhancement in field crops													
Integrated Pest Management													
Integrated Nutrient management													
Rejuvenation of old orchards													
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													
Any other													
Natural Farming	1	8	0	8	0	0	0	31	3	34	39	3	42
TOTAL	**1**	**8**	**0**	**8**	**0**	**0**	**0**	**31**	**3**	**34**	**39**	**3**	**42**

D) Farmers and farm women 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
(A) Farmers & Farm Women													
I. Crop Production													
Weed Management													
Resource Conservation Technologies													
Cropping Systems	1	0	0	0	0	0	0	8	0	8	8	0	8
Crop Diversification													
Integrated Farming	1	0	0	0	0	0	0	9	0	9	9	0	9
Water management													
Seed production													
Nursery management													
Integrated Crop Management	31	130	124	254	13	5	18	407	427	834	550	556	1106
Fodder production													
Production of organic inputs	1	0	0	0	0	0	0	15	0	15	15	0	15
Others, (cultivation of crops)													
Organic farming	2	1	31	32	0	0	0	1	16	17	2	47	49
Natural farming	1	19	3	22	0	0	0	4	2	6	23	5	28
Post harvest technology	1	0	0	0	0	0	0	27	3	30	27	3	30
Total	**38**	**150**	**158**	**308**	**13**	**5**	**18**	**471**	**448**	**919**	**634**	**611**	**1245**
II. Horticulture													
a) Vegetable Crops													
Integrated nutrient management													
Water management													
Enterprise development													
Skill development													
Yield increment													
Production of low volume and high value crops	1	0	0	0	0	0	0	16	9	25	16	9	25
Off-season vegetables													
Nursery raising													
Export potential vegetables													
Grading and standardization													
Protective cultivation (Green Houses, Shade Net etc.)	1	0	0	0	0	0	0	20	0	20	20	0	20
Others, if any (Cultivation of Vegetable)													
Nursery management	1	3	2	5	0	0	0	17	0	17	20	2	22
Exotic vegetables	1	1	0	1	0	0	0	17	3	20	18	3	21
b) Fruits													
Layout and Management of Orchards	1	1	0	1	0	0	0	3	15	18	4	15	19

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													
Cultivation of Fruit	1	0	9	9	0	0	0	12	0	12	12	9	21
Management of young plants/orchards													
Rejuvenation of old orchards													
Export potential fruits													
Micro irrigation systems of orchards													
Plant propagation techniques													
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	16	13	29	16	13	29
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	2	11	13	2	11	13
Post-harvest technology and value addition													
Others, if any													
Total	**8**	**5**	**11**	**16**	**0**	**0**	**0**	**103**	**51**	**154**	**108**	**62**	**170**
III. Soil Health and Fertility Management													
Soil fertility management	1	0	0	0	0	0	0	10	7	17	10	7	17
Soil and Water Conservation													
Integrated Nutrient Management	5	6	1	7	0	0	0	61	86	147	67	87	154

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													
Production and use of organic inputs	1	1	0	1	0	0	0	12	13	25	13	13	26
Management of Problematic soils	1	1	1	2	0	0	0	11	6	17	12	7	19
Micro nutrient deficiency in crops	1	0	0	0	0	0	0	28	4	32	28	4	32
Nutrient Use Efficiency	1	2	9	11	0	0	0	8	7	15	10	16	26
Soil and Water Testing	1	2	1	3	0	0	0	9	8	17	11	9	20
Others, if any													
Organic farming	1	1	0	1	0	0	0	7	2	9	8	2	10
Soil health management	2	0	0	0	0	0	0	33	16	49	33	16	49
Natural farming	1	1	0	1	0	0	0	11	0	11	12	0	12
Liquid fertilizer	2	9	0	9	2	0	2	39	3	42	50	3	53
Soil sampling	1	11	0	11	0	0	0	2	0	2	13	0	13
Total	**18**	**34**	**12**	**46**	**2**	**0**	**2**	**231**	**152**	**383**	**267**	**164**	**431**
IV. Livestock Production and Management													
Dairy Management	1	0	0	0	2	3	5	10	9	19	12	12	24
Poultry Management	1	5	18	23	0	1	1	0	10	10	5	29	34
Piggery Management	3	3	19	22	0	1	1	40	13	53	43	33	76
Rabbit Management													
Disease Management													
Feed management	1	4	15	19	0	0	0	0	7	7	4	22	26
Production of quality animal products													
Others, if any Goat farming													
Milk production	1	0	0	0	0	0	0	61	4	65	61	4	65
Fodder conservation	1	0	0	0	0	0	0	24	0	24	24	0	24
Goatry management	2	11	19	30	0	1	1	22	35	57	33	55	88
Total	**10**	**23**	**71**	**94**	**2**	**6**	**8**	**157**	**78**	**235**	**182**	**155**	**337**
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening													
Design and development of low/minimum cost diet													
Designing and development for high nutrient efficiency diet	1	0	0	0	0	0	0	0	31	31	0	31	31
Minimization of nutrient loss in processing	1	0	8	8	0	1	0	0	7	7	0	16	16
Gender mainstreaming through SHGs													
Storage loss minimization techniques	1	0	0	0	0	0	0	0	20	20	0	20	20
Enterprise development													

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													
Value addition	2	0	3	3	0	0	0	0	37	37	0	40	40
Income generation activities for empowerment of rural Women													
Location specific drudgery reduction technologies													
Rural Crafts													
Capacity building													
Women and child care													
Others, if any													
Food processing	1	0	5	5	0	0	0	0	7	7	0	12	12
Mushroom production	1	0	0		0	0		0	17	17	0	17	17
Total	**7**	**0**	**16**	**16**	**0**	**1**	**0**	**0**	**119**	**119**	**0**	**136**	**136**
VI. Agril. Engineering													
Installation and maintenance of micro irrigation systems													
Use of Plastics in farming practices													
Production of small tools and implements	2	0	0	0	0	0	0	15	17	32	15	17	32
Repair and maintenance of farm machinery and implements	1	1	0	1	0	0	0	13	4	17	14	4	18
Small scale processing and value addition													
Post-Harvest Technology													
Rain water harvesting	2	1	0	1	0	0	0	31	7	38	32	7	39
Finance and accounting of FPO	1	9	4	13	0	0	0	12	3	15	21	7	28
Total	**6**	**11**	**4**	**15**	**0**	**0**	**0**	**71**	**31**	**102**	**82**	**35**	**117**
VII. Plant Protection													
Integrated Pest Management													
Integrated Disease Management													
Bio-control of pests and diseases													
Production of bio control agents and bio pesticides													
Others, if any													
Contingent plan	2	24	6	30	2	0	2	57	45	102	83	51	134
Lac cultivation	3	5	0	5	0	0	0	45	5	50	50	5	55
Mushroom production	1	1	0	1	0	0	0	3	11	14	4	11	15
Bee keeping	1	0	0	0	0	0	0	13	9	22	13	9	22
Total	**7**	**30**	**6**	**36**	**2**	**0**	**2**	**118**	**70**	**188**	**150**	**76**	**226**
VIII. Fisheries													

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													
Integrated fish farming													
Carp breeding and hatchery management													
Carp fry and fingerling rearing													
Composite fish culture & fish disease													
Fish feed preparation & its application to fish pond, like nursery, rearing & stocking pond													
Hatchery management and culture of freshwater prawn													
Breeding and culture of ornamental fishes													
Portable plastic carp hatchery													
Pen culture of fish and prawn													
Shrimp farming													
Edible oyster farming													
Pearl culture													
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													

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													
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	**94**	**253**	**278**	**531**	**19**	**12**	**30**	**1151**	**949**	**2100**	**1423**	**1239**	**2662**

E) RURAL YOUTH 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) RURAL YOUTH													
Mushroom Production													
Bee-keeping													
Integrated farming													
Seed production													
Production of organic inputs													
Integrated Farming													
Planting material production													
Vermi-culture													
Sericulture													
Protected cultivation of vegetable crops													
Commercial fruit production													
Repair and maintenance of farm machinery and implements													
Nursery Management of Horticulture crops													
Training and pruning of orchards													
Value addition													
Production of quality animal products													
Dairying													
Sheep and goat rearing													
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Para vets													
Para extension workers													
Composite fish culture													
Freshwater prawn culture													
Shrimp farming													
Pearl culture													
Cold water fisheries													
Fish harvest and processing technology													
Fry and fingerling rearing													
Small scale processing													
Post Harvest Technology													

Tailoring and Stitching													
Rural Crafts													
Others, if any													
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

F) Extension Personnel Including the sponsored training programmes (Off Campus)

Thematic Area	**No. of Courses**	**No. of Participants**									**Grand Total**		
		Other			**SC**			**ST**					
		M	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**
Productivity enhancement in field crops				0			0			0	0	0	0
Integrated Pest Management				0			0			0	0	0	0
Integrated Nutrient management				0			0			0	0	0	0
Rejuvenation of old orchards				0			0			0	0	0	0
Protected cultivation technology				0			0			0	0	0	0
Formation and Management of SHGs				0			0			0	0	0	0
Group Dynamics and farmers organization				0			0			0	0	0	0
Information networking among farmers				0			0			0	0	0	0
Capacity building for ICT application				0			0			0	0	0	0
Care and maintenance of farm machinery and implements				0			0			0	0	0	0
WTO and IPR issues				0			0			0	0	0	0
Management in farm animals				0			0			0	0	0	0
Livestock feed and fodder production				0			0			0	0	0	0
Household food security				0			0			0	0	0	0
Women and Child care				0			0			0	0	0	0
Low cost and nutrient efficient diet designing				0			0			0	0	0	0
Production and use of organic inputs				0			0			0	0	0	0
Gender mainstreaming through SHGs				0			0			0	0	0	0
Crop intensification				0			0			0	0	0	0
Contingent plan	1	10	0	10	0	0	0	22	0	22	32	0	32
Nutrigain	1	0	3	3	0	0	0	0	49	49	0	52	52
TOTAL	**2**	**10**	**3**	**13**	**0**	**0**	**0**	**22**	**49**	**71**	**32**	**52**	**84**

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	1	0	0	0	0	0	0	16	1	17	16	1	17
Resource Conservation Technologies													
Cropping Systems	1	0	0	0	0	0	0	8	0	8	8	0	8
Crop Diversification	1	0	0	0	0	0	0	19	0	19	19	0	19
Integrated Farming	3	0	0	0	0	0	0	39	0	39	39	0	39
Water management													
Seed production													
Nursery management													
Integrated Crop Management	62	161	139	300	15	6	21	692	602	1294	868	747	1615
Fodder production													
Production of organic inputs	1	0	0	0	0	0	0	15	0	15	15	0	15
Others, (cultivation of crops)													
Organic farming	2	1	31	32	0	0	0	1	16	17	2	47	49
Natural farming	1	19	3	22	0	0	0	4	2	6	23	5	28
Post harvest technology	1	0	0	0	0	0	0	27	3	30	27	3	30
Total	**73**	**181**	**173**	**354**	**15**	**6**	**21**	**821**	**624**	**1445**	**1017**	**803**	**1820**
II. Horticulture													
a) Vegetable Crops													
Integrated nutrient management													
Water management													
Enterprise development													
Skill development													
Yield increment													
Production of low volume and high value crops	2	1	0	1	0	0	0	21	15	36	22	15	37
Off-season vegetables													
Nursery raising													
Export potential vegetables													
Grading and standardization													
Protective cultivation (Green Houses, Shade Net etc.)	1	0	0	0	0	0	0	20	0	20	20	0	20
Others, if any (Cultivation of Vegetable)													
Capacity building	1	0	1	1	0	0	0	21	2	23	21	3	24

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													
Machchan Kheti	1	2	0	2	0	0	0	11	0	11	13	0	13
Nursery management	1	3	2	5	0	0	0	17	0	17	20	2	22
Exotic vegetables	1	1	0	1	0	0	0	17	3	20	18	3	21
b) Fruits													
Layout and Management of Orchards	1	1	0	1	0	0	0	3	15	18	4	15	19
Cultivation of Fruit	2	0	9	9	0	0	0	32	1	33	32	10	42
Management of young plants/orchards													
Rejuvenation of old orchards													
Export potential fruits													
Micro irrigation systems of orchards													
Plant propagation techniques	1	0	1	1	0	0	0	9	0	9	9	1	10
Others, if any(INM)													
c) Ornamental Plants													
Nursery Management													
Management of potted plants	1	0	0	0	0	0	0	12	4	16	12	4	16
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	16	13	29	16	13	29
Processing and value addition													
Others, if any													
g) Medicinal and Aromatic Plants													
Nursery management													
Production and	2	0	0	0	0	0	0	21	12	33	21	12	33

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													
management technology													
Post-harvest technology and value addition													
Others, if any													
Total	**15**	**8**	**13**	**21**	**0**	**0**	**0**	**200**	**65**	**265**	**208**	**78**	**286**
III. Soil Health and Fertility Management													
Soil fertility management	1	0	0	0	0	0	0	10	7	17	10	7	17
Soil and Water Conservation													
Integrated Nutrient Management	6	7	1	8	0	0	0	62	104	166	69	105	174
Production and use of organic inputs	2	1	0	1	0	0	0	41	19	60	42	19	61
Management of Problematic soils	1	1	1	2	0	0	0	11	6	17	12	7	19
Micro nutrient deficiency in crops	1	0	0	0	0	0	0	28	4	32	28	4	32
Nutrient Use Efficiency	1	2	9	11	0	0	0	8	7	15	10	16	26
Soil and Water Testing	1	2	1	3	0	0	0	9	8	17	11	9	20
Others, if any													
Organic farming	1	1	0	1	0	0	0	7	2	9	8	2	10
Soil health management	2	0	0	0	0	0	0	33	16	49	33	16	49
Natural farming	1	1	0	1	0	0	0	11	0	11	12	0	12
Liquid fertilizer	3	9	0	9	2	0	2	55	7	62	66	7	73
Balance use of fertilizer	1	0	0	0	0	0	0	1	17	18	1	17	18
Fertilizer management	1	3	0	3	0	0	0	14	0	14	17	0	17
Soil sampling	1	11	0	11	0	0	0	2	0	2	13	0	13
Total	**23**	**38**	**12**	**50**	**2**	**0**	**2**	**292**	**197**	**489**	**332**	**209**	**541**
IV. Livestock Production and Management													
Dairy Management	1	0	0	0	2	3	5	10	9	19	12	12	24
Poultry Management	1	5	18	23	0	1	1	0	10	10	5	29	34
Piggery Management	5	4	20	24	1	1	2	68	25	93	73	46	119
Rabbit Management													
Disease Management													
Feed management	1	4	15	19	0	0	0	0	7	7	4	22	26
Production of quality animal products													
Others, if any Goat farming													
Milk production	1	0	0	0	0	0	0	61	4	65	61	4	65
Fodder conservation	1	0	0	0	0	0	0	24	0	24	24	0	24
Smart Krishi	1	5	2	7	0	1	1	21	24	45	26	27	53
Animal vaccination	2	0	0	0	0	1	1	44	5	49	44	6	50

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													
Goatry	4	12	20	32	0	1	1	38	47	85	50	68	118
Total	**17**	**30**	**75**	**105**	**3**	**8**	**11**	**266**	**131**	**397**	**299**	**214**	**513**
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening	1	0	0	0	0	0	0	0	16	16	0	16	16
Design and development of low/minimum cost diet	1	0	0	0	0	3	3	0	18	18	0	21	21
Designing and development for high nutrient efficiency diet	1	0	0	0	0	0	0	0	31	31	0	31	31
Minimization of nutrient loss in processing	1	0	8	8	0	1	1	0	7	7	0	16	16
Gender mainstreaming through SHGs													
Storage loss minimization techniques	1	0	0	0	0	0	0	0	20	20	0	20	20
Enterprise development													
Value addition	3	0	3	3	0	0	0	0	63	63	0	66	66
Income generation activities for empowerment of rural Women													
Location specific drudgery reduction technologies													
Rural Crafts													
Capacity building	1	0	0	0	0	0	0	0	15	15	0	15	15
Women and child care	1	0	0	0	0	0	0	0	24	24	0	24	24
Others, if any													
Group dynamics	1	0	0	0	0	0	0	0	20	20	0	20	20
Nutritional garden	1	0	0	0	0	0	0	0	20	20	0	20	20
Food processing	1	0	5	5	0	0	0	0	7	7	0	12	12
Mushroom production	1	0	0	0	0	0	0	0	17	17	0	17	17
Total	**14**	**0**	**16**	**16**	**0**	**4**	**4**	**0**	**258**	**258**	**0**	**278**	**278**
VI. Agril. Engineering													
Installation and maintenance of micro irrigation systems													
Use of Plastics in farming practices	1	0	0	0	0	0	0	31	7	38	31	7	38
Production of small tools and implements	2	0	0	0	0	0	0	15	17	32	15	17	32
Repair and maintenance of farm machinery and implements	2	1	0	1	0	0	0	29	9	38	30	9	39
Small scale processing and value addition													
Post-Harvest Technology													

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													
Others, if any													
Farm mechanization	1	2	0	2	1	0	1	16	0	16	19	0	19
Record keeping	1	0	1	1	0	0	0	1	0	1	1	1	2
Micro irrigation system	1	0	0	0	0	0	0	21	0	21	21	0	21
Water conservation	1	3	8	11	0	0	0	30	2	32	33	10	43
Water harvesting	2	1	1	2	0	1	1	10	44	54	11	46	57
Rain water harvesting	2	1	0	1	0	0	0	31	7	38	32	7	39
Finance and accounting of FPO	1	9	4	13	0	0	0	12	3	15	21	7	28
Total	**14**	**17**	**14**	**31**	**1**	**1**	**2**	**196**	**89**	**285**	**214**	**104**	**318**
VII. Plant Protection													
Integrated Pest Management	4	1	1	2	1	2	3	35	33	68	37	36	73
Integrated Disease Management													
Bio-control of pests and diseases													
Production of bio control agents and bio pesticides													
Others, if any													
Seed treatment	1	2	1	3	2	0	2	6	4	10	10	5	15
Integrated Crop Management	1	0	0	0	1	0	1	7	5	12	8	5	13
Weedicide	2	56	14	70	4	0	4	12	14	26	72	28	100
Contingent plan	2	24	6	30	2	0	2	57	45	102	83	51	134
Lac cultivation	3	5	0	5	0	0	0	45	5	50	50	5	55
Mushroom production	1	1	0	1	0	0	0	3	11	14	4	11	15
Bee keeping	1	0	0	0	0	0	0	13	9	22	13	9	22
Total	**15**	**89**	**22**	**111**	**10**	**2**	**12**	**178**	**126**	**304**	**277**	**150**	**427**
VIII. Fisheries													
Integrated fish farming													
Carp breeding and hatchery management													
Carp fry and fingerling rearing													
Composite fish culture & fish disease													
Fish feed preparation & its application to fish pond, like nursery, rearing & stocking pond													
Hatchery management and culture of freshwater prawn													
Breeding and culture of ornamental fishes													
Portable plastic carp													

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													
hatchery													
Pen culture of fish and prawn													
Shrimp farming													
Edible oyster farming													
Pearl culture													
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													

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													
Systems													
XII. Others (Pl. Specify)													
TOTAL	**171**	**363**	**325**	**688**	**31**	**21**	**52**	**1953**	**1490**	**3443**	**2347**	**1836**	**4183**

ii. RURAL YOUTH (On and 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) RURAL YOUTH													
Mushroom Production	3	0	0	0	0	0	0	1	50	51	1	50	51
Bee-keeping	2	8	1	9	0	0	0	5	17	22	13	18	31
Integrated farming													
Seed production													
Production of organic inputs													
Integrated Farming													
Planting material production													
Vermi-culture	4	10	4	14	0	0	0	58	31	89	68	35	103
Sericulture													
Protected cultivation of vegetable crops													
Commercial fruit production													
Repair and maintenance of farm machinery and implements													
Nursery Management of Horticulture crops	1	8	0	8	0	0	0	6	3	9	14	3	17
Training and pruning of orchards	1	1	0	1	0	0	0	12	0	12	13	0	13
Value addition	1	0	2	2	0	0	0	0	17	17	0	19	19
Production of quality animal products													
Dairying	1	1	0	1	0	0	0	6	3	9	7	3	10
Sheep and goat rearing													
Quail farming													
Piggery	2	1	0	1	0	0	0	32	15	47	33	15	48
Rabbit farming													
Poultry production	1	1	2	3	0	1	1	9	12	21	10	15	25
Ornamental fisheries													
Enterprise development													
Para vets	3	3	19	22	0	1	1	20	22	42	23	42	65
Para extension workers													
Composite fish culture													

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) RURAL YOUTH													
Freshwater prawn culture													
Shrimp farming													
Pearl culture													
Cold water fisheries													
Fish harvest and processing technology													
Fry and fingerling rearing													
Small scale processing													
Post-Harvest Technology													
Tailoring and Stitching	1	0	5	5	0	0	0	0	16	16	0	21	21
Rural Crafts													
Lac cultivation	4	3	0	3	0	0	0	50	8	58	53	8	61
Fruit production	3	7	1	8	0	0	0	54	18	72	61	19	80
Plant propagation technique	1	1	0	1	0	0	0	9	0	9	10	0	10
Soil testing	1	0	1	1	0	0	0	0	15	15	0	16	16
Fish-cum-Duck farming	1	1	2	3	0	0	0	17	0	17	18	2	20
Micro irrigation	2	15	2	17	0	0	0	13	1	14	28	3	31
Integrated Nutrient Management	2	65	9	74	4	0	4	12	0	12	81	9	90
Total	**34**	**125**	**48**	**173**	**4**	**2**	**6**	**304**	**228**	**532**	**433**	**278**	**711**

iii. Extension Personnel (On and 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
(C) Extension Personnel													
Productivity enhancement in field crops													
Integrated Pest Management													
Integrated Nutrient management													
Rejuvenation of old orchards													
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													

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
(C) Extension Personnel													
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													
Natural Farming	1	8	0	8	0	0	0	31	3	34	39	3	42
Contingent plan	1	10	0	10	0	0	0	22	0	22	32	0	32
Nutrigain	1	0	3	3	0	0	0	0	49	49	0	52	52
TOTAL	**3**	**18**	**3**	**21**	**0**	**0**	**0**	**53**	**52**	**105**	**71**	**55**	**126**

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

Discipline	Clientele	Title of the training programme	Duration in days	Venue (Off / On Campus)	Number of SC/ST			Number of participants (others)			Over all participants
					M	F	Total	M	F	Total	

H) Vocational training programmes for Rural Youth

Details of training programmes for Rural Youth

Crop / Enterprise	Identified Thrust Area	Training title*	Date	Duration (days)	No. of Participants			Self-employed after training			Number of persons employed else where
					Male	Female	Total	Type of units	Number of units	Number of persons employed	
Tailoring	Women empowerment	Cutting and Tailoring	08/05/23-06/06/23	30	0	21	21	Self employed	04	04	-
Input delar	Agri input delar	Certificate course on INM	1-18/08/23	15	39	7	46	Self employed	46	46	
Input delar	Agri input delar	INM	28/10-13/11/23	15	42	2	44	Self employed	44	46	
Pashu Mitra	Rural Youth empowerment	Pashu Mitra	16/02-10/03/23	23	10	15	25	-	15	-	

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

I) Sponsored Training Programmes

SL	Date	Title	Thematic area	Month	Duration (days)	Client PF/RY/EF	No. of course	No. of participants										Sponsoring agency
								Male			Female			Total				
								Others	SC	ST	Others	SC	ST	Others	SC	ST	Total	
		ON Campus																
2	13/1/2023	Goat vaccination	Goatry		1	PF	1	0	0	5	0	0	5	0	0	10	10	ARYA
3	24-04-2023	Vaccination of Piglet	Piggery		1	PF	1	1	0	16	1	0	7	2	0	23	25	ARYA
4	25-04-2023	Goat farming & vaccination	Water Conservation		1	PF	1	1	0	11	1	0	7	2	0	18	20	ARYA
3	04-07-2023	Energy & water conservation in agriculture	Water harvesting		1	PF	1	3	0	30	8	0	2	11	0	32	43	
5	13-07-2023	Rain water harvesting	Water harvesting		1	PF	1	0	0	1	0	0	22	0	0	23	23	
6	07-08-2023	Scientific pig farming	Piggery		1	PF	1	0	1	12	0	0	5	0	1	17	18	
7	02-09-2023	Cultivation of medicinal & Aromatic plant	Production and management technology (Medicinal)		1	PF	1	0	0	19	0	0	1	0	0	20	20	
8	02-09-2023	Capacity building on horticultural livelihood	Capacity Building		1	PF	1	0	0	21	1	0	2	1	0	23	24	
9	27-10-2023	Advance production technology of Mustard	ICM		1	PF	1	8	0	18	0	0	3	8	0	21	29	DRMR
10	28-10-2023	Advance production technology of Mustard	ICM		1	PF	1	3	0	23	0	0	4	3	0	27	30	DRMR
11	05-10-2023	Trellies management of "Machchan Kheti"	Trellis management		1	PF	1	2	0	11	0	0	0	2	0	11	13	JDH_SPMU_BRLF (VB)
12	17-10-2023	Nutrition garden	Nutritional Garden		1	PF	1	0	0	0	0	0	20	0	0	20	20	
13	03-11-2023	Advanced production technology of mustard	ICM		1	PF	1	1	0	3	0	0	14	1	0	17	18	DRMR
14	04-11-2023	Advanced production technology of mustard	ICM		1	PF	1	0	0	8	0	0	8	0	0	16	16	DRMR
15	06-11-2023	Advanced production technology of mustard	ICM		1	PF	1	0	0	12	0	0	2	0	0	14	14	DRMR
		Total (On Campus)			**15**		**15**	**19**	**1**	**190**	**11**	**0**	**102**	**30**	**1**	**292**	**323**	
		OFF Campus																
16	28/1/2023	Goat farming and vaccination	Goatry		1	PF	1	11	0	22	6	0	25	17	0	47	64	Vikas Sanwad Samiti Gumla
17	5-6/2/2023	Finance and accounting of FPO	Finance and accounting		2	PF	1	9	0	12	4	0	3	13	0	15	28	Vikas Sanwad Samiti Gumla

SL	Date	Title	Thematic area	Month	Duration (days)	Client PF/RY/EF	No. of course	No. of participants										Sponsoring agency
								Male			Female			Total				
								Others	SC	ST	Others	SC	ST	Others	SC	ST	Total	
18	20-03-2023	Pig farming and vaccination	Pig farming		1	PF	1	0	0	10	0	0	2	0	0	12	12	ARYA
19	24-05-2023	Improved production technology of coarase millets	ICM		1	PF	1	6	0	12	1	0	5	7	0	17	24	
20	25-05-2023	Improved production technology of coarase millets	ICM		1	PF	1	0	0	14	0	0	16	0	0	30	30	
21	11-05-2023	Pig farming and vaccination	Piggery		1	PF	1	3	0	0	19	1	10	22	1	10	33	
22	12-05-2023	Scientific Goat Farming	Goatry		1	PF	1	0	0	0	13	1	10	13	1	10	24	
23	07-06-2023	Lac cultivation	Lac cultivation		1	PF	1	3	0	8	0	0	0	3	0	8	11	
24	09-10-2023	Integrated Agriculture technique on oilseed and pulses crop	ICM		1	PF	1	1	0	17	0	0	3	1	0	20	21	
25	21-12-2023	Horticulture production	Fruit production		1	PF	1	0	0	0	9	0	12	9	0	12	21	Vikas Bharti
		Total (OFF Campus)			**11**		**10**	**33**	**0**	**95**	**52**	**2**	**86**	**85**	**2**	**181**	**268**	
		ON Campus																
26	3-7/1/2023	Scientific Bee Keeping	Bee keeping		5	RY	1	8	0	5	0	0	0	8	0	5	13	
27	22-26/02/23	Scientific Bee Keeping	Bee keeping		5	RY	1	0	0	0	1	0	17	1	0	17	18	
28	9-15/02/2023	Pig farming	Pig farming		7	RY	1	0	0	14	0	0	6	0	0	20	20	ARYA
29	16-20/05/23	Lac cultivation	Lac cultivation		5	RY	1	0	0	10	0	0	4	0	0	14	14	ARYA
30	23-27/05/23	Horticulture & tree plantation	Fruit production		5	RY	1	3	0	12	1	0	4	4	0	16	20	Watershed
31	29-31/05/23	Vermicompost production	Vermiculture		3	RY	1	5	0	33	3	0	9	8	0	42	50	Watershed
32	2-6/11/23	Horticulture training	Fruit production		5	RY	1	2	0	28	0	0	10	2	0	38	40	DHO Gumla
33	4-9/12/23	Pig rearing and management	Piggery		6	RY	1	1	0	18	0	0	9	1	0	27	28	ATMA Gumla
		Total (RY On Campus)			**41**		**8**	**19**	**0**	**120**	**5**	**0**	**59**	**24**	**0**	**179**	**203**	
		Grand Total			**67**		**33**	**71**	**01**	**405**	**68**	**02**	**247**	**139**	**03**	**652**	**794**	

Area of training	No. of Courses	No. of Participants											
		General			SC			ST			Grand Total		
		M	F	Total	M	F	Total	M	F	Total	M	F	Total
Crop production and management													
Increasing production and productivity of crops	31	31	15	46	2	1	3	285	175	460	318	191	509
Commercial production of vegetables	1	1	0	1	0	0	0	5	6	12	6	6	12
Production and value addition													
Fruit Plants													
Ornamental plants	1	0	0	0	0	0	0	20	1	21	20	1	21
Spices crops	1	0	0	0	0	0	0	16	13	29	16	13	29
Soil health and fertility management	5	4	0	4	0	0	0	61	45	106	65	45	110
Production of Inputs at site	1	0	0	0	0	0	0	29	6	35	29	6	35
Methods of protective cultivation	1	0	0	0	0	0	0	2	11	13	2	11	13
Other													
Total	**41**	**36**	**15**	**51**	**2**	**1**	**3**	**418**	**257**	**676**	**456**	**273**	**729**
Post harvest technology and value addition													
Processing and value addition	1	0	2	2	0	0	0	0	17	17	0	19	19
Other													
Total	**1**	**0**	**2**	**2**	**0**	**0**	**0**	**0**	**17**	**17**	**0**	**19**	**19**
Farm machinery													
Farm machinery, tools and implements	2	2	0	2	1	0	1	32	5	37	35	5	40
Mulching	1	0	0	0	0	0	0	31	7	38	31	7	38
Total	**3**	**2**	**0**	**2**	**1**	**0**	**1**	**63**	**12**	**75**	**66**	**12**	**78**
Livestock and fisheries													
Livestock production and management													
Animal Nutrition Management	5	8	37	45	2	5	7	50	32	82	60	74	114
Animal Disease Management	1	4	15	19	0	0	0	0	7	7	4	22	26
Fisheries Nutrition													
Fisheries Management													
Other													
Total	**6**	**12**	**52**	**64**	**2**	**5**	**7**	**50**	**39**	**89**	**64**	**96**	**240**
Home Science													
Household nutritional security	3	0	0	0	0	0	0	1	50	51	1	50	51
Economic empowerment of women	1	0	5	5	0	0	0	0	7	7	0	12	12

Drudgery reduction of women													
Other													
Total	**4**	**0**	**5**	**5**	**0**	**0**	**0**	**1**	**57**	**58**	**1**	**62**	**63**
Agricultural Extension													
Capacity Building and Group Dynamics													
Other													
Total													
Grant Total	**55**	**50**	**74**	**124**	**5**	**6**	**11**	**532**	**382**	**915**	**587**	**462**	**1129**

J. Information on ASCI Skill Development Training Programme funded by ICAR undertaken during 2023

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	
01	Backyard Poultry Farmer	Backyard Poultry Farmer		0	1	9	12	1	2	10	15	25	

K. Information on Skill Development Training Programme (other agency if any) if undertaken : Not Done

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	

3.5. A. ACHEVEMENTS 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	2	4045	3031	7076	150	5724	08	04	12			4053	3043	7096	150	5724
Kisan Mela participated	2	84	65	149	3	97	06	02	08			90	67	157	3	97
Field Day	28	480	218	698	1	633						480	218	698	1	633
Kisan Ghosthi	18	463	376	839	1	786						463	376	839	1	786
Exhibition organized	1	345	335	680	25	535	02	03	05			347	338	685	25	535
Participation in exhibition		0	0	0	0	0						0	0	0	0	0
Film Show	8	87	85	172	2	111						87	85	172	2	111
Method Demonstrations	13	94	20	114	2	81						94	20	114	2	81
Farmers Seminar		0	0	0	0	0						0	0	0	0	0
Workshop		0	0	0	0	0						0	0	0	0	0
Group discussion		0	0	0	0	0						0	0	0	0	0
Lectures delivered as resource persons	1	43	7	50	3	35						43	7	50	3	35
Advisory Services	53	293	90	383	1	378						293	90	383	1	378
Scientific visit to farmers field	163	516	123	639	3	556						516	123	639	3	556
Farmers visit to KVK	108	1107	985	2092	66	1405						1107	985	2092	66	1405
Diagnostic visits		0	0	0	0	0						0	0	0	0	0
Exposure visits	15	277	143	420	5	242						277	143	420	5	242
Ex-trainees Sammelan	4	25	45	70	1	46						25	45	70	1	46
Soil health Camp	3	42	33	75	0	75						42	33	75	0	75
Animal Health Camp	13	57	13	70	1	63						57	13	70	1	63
Agri mobile clinic		0	0	0	0	0						0	0	0	0	0
Soil test campaigns	1	21	1	22	0	21						21	1	22	0	21
Farm Science Club Conveners meet		0	0	0	0	0						0	0	0	0	0
Self Help Group Conveners meetings	3	0	47	47	0	47						0	47	47	0	47
Mahila Mandals Conveners meetings		0	0	0	0	0						0	0	0	0	0
Special day celebration		0	0	0	0	0						0	0	0	0	0
Sankalp Se Siddhi		0	0	0	0	0						0	0	0	0	0
Swatchta Hi Sewa	**22**	329	290	619	6	562	04	0	04			333	290	623	6	562
Celebration of		0	0	0	0	0						0	0	0	0	0

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.)
important date																
Others		0	0	0	0	0						0	0	0	0	0
Helpline	47	68	10	78	3	49						68	10	78	3	49
Clinical Service	163	126	44	170	3	139						126	44	170	3	139
FAP conducted	18	182	308	490	5	427						182	308	490	5	427
Mahila Gosthi	7	20	169	189	2	156	0	4	04			20	173	193	2	156
Group meeting	7	89	24	113	0	105						89	24	113	0	105
Natural farming awareness	61	1564	1416	2980	37	2499						1564	1416	2980	37	2499
Agriculture knowlwdge in rural school	5	93	154	247	3	219						93	154	247	3	219
PM live telecast	4	133	138	271	3	226						133	138	271	3	226
Input distribution under TSP	7	67	94	161	4	129						67	94	161	4	129
FPO meeting	4	225	214	439	82	287						225	214	439	82	287
Rabi Workshop	1	29	6	35	1	22						29	6	35	1	22
Workshop on Expert Sensitization programme	1	30	10	40	0	35						30	10	40	0	35
Exposure visit of KGBV students	6	0	393	393	16	279						0	393	393	16	279
Awareness programme under IYM	6	0	393	393	16	279						0	393	393	16	279
Drone awareness programme	2	66	27	93	0	51						66	27	93	0	51
Lifestyle for environment	14	272	459	731	5	646						272	459	731	5	646
Kharif workshop	2	87	21	108	0	43	04	0	04			91	21	112	0	43
Live telecast of mega conclave of FPOs	2	31	30	61	0	50						31	30	61	0	50
FPO meeting	1	5	5	10	0	4						5	5	10	0	4
Organic rice awareness	1	36	10	46	0	46						36	10	46	0	46
Receipe contest	7	29	234	263	6	215	02	08	10			31	242	273	6	215
Stall exhibition in other agencies programme	1	2	0	2	0	0						2	0	2	0	0
Nutrition awareness week	9	30	227	257	0	242						30	227	257	0	242
PRA	1	10	20	30	0	30						10	20	30	0	30
Viksit Bharat Sankalp Yatra	100	26564	34148	60712	13	60190	150	25	175		50	25714	34168	13	60240	60253
Celebration of important date																
Republic day (26th Jan.)		0	0	0	0	0						0	0	0	0	0
International Women's Day (8th Mar.)	1	35	5	40	0	40						35	5	40	0	40
World ‘Milk	1	0	22	22	0	22						0	22	22	0	22

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.)
Day																
International Yoga Day (21st Jun.)	1	18	43	61	0	54						18	43	61	0	54
Independence Day (15th Aug.)		0	0	0	0	0						0	0	0	0	0
Parthenium Awareness Week	1	57	35	92	4	38						57	35	92	4	38
Mahila Kisan Diwas (15th Oct.)	1	12	72	84	0	66						12	72	84	0	66
World Soil Day (5th Dec.)	1	42	51	93	1	59						42	51	93	1	59
Kisan Diwas (23rd Dec.)	1	54	98	152	0	62						54	98	152	0	62
Any other day																
National Science Day ((28 Feb)	1	0	18	18	0	18						0	18	18	0	18
World water day (22nd Mar)	1	8	28	36	0	36						8	28	36	0	36
World Bee day (20th May)	1	13	11	24	0	24						13	11	24	0	24
National Lac Day (16th May)	1	20	15	35	0	35						20	15	35	0	35
World food safety day	1	4	37	41	0	29						4	37	41	0	29
ICAR foundation day (16th July)	1	39	21	60	0	57						39	21	60	0	57
Vishwa Aadiwasi Diwas (9th Aug)	1	30	10	40	0	40						30	10	40	0	40
Meri mati Mera Desh	4	29	64	93	0	62						29	64	93	0	62
Janjatiya Gourav Diwas (9th Nov)	2	175	585	760	0	734						175	585	760	0	734
Mushroom Day (23rd Dec)	1	4	11	15	0	14						4	11	15	0	14

B. Other Extension/content mobilization activities

Nature of Extension Activity	No. of activities
Newspaper coverage	53
Radio talks	03
TV talks	08
Popular articles published	
Extension Literature	10
Electronic media	03

D. Technology week celebration : Not done

Type of activities	No. of activities	Number of participants	Related crop/livestock 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 (26th Jan.)										
International Women's Day (8th Mar.)	1	35	5	40				35	5	40
Ambedkar Jayanti (14th Apr.)										
World's Veterinary Day										
(Last week of April)		0	0	0				0	0	0
World 'Milk Day	1	0	22	22				0	22	22
International Yoga Day (21st Jun.)	1	18	43	61				18	43	61
Independence Day (15th Aug.)		0	0	0				0	0	0
Parthenium Awareness Week	1	57	35	92				57	35	92
Hindi Diwas (14th Sep.)		0	0	0				0	0	0
Gandhi Jayanti (2nd Oct.)		0	0	0				0	0	0
Mahila Kisan Diwas (15th Oct.)	1	12	72	84				12	72	84
World Food Day (16th Oct.)										
Vigilance Awareness Week										
National Unity Day (31st Oct.)										
World Science Day (10th Nov.)										
National Education Day (11th Nov.)										
Fisheries day (21 Nov)										
National Constitution Day (26th Nov.)										
World Soil Day (5th Dec.)	1	42	51	93				42	51	93
Kisan Diwas (23rd Dec.)	1	54	98	152				54	98	152
Any other day										
National Science Day ((28 Feb)	1	0	18	18				0	18	18
World water day (22nd Mar)	1	8	28	36				8	28	36
World Bee day (20th May)	1	13	11	24				13	11	24
National Lac Day (16th May)	1	20	15	35				20	15	35
World food safety day	1	4	37	41				4	37	41
ICAR foundation day (16th July)	1	39	21	60				39	21	60
Vishwa Aadiwasi Diwas (9th Aug)	1	30	10	40				30	10	40
Meri mati Mera Desh	4	29	64	93				29	64	93
Janjatiya Gourav Diwas (9th Nov)	2	175	585	760				175	585	760
Mushroom Day (23rd Dec)	1	4	11	15				4	11	15
Total	**21**	**540**	**1126**	**1666**				**540**	**1126**	**1666**

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	27/01/23	14th instalment release of Kisan samman nidhi yojna	Hon'ble PM	105			105
2	14/07/23	National mega conclave of FPO		61			61
3	30/09/23	Sankalp saptah programme under aspirational village		76			76
4	30/11/23	Viksit Bharat Sankalp Yatra	Hon'ble PM	44			44
5	15/01/24	Janman Yoja	Hon'ble PM	300			300

3.5 a. Production and supply of Technological products

A. Seed production at seed village

Crop	Variety	Quantity of seed (q)	Value (Rs in lakh)	No. of farmers involved in village seed production	Number of farmers to whom seed provided			
					SC	ST	Oth	Total
Rice (130 ha)	Swarna Shreya	450 q	9.82	30	-	28	02	30
Ragi (20 ha)	GPU-28	200 q	7.69	60	-	52	08	60
Niger (05 ha)	Birsa Niger-3	15 q	1.16	12	-	10	02	12
Total		**665 q**	**18.67**	**102**		**90**	**12**	**102**

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
Cereals							
Paddy	CR Dhan-305	46.26	87894.00				
Paddy	Swarna Shreya	6.16	18480.00				
Paddy	Black Rice	1.90	5700.00				
Wheat	DBW-187	1.15	4000.00				
Wheat	Sabour Nirjal	1.73	5760.00				
Ragi	BM-03	1.04	4160.00				
Kodo	JK-41	0.10	1000.00				
Oil seed							
Sesame	Kanke safed	0.07	1050.00				
Niger	Birsa Niger-3	2.64	26400.00				
Mustard	PM-30	1.30	11440.00	0	62	3	65
Pulses							
Redgram	Rajeev Lochan	2.5	17600.00	0	12	3	15
Green Manure							
Tephrosia	Teprosia Purpurea	0.03	625.00	0	17	0	17
Commercial crop							
Vegetables							
Fodder							
Spices							
Fruits							
Papaya	Ranchi Papaya	0.06	5000.00				
Forest crop							
Ornamental/flower							
Medicinal							
Grand Total		**64.94**	**189109.00**				

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
Vegetable seedlings							
Cauliflower	Agahnai	6500	975.00		10		10
Cabbage	Golden acre	6000	900.00		10		10
Tomato	Pusa rubi	80000	12000.00		65		65
Tomato	Swarna Parakash	1025	153.75				
Brinjal	Local	20000	3000.00		20		20
Brinjal	Swarna Shayamali	1500	225.00		01		01
Brinjal	RC-BR-22	3150	472.50		01		01
Chilli							
Onion							
Others							
Total		**118175**	**17726.25**		**107**		**107**
Commercial seedlings							
Mulberry							
Sugarcane,							
Sweet Potato							
Turmeric							
Zinger							
Others							
Fruits seedlings							
Mango							
Mango rootstock	Local	1500	7500.00				
Guava							
Lime							
Papaya	Ranchi Papaya	700	3500.00		20		20
Banana							
Pear	Netarhat selection	400	2000.00				
Litchi	Shahi	30	600.00				
Total		**2630**	**13600.00**		**20**		**20**
Ornamental plants							
Marigold							
Annual chrysanthemum							
Tuberose							
Arhul	Local	500	1500.00				
Total		**500**	**1500.00**				
Medicinal and Aromatic							
Lemon grass	Krishna	8000	4000.00				
Total		**8000**	**4000.00**				
Plantation							
Tuber Elephant yams							

Crop	Variety	No. of planting materials	Value (Rs)	Number of farmers to whom planting material provided			
				SC	ST	Other	Total
Spices							
Chilli	Nagin	60000	9000.00		40		40
Chilli	Swarna Apurva	2025	303.75		01		01
Total		**62025**	**9303.75**		**41**		**41**
Grand Total		**191330**	**46130.00**				**168**

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
Napier	Pusa Jaint	7000	7000.00	0	41	39	80
Total		**7000**	**7000.00**	**0**	**41**	**39**	**80**

F. Production of Bio-Products

Name of product	Quantity (Kg)	Value (Rs.)	No. of Farmers benefitted			
			SC	ST	Other	Total
Bio-fertilizers						
Vermicompost	118.5 q	138600.00	0	142	32	174
Jeevamrit	8800 lit	132000.00				
Ghanjeevamrit	4.0 q	4000.00				
Bio-food (Spirulina etc)	-	-				
Bio-pesticide						
Neemastra	50 lit	1750.00				
Dasparni	100 lit	3500.00				
Bio-agents (Trichocard etc)						
Azolla	1.5 q	3750.00				
Worms (earthworm, silk worms etc)	0.02 q	1600.00				
Bio-fungicide						
Beejamrit	50 lit	1750.00				
Others						
Mushroom spawn	0.635 q	10800.00				
Cow Urine	373 lit	1865.00				
Cow Dung	50 q	8275.00				
Goat Dung	10 q	5000.00				
Total		**312890.00**				

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
Dairy animals							
Cows							
Buffaloes							
Calves	Sahiwal	02	12000.00				
Others (Pl. specify)							
Small ruminants							
Sheep							
Goat	Black Bengal	02	6000.00				
Other, please specify							
Poultry							
Broilers							
Layers	Jharseem, Soinali, Red Divyayan	264	7320.00				
Duals (broiler and layer)							
Japanese Quail							
Turkey							
Emu							
Ducks	Indian runner	191 egg	1347.00				
Others (Pl. specify)							
Piggery							
Piglet	Jharsuk	56	168000.00				

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers benefitted			
				SC	ST	Other	Total
Hog							
Others (Pl. specify)							
Rabbitry							
Fisheries							
Indian carp							
Exotic carp							
Mixed carp							
Fish fingerlings							
Spawn							
Others (Pl. specify)							
Grand Total			**194667.00**				

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**
-	487	487

c. Detail of Soil, Water and Plant analysis at KVK (2023)

Sl.	Analysis	No. of Samples analyzed	No. of Villages covered	No. of Farmers benefitted	Amount realized (Rs.)
1.	**Soil**	**487**	**97**	**487**	**119000.00**
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	01	10	93	03	1. Shri Vijay Kujur, DAO Gumla 2. Shri Praveen Kumar, LDM Bank of India, Gumla 3. Shri Mahendra Bhagat, Joint Secretary Vikas Bharti Bishunpur	104

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.)
01	09	02 (Micro irrigation) 01 (Rain water harvesting structure)	Mango orchards, Medicinal units, water use in mango orchard	1012	23

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	Crop	Variety	Production (q)			
			Target Area (in ha)	Area sown (ha)	Production	Category of Seed (F/S, C/S)
Kharif 2023	Redgram (2022-23)	Rajeev Lochan	1.0	0.40	2.5	C/S
	Redgram (Kharif 2023)	Birsa Arhar-2	1.0	0.40	Fruiting stage	C/S
Rabi 2023	Lentil	IPL-220	0	0.60	Growth stage	T/S
Summer/ Spring 2023	-	-	-	-	-	-

3. Financial Progress

Fund received (2016-17, 2017-18, 2019, 2020 and 2021)	Expenditure (Rs. in lakhs)		Unspent balance (Rs. in lakhs)	Remarks
	Infrastructure	Revolving fund		
2016-17	-	-		
2017-18	-	-		
2018-19	-	-		
2019	-	-		
2020	-	-		
2021	-	-		
2022	-	-		
2023	-	-		

4. Infrastructure Development

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

3.6 PUBLICATIONS, HUMAN RESOUSES DEVELOPMENT & AWARDS & RECOGNITION

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

S.No	Item	Details of publication bibliographic form	NASS Rating
1	Research paper	-	-

B. Details of Other Publications

Particulars	Details of publication bibliographic form	No of copies published (if any)	No of copies distributed (if any)
Seminar/conference/ symposia papers	01		
Books			
Book Chapter			
Popular articles			
success story	10		
Bulletins			
Agro-advisory bulletins			
Extension Folders			
	Agri Drone	1000	800
	Natural Farming	1000	700
	Kheti Bari (Oct22-Mar 23)	500	300
	Kheti Bari (April 23-Sep 23)	500	250
	अरहर की खेती	900	600
	सरसों की वैज्ञानिक खेती	1000	800
	Soil health card pumphlet	2000	1500
	गुमला जिले में पारंपरिक धन की पाई जाने वाली प्रभेदों / प्रजातियों का संशिप्त विवरण	1000	600
	पोषकता से भरपूर गोंदली की उन्नत खेती	1000	850
	पोषकता से भरपूर मडुवा की उन्नत खेती	1000	800
	पोषक अनाज ज्वार की उन्नत खेती	1000	800
	पोषक अनाज बाजरे की उन्नत खेती	1000	800

Technical reports		06	06
News letter		02	02
Electronic Publication (CD/DVD etc)		03	00

C. Details of HRD programmes undergone by KVK personnel

Sl. No.	Name of KVK personnel and designation	Name of course/training program attended	Date and Duration	Organizer/Venue
1.	Mr. Eno Rai (SMS Ag. Eng)	DGCA approved Remote Pilot	15-16/03/2023 (2 days) 29/04-01/05/2023 (3 days)	Online
2.	Mr. Rajeev Kumar Singh (Farm manager)	Agriculture Drone Operator	2-3/05/2023 (2 day)	Gurugram
3.	Mr. Eno Rai (SMS Ag. Eng)	Agriculture Drone Operator	2-3/05/2023 (2 day)	Gurugram
4	Ratan Oraon	Finance	22-24/05/2023	ATARI Patna
5	Dr. Sanjay Kumar, Senior Scientist & Head	ISEE National Seminar	22-24/06/20232 (3 days)	UAS Banglore
6	Dr. Sanjay Kumar, Senior Scientist & Head	Workshop under NICRA	27-28/10/2023 (2 day)	ATARI Patna
7	Dr. Sanjay Kumar, Senior Scientist & Head	Agricultural Science Congress at ICAR-CMFRI, Kochi (Kerela)	10-13/10/2023 (3 days)	ICAR-CMFRI, Kochi (Kerela)

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

Type of attachment	No of student trained	No of days stayed
Usha Martin University Ranchi	05	90 (11/08/23-18/11/23)

E. Awards/Recognition

Institutional Award received by KVK

Sl. No.	Name of the Award	Conferring Authority	Amount	Purpose

Award received by KVK Scientists

Sl.	Name of the Award	Name of the Scientist	Value in Amount/	Purpose	Conferring Authority
1	For Highest Revolving Fund	Dr. Sanjay Kumar	0.00	Highest Revolving Fund among KVKs of Jharkhand	ATARI Patna
2	Zonal Level	Mr. Eno Rai	0.00	ARYA	ATARI Patna

Award received by Farmers

Sl.	Name of the Award	Name of the Farmer	Address	Contact No.	Aadhar No.	Amount	Purpose	Conferring Authority
1	Best farmer	Mr. Kishor Minz	Village-Ratantoli Panchayet-Khetli Block-Dumri	8340722102		0.00	Pig farming	BAU Ranchi
2	Progressive farmers	Mr. Manchan Beck	Vill-Manjhatoli Block – Raidih Dist-Gumla	9955948668		0.00	Progressive farmer	ATARI Patna

3.7. TECHNOLOGY DEVLOPMENT

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 lefy vegetable in advance	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.	

Sl. No.	Name/ Title of the technology	Brief details of the Innovative Technology	Impact of the technology	Status of commercialization/Patent
		with least investment and better income and self use. From single plant ring farmer's are succeded in harvesting of 2-3 kg leafy sag costing of rupees 100-120/kg per plant ring.		
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.	
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 succeded 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 receipe using finger millet flour and prepared by SHG of Bishunpur block. The preparation of Ragi cake is extremely simple and healthy cake receipe. Youth women group of Bishunpur has started this new venture during IYM 2023 and get very positive response. After seeing	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 succeded in earning of Rs 7500-10000/month.

Sl. No.	Name/ Title of the technology	Brief details of the Innovative Technology	Impact of the technology	Status of commercialization/Patent
		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.		

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 & dieases	
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 lesf 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 strw 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	

Sl. No.	Enterprise	Brief details of the ITK Practiced	Purpose/Impact of ITK	Impact of the technology
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	
18	Mustard	Seed of mustard first broadcasted then use tractor drawn cultivator making line sowing. After ploughing small ridge and forrow 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% less rot is found in Onion stored with this method.

Give details of by the farmer (if Any)

Organic rice cultivation, Village – Banalat, Block - Bishunpur

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

4.1 Impact of KVK activities till now (Not to be restricted for reporting period).

Name of specific technology/skill transferred/training	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Mushroom production	76	32.8% (25)	45000-55000	85000-95000
Cutting & Tailoring	60	70% (42)	80000-90000	100000-200000
Pumset repairing	163	47.85 (78)	00	3500-5000
Hand pump repairing	16	56.25 (9)	00	5000-7000
Micro Irrigation repairing	54	59.26 (32)	00	2500-4000
Lac cultivation	136	70.59% (96)	15000-22000/ha	60000-70000/ha
Beekeeping	28	60.71% (17)	2160/hive	5000-5400/hive
Sole cropping of Mustard	50	88% (44)	39628/ha	60200/ha
Vermicomposting	30	76.5% (23)	7500/annum	35000/annum

NB: Should be based on actual study, questionnaire/group discussion etc. with ex-participants

4.2. Cases of large-scale adoption (Please furnish detailed information for each case)

SN	Horizontal spread of technologies	
	Technology	**Horizontal spread**
1	Participatory Seed production programme	100 ha
2	Bora Bandh (Water conservation)	1200 no.
3	Improved varieties	
	Paddy – Var. Lalat, Anjali, Sahbhagi, Pusa 1612	14000 ha
	Maize (Hybrid)	3500 ha
	Ragi – Var. GPU 28	1400 ha
	Niger - Var. Birsa Niger 1, 2 & 3	1100 ha
	Groundnut – Var. TG-22, K-6, TG-51	125 ha
	Wheat – Var. K-9107, HD-2733, HD-2967, DBW-187	1800 ha
	Field pea - Var. GS-10	220 ha
	Redgram-Rajeevlochan, IPA-203	255 ha
	Mustard PM-30	800 ha
	Blackgram PU-31	255 ha
	Bottle gourd (Hybrid)	275 ha
4	Mushroom Production	312 farmer
5	Vermicomposting	182 farmer
6	T & D breed of Pig (Jharsuk)	215 farmers
7	Beetle breed of Goat (Black Bengal)	218 farmers
8	Boron application on cauliflower	195 ha
9	Pest management in lac	410 farmers
10	Dolomite application	400 ha
11	Vaccination	10000 animal
12	Protected nursery	60 farmer
13	Paddy community nursery on staggered date	640 ha
14	Farm mechanization especially of Paddy thresher, Wheat thresher and Rotavetor	Paddy thresher-95, Wheat thresher-41, Rotavator-210 (165000 ha)
15	Canopy management in orchard	55 ha
16	Drip irrigation	1800 ha
17	Orchard development (Wari)	600 ha
18	Application of bio-pesticides	1400 ha
19	Sole Mustard cropping	16500 ha in district
20	Improved variety of Mustard (BBM-1 & PM-30)	800 ha in district
21	Organic rice cultivation	160 ha
22	Vegetable nursery management	20-25 ha

1. Oyester mushroom production: Cultivation of oyster mushroom from October to February is favorable for Gumla District because of its favourable temperature and humidity. Mushroom farming is an enterprise of high profit at low cost due to which more than 200 farm women of Gumla district were engaged in mushroom cultivation through training, front line demonstration and obtained good yield of oyster mushroom in a season. For production of oyster mushroom, the necessary materials that are required are arched room, shady palce, 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.

Horizontal Spread of the technology:

With the introduction of oyster mushroom cultivation in the farming system by the KVK Gumla, the number of farmers and farm women engaged in mushroom cultivation were increased. A large spread of this technology was also done by other NGOs and SHGs after introduction of this technology by the KVK Gumla as the number of mushroom growers were increased up to 300 and

were able to earn Rs.30000 to Rs. 40000 in a season. Now the consumption of oyster mushroom was found 3 kg to 15 kg among mushroom growers and others too due to easy availability of mushroom at home. During 2023-24, the number of farmers and farm women involved in mushroom cultivation were about 350 and earned about Rs 50000 to Rs. 65000 in a season through the sale of mushroom, mushroom nuggets and pickles. They were also adopted the technology of vermicomposting of spent mushroom straw and used in vegetables crop. Earlier oyster mushroom cultivation was found in a limited area of one or two blocks but now mushroom cultivation has been extended by farmers to farmers, SHGs to SHGs and other organizations in almost every block of Gumla district. Not only income but number of farmers and farm women engaged in mushroom cultivation were also increased.

2. Vegetable Nursery Management.

The production of healthy vegetable seedling play a vital role to established a healthy crop in main field for raising healthy seedling. There are few important steps that we should keep in mind like preparation of nursery bed, soil management, planting procedure, control of seedling density. The main objective of vegetable nursery management is to supply elite seedling.

Mr. sukhram bhagat has undergone training in vegetable nursery raising and management at Krishi Vigyan Kendra Gumla in which he learned about disease resistant variety of vegetables, seed treatment, raising nursery in pro tray and knowing he raised vegetable nursery the good market demand of vegetable nursery in the market. He raised vegetable nursery in 0.5 hac of his land and sold 5.30 lakh vegetabke nursery in the local market. All the seedling were easily sold because of its good and healthy characteristics. Through vegetable nursery management his gross income was rs. 132500 and cost of cultivation rs 42500 with B:C ratio (1:3.11) which was scope for income generation.

Economics of vegetable Nursery management.

Crop	Production	Cost Input (Rs.)	Gross Income (Rs.)	Net Income (Rs)	B:C
Vegetable Nursery (Tomato, Brinjal, Cauliflower, Chilli)	5.30 Lakh	42500	132500	90000	1:3.11

Horizontal Spread

Shri Bhagat started this new initiative of vegetable nursery management in his field which was not only proved to be beneficial for his economic amelioration but also brought positive change among rural villagers of palkot block towards production of vegetable nursery and its management. More than 100 farmers of 10 villages of palkot block were associated with vegetable nursery production and its management in 15-20 hac of land which resulted in good economic returns. The positive change that observed was because of nursery management in palkot block which boosting the economic and social standard of farmers of palkot block of Gumla district.

4.3. Details of impact analysis of KVK activities carried out during the reporting period

Sl. No.	Brief details of technology	Impact of the technology in subjective terms	Impact of the technology in objective terms
1	S-application in Mustard resulted in increasing the seed yield of Mustard by 10-25% under irrigated condition	Sulphur 80% WP@1.25 kg/ha sprayed at 75 DAS in CFLD and DRMR plot during 2021-22 in 20 ha area. Result showed that application of foliar spray of sulphur had significant influence on yield and its attributes resulted in yield by 16.5 to 18.0 q/ha and oil content% was 40.1 to 41.4.	As a result use of foliar spray of sulphur increase very fastly and Mustard growing farmer adopted its application in more than 4000 ha area during 2022-23
2	Cutting and Tailoring Skill development through training on cutting and tailoring were: • Care & repair of sewing machine, • Drafting and designing of garments • Cutting, and stitching of women's garments and children's garments, • Finishing of garments • The use of various types of trimmings for designing of stitched garments. • Entrepreneurial skills	After establishing their enterprise, they were contributed to monthly household income. With the increase in income the standard of living of these trainees were also increased. Some of them purchased household appliances like refrigerator, grinder and television. They also got good recognition in the society	After exposing to vocational training on cutting and tailoring, the trainees were acquired the knowledge about sewing machine care, drafting, cutting and stitching of garments of women and children like blouse, frock, shalwar suit etc. For strengthening the trainees, KVK Gumla provided Sewing machine to those who had started their enterprise under TSP which was a big support for them at initial stage. Among 21trainees, 10 participants were opted for self-employment, run their own tailoring units and earned Rs.15000 to Rs.20000/- per month.

4.4. Details of entrepreneurship development

Entrepreneurship development	
Name of the enterprise	**Lac cultivation**
Name & complete address of the entrepreneur	Name:- **Rabi Oraon** Viilage:- 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 2016-17
Technical Components of the Enterprise	• Selection of host plants • Prunning of host plants • Treatment of host plant before inoculation • Proper brood lac inoculation • Insect pest management • Use of farm machinery for lac cultivation
Status of entrepreneur before and after the enterprise	Rabi Oraon used to cultivate lac on 200 Ber trees which did not give him good income. There was a net profit of about Rs 62000 in a year from traditional lac cultivation. Today, by scientific lac cultivation, we are getting a net income of about Rs 389,000 in a year.
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 Shri Rabi Oraon, about 745 farmers of nearby villages are also earning good income by scientific lac cultivation

Entrepreneurship development	
Name of the enterprise	**Lac farming based IFS**
Name & complete address of the entrepreneur	Name:- **Bhikram Oraon** Viilage:- Halmat, Panchayet:- Nagar, Block :- Sisai, Dist:- Gumla, Jharkhand
Role of KVK with quantitative data support:	KVK, Gumla conducted skill training, technical support and provide brood lac, Redgram (Rajeevlochan) & Niger (Birsa Niger-1).
Timeline of the entrepreneurship development	Started scientific lac cultivation after training in KVK in 2020-21
Technical Components of the Enterprise	• Kusumi lac cultivation • Improve Goat houshing • Improve redgram variety Rajeev lochan & Niger (BN-1) • Hybrid Maize cultivation • Vegetable cultivation • Protective nursery
Status of entrepreneur before and after the enterprise	Before joining KVK, Bhikharam used to do farming in the traditional way, due to which he could earn an income of Rs 50-60,000 per year, but after meeting KVK scientists in 2018-19, he received training in KVK and after the training, he adopted scientifically integrated farming system. With the help of KVS, in 2021-22, he cultivated lac on 200 Ber trees, cultivated pigeon pea in 2 hectares and also cultivated hybrid maize in 4 ha, due to which he is getting handsome income of about Rs. 450000 in a year.
Present working condition of enterprise in terms of raw materials availability, labour availability, consumer preference, marketing the product etc. (Economic viability of the enterprise):	Gumla district's climate is suitable for lac cultivation and there is a lot of potential for lac production due to the availability of adequate quantity of host plants. Forest conservation will be strengthened by the cultivation of lac. In lac cultivation, labor is less required and hence laborers are easily available. No any market prolems, due to increase in demand of lac in foreign market, farmers get good income.
Horizontal spread of enterprise	Seeing the success of Oraon, about 55 farmers of nearby 4 villages are also earning good income by lac farming based IFS. Lac based IFS is most resilent, profitable, sustainable and easely acceptable sytem in tribal community.

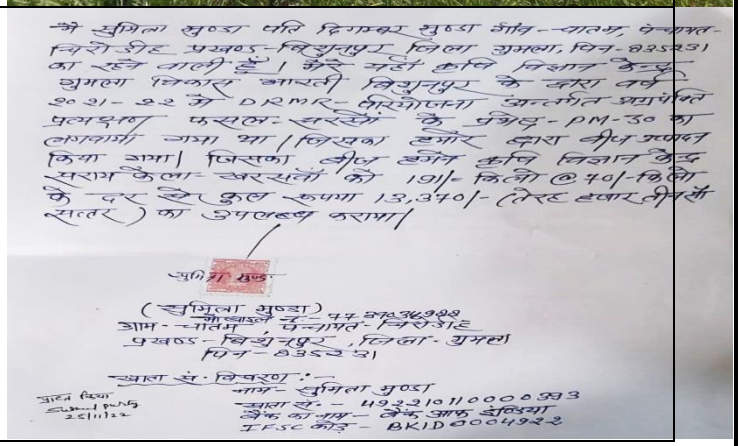
Entrepreneurship development	
Name of the enterprise	**Millet based processed products open the gateway of success**
Name & complete address of the entrepreneur	Ms. Kanti Kumari, Village-Bishunpur, Block- Bishunpur, District-Gumla, Jharkhand
Role of KVK with quantitative data support:	Skill development through technical guidance
Timeline of the entrepreneurship development	2023
Technical Components of the Enterprise	Ragi cookies and cake
Status of entrepreneur before and after the enterprise	Before establishment of the enterprise, she earned about Rs.5000 and after establishment of this enterprise her income was increased to Rs.32500/-
Present working condition of enterprise in terms of raw materials availability, labour availability, consumer preference, marketing the product etc. (Economic viability of the enterprise):	There was no bakery shop in Bishunpur block and competition was at zero level. As govt of India was celebrating International Year of millet because of its nutritional importance, she participated in the awareness programs on millets conducted by KVK Gumla and recognized millet-based enterprise would be a better opportunity for her and established it in Bishnupur block. She started to prepare ragi cake and cookies at household level and brought to KVK for organoleptic test. As per advice from KVK Gumla she standardize her products for bringing good taste, flavor and texture. When she was well trained in preparing cakes and cookies, she took it to an enterprise level and sold her products through grocery shops located in Bishunpur, Ghaghra and Gumla blocks. She started to take order of cake from the people on different occasions like birthday, fair, festivals, celebrations and parties. She has also provided employment to one person in this unit. In a month an average production of cookies and cakes were 50 kg and ragi laddu 200 pieces and monthly Gross income was Rs.32500 with B:C ratio 2.71. According to her this enterprise was economic viable and has good future scope. She was working on packing and labelling of her product for better acceptability of her products in a wider scale.
Horizontal spread of enterprise	After seeing her good initiative 10 SHGs members were also preparing Ragi laddu, cake, nimki and sold it in exhibition, Kisan Mela and other customers too. Seeing her participation in Recipe Contest at Bishunpur, other rural women was also encouraged and prepared ragi cake and laddu at her household level because of its good taste, nutritional and healthier importance.
Recognition	She was honoured by Director ATARI Patna, Zone IV in the 16th Scientific Advisory Committee of KVK Gumla on 22nd December 2023 for her appreciating work in the field of millet based products.

Photographs

4.5. Success stories/Case studies

Sustainable Livelihood Security Through Mustard Production

Name of farmer	**Digambar Munda**	
Address & Contact details (Phone, mobile, email Id)	**Vill. – Chatam,** **Panchayat – Chirodih** **Block - Bishunpur,** **Dist. – Gumla (Jharkhand)** **Mobile Number : 6206653491**	
Assets (Landholding in ha.)	2.0	
Name and description of the farm/ enterprise	**Sustainable Livelihood Security Through Mustard Production** Digambar Munda is a progressive farmer of the district and did the vegetable cultivation round the year. He was interested in the cultivation of oilseeds because requires less water and sold on a good price. He cultivates a traditional oilseed crop i.e. Lotni in Jharkhand, but due to various factors including local variety and aphid infestation, he was getting low production. He participated in the Training Program on Oilseeds Production Technology in 2021-22 organised by KVK Gumla.	
Achievement of the farmers	After completing of training at KVK Gumla in 2021-22, Mr. Munda got all the inputs (Seed, Fertilizers and other) for mustard production in one hectare under DRMR-STC-FLD. Mr. Munda did very well cultivated mustard and achieved production at the rate of 17.5q./ha. And he succeeded in gaining of net income of Rs 65875/ha and B:C 3.06.	
KVK intervention	With technical knowledge acquired from the KVK scientist and desire to obtained a higher production of mustard in the locality, he was motivated to participate in DRMR-STC-FLD Oil seeds programme in 2021-22. The training provided him motivation to adopt all the practices judiciously as advised. Under the project he supported with critical inputs viz. High yielding variety of mustard:- PM-30, Fertilizer and herbicide. He used Foliar application of sulphur (Liquid fertilizer 20%) @ 1Lt/ha. Spray of plant protection chemicals like Thiamethoxam @ 150gram/ha for controlling Aphids infestation.	
Impact (Economic/ Social/Environmental)	In earlier Mr. Munda's net income from Lotani cultivation received only Rs.15,000/ha but he got a net income of Rs.65,875/ha under demonstration. Due to which his financial condition improved and he purchase a scooter for himself in the same year. And with this his livihood condition also improved. Mr Munda has two children whom he keeps in hostel and studies in English Medium School. In earlier Mr. Munda used to buy and consume mustard oil only for six month in a year. Now he is consuming home produce mustard oil throughout the year. And also he is selling mustard in the market.	
Outcome (Horizontal/ Vertical spread)	Since 2021-22 Mr. Munda has been continuously doing scientific cultivation of mustard and by seeing his farming 20 more farmers of his village have started scientific cultivation of mustard in 35 acre area during 2023-24. Mr. Munda providing them improved variety seed PM-30 at the village level on seed exchange basis. Farmers from nearby villages are also coming to see their farming.	



Performance of Technology VIS-A-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)	BC ratio
Farmers practices (Var. – Lotani)	6.50	17825	32825	15000	1.84
Demonstration (Var. – PM 30)	17.50	28850	88375	59525	3.06
% Increase in Yield	169.23				

Success Story

Personal Information

Name of farmer	Mrs. Bandhain Devi	
Address and Contact details(Mobile, email Id)	Village -Kubbatoli, Panchayat- Bishunpur,Block- Bishunpur, District- Gumla 7488641417	
Assets (Landholding (in ha.)	1.5 ha.	
Name and description of farm/enterprise	**Mushroom Production –A key for success in living a quality life** Mrs. Bandhain Devi, 38 years old, resident of village- kubatoli, Panchayat-Bishunpur, Block-Bishunpur was dependent on farming only and earned about Rs 35,000 to Rs. 45,000 in a year which was insufficient to meet her expenses. She was engaged in kharif season but in rabi season she was almost free as she did not cultivate rabi crops like wheat, mustard due to lack of irrigation facilities. So, she was in search of doing highly remunerative enterprise for utilizing her leisure time and also for securing her livelihood. In 2013, she started mushroom production with ten bundles but due to unavailability of spawn and lack of complete technical knowledge, she did not take it to a sustainable level.	
Achievement of the Farmers	In 2018, she prepared 300 mushroom bundles with chemical treatment method in a season and earned about Rs.70000 from the sale of 350 kg of mushroom. With continuous support from KVK Gumla, she increased mushroom bundles preparation from 300 to 500 bundles and then took it to1000 bundles in the year 2023. After selling of fresh mushroom, she dried the leftover mushroom in dried sunlight and sold in off season at the rate of Rs.1000 per kg.	
KVK Intervention (Planning & Implementation)	She wanted to sustain her enterprise but due to lack of technical knowledge of running mushroom unit with less infestation, she did not get good return from this enterprise. Then she decided to be in regular contacted with KVK Gumla from beginning to end of mushroom cultivation. One day she contacted to KVK Gumla regarding training on oyster mushroom cultivation. In 2023, she acquired complete technical knowledge and skill of oyster mushroom cultivation and its value addition through training and demonstration and again she started her journey with mushroom cultivation to a large scale. During demonstration she came to know about room selection, use of formaldehyde for room sanitization, use of fungicide and formaldehyde during wetting of straws, control from pests, bundle preparation, time of removing the plastic bags and picking of mushroom,	

<table>
<tr><td></td><td>watering the bundles, maintenance of hygiene, drying of mushroom and its value addition etc.</td></tr>
<tr><td>Impact(Economic/Social/Environmental)</td><td>Mushroom cultivation is an ecofriendly activity as it utilizes the waste from agriculture which are available in huge quantities in every village and in turn it produces fruiting bodies with good nutritional and medicinal attributes Selling fresh and dry mushroom, she was getting an income of Rs. 170000/ in a season which made her quite happy. After harvesting of the mushroom, the left-over straw of bundles was used for the vermin compost production by the members of the SHG. The members that were involved in mushroom cultivation were acquainted with good technical skills like mushroom cultivation, value addition, vermicompost and marketing skills. She was preparing mushroom nuggets, mushroom pickles, mushroom powder. She also included it in her family diet. With this growth in income, she was able to provide proper education to her children and living a happy life.

Economic Information:
<table>
<tr><th>Enterprise</th><th>Gross Income (annual)</th><th>Net Income</th><th>Cost-Benefit ratio</th><th>Economic impa</th></tr>
<tr><td>Mushroom Production</td><td>170000</td><td>110000</td><td>2.83</td><td>Good return and to damage of mu bundles.</td></tr>
</table>
</td></tr>
<tr><td>Outcome (Horizontal/Vertical)</td><td>Now Mushroom cultivation has been adopted by the most of the farm women, SHGs also because of good income security and it has become a well-known enterprise in Gumla district. For developing this enterprise at large scale, she had distributed work among all the members of the SHG like roles for grower, seller, value addition of mushroom and waste management. Empowering women for their development was a major role played by her in defining, challenging and overcoming barriers in the life.
Earlier oyster mushroom cultivation was found in a limited area of one or two blocks but now mushroom cultivation has been extended by farmers to farmers, SHGs to SHGs and other organizations in almost every block of Gumla district. Not only income but number of farmers and farm women engaged in mushroom cultivation were also increased. During 2023, the number of farmers and farm women involved in mushroom cultivation were about 350 and earned about Rs 50000 to Rs. 65000 in a season through the sale of mushroom, mushroom nuggets and pickles. They were also adopted the technology of vermicomposting of spent mushroom straw and used in vegetables crop.</td></tr>
</table>

Photographs






Name of Farmer	Mr. Dewan Oraon
Address & Contact details	Father's name- Sukra Oraon Name of the village- Shivrapur Name of the Block- Ghaghra Age (Yrs)- 51 Education- Primary Mobile- 9835088410 Social Category: ST 
Assets	Total operational holding (ha)- 2.0
	Animals (No.)
	1. Cow (Pahari local)- 02 Buffalo- 02
	2. Goat- 05
Title	**Remarkable Yield Triumph of Pea(Var. G-10) cultivation in Irrigated with Animal Farming System Typology under NICRA**
Details of technology	Mr. Dewan Oraon was always in search of farm innovation in respect to high return as well as of climate resiliency, and accordingly he decided to cultivate vegetable pea earlier to other grower, keeping the time, resources, climatic constraints and market demand in centre. He is a dedicated NICRA farmer, harnessed a combination of modern agricultural techniques and traditional wisdom to cultivate vegetable pea (high yielding, disease resistant and early maturing variety- G-10) in his 2 acre land during the Rabi season. Leveraging climate-resilient agricultural practices, Mr. Oraon employed precision farming methods like, before sowing pea, he conduct soil tests in KVK, to assess nutrient levels, pH, and other soil characteristics, including optimal seed selection, timely sowing, and efficient water and nutrient management like incorporate organic matter such as vermicompost and crop residues into the soil to improve its water-holding capacity and drainage characteristics. Additionally, he integrated sustainable soil conservation measures to enhance soil health and productivity, like sown pea in rows along the contour lines of the land to slow down irrigation water which helps prevent soil erosion, improves water retention in the root zone, and minimizes the risk of nutrient leaching.
Achievement of the farmer	Mr. Oraon's pioneering efforts bore fruit, quite literally, as his pea cultivation surpassed the yields of neighboring farms. Despite facing similar climatic challenges, his farm stood out due to its robust crop growth and abundant harvests. By embracing innovative farming techniques, Mr. Oraon not only increased his own productivity but also set a benchmark for success within his community.
KVK Intervention	The Krishi Vigyan Kendra Gumla played a crucial role in supporting Mr. Oraon's agricultural endeavors through tailored training programs, technical guidance, and access to cutting-edge research, KVK facilitated the adoption of climate-resilient practices among local farmers. Collaborating closely with Mr. Oraon, KVK provided personalized assistance, helping him fine-tune his cultivation techniques and overcome any challenges encountered during the growing season.

<table>
<tr><td>Impact</td><td>Mr. Dewan Oraon's success reverberated throughout the agricultural landscape, inspiring fellow farmers to embrace innovation and adopt climate-smart practices. His exemplary results showcased the potential of sustainable agriculture in mitigating the effects of climate change and enhancing rural livelihoods. By demonstrating the feasibility and profitability of pea cultivation during the Rabi season, Mr. Oraon stimulated interest and enthusiasm among his peers, sparking a collective shift towards more resilient and productive farming methods.
<table>
<tr><th>Impact factor</th><th>Before Adoption</th><th>After Adoption</th></tr>
<tr><td>Yield (q/ha)</td><td>68</td><td>110</td></tr>
<tr><td>Cost of cultivation (Rs)</td><td>65000</td><td>82500</td></tr>
<tr><td>Gross Income (Rs)</td><td>136000</td><td>220000</td></tr>
<tr><td>Net Profit (Rs)</td><td>71000</td><td>137500</td></tr>
<tr><td>B:C Ratio</td><td>2.09</td><td>2.66</td></tr>
</table></td></tr>
<tr><td>Outcome</td><td>Mr. Oraon's initiative were multifaceted and far-reaching. Not only did he achieve higher yields (110q/ha) and improve farm income by 93.66%, but he also contributed to food security and rural development in his community. By diversifying agricultural practices and promoting crop resilience, Mr. Oraon helped buffer local farmers against the uncertainties of climate variability. Moreover, his success story served as a catalyst for broader policy discussions and interventions aimed at promoting sustainable agriculture and enhancing the resilience of smallholder farmers across the region.
In conclusion, Mr. Dewan Oraon's journey exemplifies the transformative potential of innovation and collaboration in agriculture. Through his perseverance, supported by NICRA and KVK, he not only achieved personal success but also catalyzed positive change within his farming community. His story serves as a beacon of hope and inspiration for farmers striving to navigate the challenges of a changing climate while unlocking the full potential of sustainable agriculture. Approx more than 200 farmers of the adjoining villages come forward and started scientific pea cultivation. Altogether approx 25 ha area is under pea cultivation and associated farmer has succeeded in earning income of Rs. 80000-90000/ha per annum.</td></tr>
</table>

<table>
<tr><td>1</td><td>Name</td><td>:</td><td colspan="3">First Name: Ram

Middle Name:-

Surname: Sahu</td></tr>
<tr><td>2</td><td>Postal address</td><td>:</td><td colspan="3">Vill:-Khambhiya
Panchayet: Arangi
Black: Ghaghra
District: Gumla
State: Jharkhand
Phone: Mobile: 8340608872</td></tr>
<tr><td>3</td><td>Home town</td><td>:</td><td colspan="2">Village: Khambhiya
Taluk/Mandal: Ghaghra</td><td>District: Gumla
State: Jharkhand</td></tr>
<tr><td>4</td><td>Age</td><td>:</td><td colspan="3">53</td></tr>
<tr><td>5</td><td>Education</td><td>:</td><td colspan="3">12th</td></tr>
<tr><td>6</td><td>Land holding (acres)</td><td>:</td><td colspan="2">Irrigated: 7.5</td><td>Rainfed: 5.5</td></tr>
<tr><td rowspan="12">7</td><td rowspan="12">Farming experience</td><td rowspan="12">:</td><td>Crops grown:</td><td>Area (acres)</td><td>Productivity (kg/acre)</td></tr>
<tr><td>Rice</td><td>9.0</td><td>1400</td></tr>
<tr><td>Blackgram</td><td>1.0</td><td>320</td></tr>
<tr><td>Maize</td><td>1.0</td><td>1520</td></tr>
<tr><td>Groundnut</td><td>1.0</td><td>760</td></tr>
<tr><td>Ragi</td><td>1.0</td><td>600</td></tr>
<tr><td>Mustard</td><td>2.0</td><td>560</td></tr>
<tr><td>Maize-Watermelon</td><td>1.0</td><td>6300</td></tr>
<tr><td>Mango</td><td>2.0</td><td>-</td></tr>
<tr><td colspan="2">Livestock (no.): 06</td><td>Poultry (no.): 20</td></tr>
<tr><td colspan="2">Small ruminants (no.):</td><td>Farm machinery available: Tractor, Rotavetar, Cultivator, Sprayer ,Drip irrigation and solar based irrigation system</td></tr>
<tr><td rowspan="5">8</td><td rowspan="5">List the Rainfed/ Innovative farming technologies adopted</td><td rowspan="5">:</td><td colspan="3">In situ water harvesting: Drip irrigation system, Broad beds & furrow method, farm bunding & 5% model</td></tr>
<tr><td colspan="3">Ex-situ water harvesting: Well & Pond</td></tr>
<tr><td colspan="3">Improved varieties: Paddy (Sahbhagidhan & Hybrids), Maize (Hybrid), Groundnut (Smruti), Ragi (GPU-28), Black Gram (PU-31), Mustard (PM-30), Watermelon (F_1) etc.</td></tr>
<tr><td colspan="3">Farm machinery usage: Tractor, Rotavetar, Cultivator, Sprayer ,Drip irrigation and solar based irrigation system & Agriculture Drone</td></tr>
<tr><td colspan="3">Any other:</td></tr>
<tr><td>9</td><td>Recognition Certificates, awards etc. already recieved) Received from (Name of the organization)</td><td>:</td><td colspan="3"></td></tr>
</table>

10	Description of innovation/ **adopted Climate resilient practices** (1 or 2 practices) Describe in **not more than 100 words** and attach separately/ photo of the innovation/adopted technology)	:	Mr. Ram Sahu have 13.0 acre of rainfed agriculture land. Traditionally, he grew crops such as paddy, Maize, black gram, millets, potato, After joining with NICRA Project, he found out about diversified farming system and in-situ. He diversified Wheat crop with improved variety of Mustard crop (PM-30) which needs 3-4 irrigation. He also got solar based drip irrigation system and Pond for Rabi crops to aid judicious use of natural resources, which can irrigate 7.5 acre of his agriculture land. He has maintained a nutritious kitchen garden keeping in mind the health of his family members. He underwent training in Backyard Poultry farming from NICRA and rears 20 poultry birds to   generate an additional income.
11	Process of innovation/ **Adoption** (Describe in **not more than 100 words)**	:	After joining with NICRA Project and got training from scientists, Mr. Ram Sahu observed that the water scarcity and declining water table every year due to monoculture of the Rice-Wheat farming system in Jharkhand. In the Rabi season, he grows Wheat, but the diversified cropping system with improved variety of Mustard crop (PM-30) fetches him an additional income of Rs. 25000/ha with less irrigation application.
12	Practical utility of the innovation/adoption of technology (Benefits-yeild/income/resource conservation etc.)	:	More no of small and marginal farmers in this area cultivate Wheat crop in average 03-04 acre in Rabi season. The more no of farmers adopted the innovative technology (Diversified farming system) because the technology is easy and cost effective. Had he grown Wheat on 2.5 acre, he would have generated Net income of Rs.32000 where after adopting Diversified cropping system he pooled net income from Mustard Rs.54910. Also he saved 2-3 no. of irrigation.
13	Impact of innovation on other farmers (Quantify in terms of no. of other farmers adopted, area covered etc.)	:	In Gaghra block approx 150 farmers & 100 acre area covered under Mustard Crop.
14	Any other information pertaining to innovation/adoption of the technology not covered above	:	

Innovative Farmer

1	Name	:	First name: **Lalmohan** Middle Name: Surname: **Oraon**		
2	Postal address	:	Village: **Shivrajpur** Taluk/Mandal: **Ghaghra** District: **Gumla** State: **Jharkhand** Pin- **835207** Phone: Mobile: **9835703602**		
3	Home town	:	Village: **Shivrajpur** Taluk/Mandal: **Ghaghra**		District: **Gumla** State: **Jharkhand**
4	Age	:	**39**		
5	Education	:	**10th**		
6	Land holding (acres)	:	Irrigated: **3.0**		Rainfed: 7**.0**
7	Farming experience	:	Crops grown:	Area (acres)	Productivity (kg/acre)
			1. Rice	**5.0**	**1600**
			2. Groundnut	**1.0**	**820**
			3. Ragi	**0.5**	**560**
			4. Blackgram	**0.5**	**650**
			5. Ragi+Potato	**0.5**	**7000**
			5. Mango+Wheat	**1.0**	**1340**
			6. Mustard	**1.0**	**730**
			7. Watermelon	**1.0**	**3000**
			Livestock (no.): **Cow- 2no.** **Calf- 2 no.** **Cow (male)- 2 no.**		Poultry (no.): **58 no.**
			Small ruminants (no.): **Goat- 07 no.**		Farm machinery available: **1. Paddy thresher- 1 no.** **2. 5HP diesel motor pump set** **3. 1HP solar powered motor pump** **4. Sprayer-1 no.**
8	List the Rainfed/ Innovative farming technologies adopted	:	In situ water harvesting: **1. Drip irrigation system-1 acre** **2. Sprinkler irrigation system- 1acre**		
			Ex-situ water harvesting: **1. %5 model (Dova)- 3no.** **2. Commercial pond- 1no.**		
			Improved varieties:		

<table>
<tr><td></td><td></td><td></td><td>
<table>
<tr><td>Crops grown:</td><td>Variety</td></tr>
<tr><td>1. Rice</td><td>Swarna Shreya, CR Dhan 320</td></tr>
<tr><td>2. Groundnut</td><td>TG-51</td></tr>
<tr><td>3. Ragi</td><td>BM-3</td></tr>
<tr><td>4. Blackgram</td><td>PU-31</td></tr>
<tr><td>5. Wheat</td><td>Sabour Nirjal</td></tr>
<tr><td>6. Mustard</td><td>PM-30</td></tr>
<tr><td>9. Mango</td><td>Langra</td></tr>
</table>
Farm machinery usage: Solar based sprinkler irrigation system, Rotavetar, Zero till seed drill, Wheat & paddy thresher & Sprayer
</td></tr>
<tr><td>9</td><td>Recognition Certificates, awards etc. already recieved)
Received from (Name of the organization)</td><td>:</td><td></td></tr>
<tr><td>10</td><td>Description of innovation/ adopted Climate resilient practices
(1 or 2 practices)

Describe in not more than 100 words and attach separately/ photo of the innovation/adopted technology)</td><td>:</td><td>Mr. Lalmohan Oraon has total land of 7.0 acre. Traditionally, he grew crops such as paddy, Maize, black gram, millets, potato, wheat . After observing NICRA village Gunia, he inspired up and integrates his farming through the use of improved varieties of agriculture and horticulture crops, Backyard poultry farming and Composite fish farming. As a water conservation practice, he adopted solar based drip irrigation system in his field, which increased water use efficiency compared to flood irrigation. He recycles farm waste into healthy manure through the vermicompost unit and gets over 50% nutrients by recycling the bio-mass available within the farm itself.

 
Integrated Farming

 
Drip Irrigation in Watermelon</td></tr>
<tr><td>11</td><td>Process of innovation/ Adoption

(Describe in not more than 100 words)</td><td>:</td><td>As a farmer, he used to grow old varieties of field crops to earn his livelihood, but he was not satisfied with his income. Later, he visited old NICRA village Gunia, meet farmers and then he shifted to cultivation of improved variety of agriculture and horticulture crops. He planted mango trees in his field as an intercropping practice and he also started Composite fish farming in his pond to develop an Integrated Farming System model. He made two Vermicompost unit for organic farming and started Backyard poultry farming to enhance sustainability of his income.</td></tr>
</table>

12	Practical utility of the innovation/adoption of technology (Benefits-yeild/income/resource conservation etc.,)	:	Earlier, his only source of income was from crops such as Paddy, Ragi, Wheat etc. which would fetch him an annual net income of Rs. 65,000. With the introduction of Integrated Farming System and improved crop varities, his annual income increased to Rs.1,95,000. He has developed his farm with a combination of Agri-Horti farming system. He has planted mango trees in his field, utilising the land efficiently and has started composite fish farming to generate additional income.
13	Impact of innovation on other farmers (Quantify in terms of no. of other farmers adopted, area covered etc.)	:	Mr. Lalmohan Oraon is a role model for impoverished farmers of his village. He transformed into a successful farmer with an improved livelihood. He delivers lectures and shares his experience with neighbouring farmers. He is a great example of how adopting integrated farming practices could be the way forward for farmers.
14	Any other information pertaining to innovation/adoption of the technology not covered above	:	

Success Story 2022-23

Specific technology :- Variety (PM-30)

Name of KVK	**:**	Krishi Vigyan Kendra, Gumla Vikas Bharti Bishunpur
Crop and variety	**:**	Mustard (PM-30)
Name of farmer & address	**:**	Shri Rabi Oraon Vill- Nagar Block – Sisai Dist – Gumla Mobile no. – 7004967642
Background information about farmer field	**:**	Mr. Rabi Oraon is a medium land holding farmer having a total of 10 acre own land. Keeping the objectives of Frontline Demonstration in the centre, Mr. Oraon field was selected, which was on roadside and approachable to other adjoining villages. Field condition of demonstration plot was low in Nitrogen and Phosphorous while medium in potassium. Previously the cropping system of the respective farmer's field was Maize-Wheat and the farmer had to manage 6-8 no. of irrigation and threshing problem for wheat, which leads high production cost. Keeping the constraints of managing water, crop Mustard (variety – Pusa Mustard-30) was introduced in the existing system with an objective to minimize the cost and maximize the judicious utilization of available natural resources.
Details of technology demonstrated	**:**	➢ Line sowing ➢ Improved variety (Pusa Mustard-30) ➢ Seed rate 6 kg/ha ➢ Seed treatment with PSB + Azotobactor ➢ Application of vermicompost, Bio-zyme and Jeevamruth ➢ Soil application of Sulphur @ 25 kg/ha ➢ Application of Jeevamruth through Kisan drone ➢ Plant protection measures adapted as on required
Institutional involvement	**:**	1. Farmers selection 2. Conducted training program on **Scientific cultivation of Mustard** . 3. Supply of critical inputs in right time 4. Spray of Jeevamruth through kisan drone 5. Periodic field visits & field day
Success point	**:**	• Minimize three no. of irrigation costing of Rs 3000/ha. • High yielding variety & low nutrient requiring crop. • Low cost of inputs for cultivation. • Demonstration under cluster approach. • Yield (15.80 Q/ha) enhancement was 49.06% over Farmer's practice (10.60 Q/ha) • Maximum gain of net return (Rs.44180/ha) instead of Rs. 21380/- under farmer's practice.
Farmer feed back	**:**	✓ Showing keenness and willingness to adopt Mustard crop with an improved technology in Maize-Wheat system.

		✓ Market price is regular higher, low storage cost and easily storage.
Outcome yield (Q/ha)		
• **Demonstration**	**:**	15.80
• **Potential yield of variety/ technology**	**:**	22.00
• **District average (Previous year)**	**:**	9.68
• **State average (Previous year)**	**:**	9.53

Performance of technology vis-a-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's Practice	10.60	32150.00	53530.00	21380.00	1.66
Demonstration	15.80	35610.00	79790.00	44180.00	2.24
% Increase	49.06				


Farmer's Field Follow up

Field day

Success Story 2023-24

Specific technology :- Niger Variety (Birsa Niger-1)

Name of KVK	**:**	Krishi Vigyan Kendra, Gumla Vikas Bharti Bishunpur
Crop and variety	**:**	Niger (Variety Birsa Niger-1)
Name of farmer & address	**:**	Smt. Renu Jaiswal W/O Shri Mahesh Kumar Jaiswal Village – Duttra Block – Chainpur Mobile no. 9334623976
Background information about farmer field	**:**	During the selection of farmers for the cultivation of Niger under the cluster approach, the scientists of Krishi Vigyan Kendra met the farmers of Dattra village and also discussed various topics.. This village is connected by road and this road also connects other villages. The farming of the farmers of which village is rain based because there is no adequate means of irrigation. Due to this, most of the land here remains vacant and the soil here is also acidic and deficient in nitrogen and phosphorus. During this time, the scientists of the center met Mr. Mahesh Jaiswal of this village, who engaged in beekeeping and is also associated with the ARYA Project. Mr. Jaiswal told that due to less cultivation & low productivity of Niger in his village, we have migrated the bee boxes to some other place. In view of all these circumstances, Krishi Vigyan Kendra decided to conduct CFLD on Niger (var. Birsa Niger-1) in the same field with an objective to mitigate the yield gap.
Details of technology demonstrated	**:**	➢ Improved variety Birsa Niger-1 ➢ Seed treatment with *PSB* ➢ Line sowing ➢ Application of need based pesticides ➢ Application of vermicompost & bio fertilizer ➢ Application of Nano urea through kisan drone ➢ 250 bee boxes nearby the niger field
Institutional involvement	**:**	Training cum awareness programme on **scientific cultivation of Niger** was given to the farmers before the seeds were distributed. Trainings were conducted and inputs like Niger seeds @ 6 kg/ ha were distributed along with bio fertilizers Sagarika 30 kg/ha, vermi compost 200 kg/ha PSB for seed treatment & Nano urea 1 lit/ha spray through Kisan Drone Demonstrations on Niger were done in 7.6 ha area covering 11 farmers in the adjoining areas of Duttra villages in Chainpur block.
Success point	**:**	51.43 % yield increment was observed over farmer's used variety (Deomali). Maximum net return of Rs. 19780/ha was observed, while it was of Rs. 7789/ha under Farmer's practice. Honey production will increase about 20%.
Farmer feed back	**:**	He is very satisfied with the variety as the crop gave him successful return on time. Farmers believed that not only the production of Niger increased through beekeeping; we can also get additional income from beekeeping.
Outcome yield (Q/ha)		
• **Demonstration**	**:**	5.30
• **Potential yield of**	**:**	6.00

variety/ technology		
• **District average (Previous year)**	**:**	0.98
• **State average (Previous year)**	**:**	2.98

Performance of technology vis-a-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's Practice	3.50	19280	27069	7789	1.40
Demonstration	5.30	21210	40990	19780	1.93
% Increase	51.43				

Photographs

Spray nano urea through Kisan Drone

Flowering Stage

Bee colony nearby Niger field

Field day

Success Story

1. Personal information

1	**Name**	Shri Rabi Oraon
2	**Date of birth**	12/12/1972
3	**Education**	10th
4	**Education**	10 years
5	**Cell No.**	7004967642
6	**Address**	Vill- Kataidamar, Panchayet-Nagar, Block- Sisai District-Gumla Jharkhand
7	**Professional membership**	FPO
8	**Award received**	IINRG (NISA) Namkum (2020)

2. Professional information

1	**Title:-** ***Lac is life changing for tribal farmers***
2	**Farming Situation Analysis with Problem Statement:-** In Gumla, around 85 % population of the district is tribes. Maximum farm family are having small and marginal land holdings and cultivating *kharif* crops mainly rice under the monocropping. Very few farmers are growing rabi crops due to poor irrigation facility and resources. As the cropping is mono-cropping in general, seasonal migration of farm women is also a big problem in this area. Forests cover around 27 per cent of the total area of the district and abundant no of host plant are available in forest for lac cultivation. Many tribal farmers cultivate lac in traditional way and are getting very less income from this venture. Krishi Vigyan Kendra sorted out this problem and promoted **Scientific Lac Cultivation**.
3	**KVK intervention:-** After completing class 10, Rabi Oraon got engaged in farming and mainly cultivated paddy and Ragi in his 10 acres of land. There were sufficient number of Ber trees (105 No) in his tar fields but due to low production of lac in the ber trees, he started the lac cultivation on Semialata but due to less production in that too, he was not getting the expected production and income. Seeing this problem, Mr. Oraon contacted KVK Gumla, and got training on Scientific Lac Cultivation under ARYA Project. After getting training he started Scientific cultivation of Lac on ber, Semialata and today he is getting an income of about 5 lakhs from Lac and Brood Lac production. KVK Gumla, provided quality brood lac (Kusumi), tools and pesticides under ARYA project to him and others farmers of his village for lac production. Today Shri Oraon has become self-reliant towards lac seeds (Brood lac).
4	**Details of farmers practices about the lac cultivation:-** Shri Rabi Oraon has 60 no. of ber tree but he does not succeeded in cultivating Lac on all the tree. He cultivated lac only on 10-15 no. of ber trees, i,e 25% of total trees. For lac cultivation, he only inoculate brood lac and leave them as it is for harvesting, He did not manage the host plants, and also not having any tools for lac production like loopers, secateurs, trays and nets etc. He was only cultivating lac by traditional way.
5	**Results/Output (Economical and Social):-** Seeing the success of Shri Rabi Oraon, about 745 farmers of nearby villages are also earning good income by scientific lac cultivation. **Shri Oraon was selected as a progressive farmer in Lac cultivation by the Ministry of Agriculture and Farmers Welfare and his success story was published in front of Honourable Agriculture Minister, Shri Narendra Singh Tomar, GOI on the occasion of 94th ICAR Foundation Day celebration at ICAR New Delhi.** Today the farmers of the entire Nagar Panchayat are very happy with the bumper

production of Lac. Various families of Nagar Panchayat are becoming ***Lakhpati*** by cultivating lac. Today the Nagar Panchayat of Sisai block is famous in the entire district for lac production.

6 Impact/Outcome:-

Shri Rabi Oaron is motivating other young farmers for lac cultivation and 745 farmers of the adjoining villages come forward and started cultivation of lac. Altogether approx 7000 ber tree is under lac cultivation and associated farmer has succeeded in earning income of Rs. 45000-65000/- per annum. Lac cultivation has changed the life of villagers and they are trying for value addition in lac produce for better income. Mr. Oraon says that in the coming days, lac cultivation will be increased in Ber, Kusum and Semialata. It is our endeavour that in the coming days this Panchayat will be famous as the **"Lakhpatiyo ka Gaon"**.

S.No.	Year	No .of participants under training	No. of youths/farmers engaged in scientific lac cultivation	No. of youths established their own entrepreneurial units	No. of youths established in sustainable manner
1	2016-17	61	45	20	20
2	2017-18	109	85	20	20
3	2018-19	225	91	21	21
4	2019-20	196	143	21	21
5	2020-21	112	98	20	20
6	2021-22	174	161	35	28
7	2022-23	168	122	21	21
Total		**1045**	**745**	**158**	**151**

Based on this table, it is concluded that under the ARYA Project, 1045 youth farmers were given training on scientific lac cultivation from the year 2016-2022, out of which 745 **(71.29%)** farmers are earning good income from lac cultivation. After receiving training, 158 youth farmers started farming commercially, but due to some reasons, today 151 **(95.55%)** youth farmers are doing sustainable and commercial lac cultivation.

7 Economic information :-

Impact factor	Before Adoption	After Adoption
Yield (q/ha)	2.50	6.30
Cost of cultivation (Rs)	50,000.00	1,15,000.00
Gross Income (Rs)	1,12,500.00	5,04,000.00
Net Profit (Rs)	62,000.00	3,89,000.00
B:C Ratio	2.24	4.38

The KVK centre is motivating the rural youths for Scientific lac cultivation, due to which they are also getting handsome income. Based on this table, the farmer's net profit was Rs 62,000.00 traditionally and Rs 3,89,000.00 by scientific lac cultivation method and B:C is seen then it is 2.24 and 4.38.

Photographs

Training programme

Quality brood lac distribution

Distribution of looper, secateurs & tray

Semialata field visit

Ber field visit and field day

Union Minister for Tribal Affairs, Govt. of India, Shri Arjun Munda honor to Shri Ravi Oraon (Lac entrepreneur) Progressive Farmers Awards Programme organized by Vikas Bharti Bishunpur on 150 Years Birth anniversary of Mahatma Gandhi at Ranchi, Jharkhand

Honarabl MP Rajya Sabha Shri Sanjay Seth honor to Shri Ravi Oraon (Lac entrepreneur) Progressive Farmers Awards at NISA Namkum Ranchi

Shri Rabi Ji in News and Doordarshan programme

Success Story
"More income from natural farming"

1. Personal Information

Sl. No			
1	Name of farmer	:	Bandha Brijiya
2	Date of Birth	:	1960
3	Education	:	2nd
4	Farming Experience	:	40
5	Cell No.	:	8252117441
6	Full Address	:	Vill – Langratand Panchayet – Narma Block – Bishunpur District – Gumla State – Jharkhand Pin - 835231
7	Professional membership	:	Farmer club
8	Award received	:	
9	Size of land holding (in acre)	:	3.0

Introduction about the farmer : Bandha Brijiya comes from the primitive tribe of Jharkhand. He has studied till class 2. He was been doing farming in traditional way for a long time.

2. Professional Information

1. Title : Big income from natural farming

2. Situation analysis/Problem statement : Bandha Brijiya has been practicing traditional farming for a long time, cultivating one or two crops in some lands in a year, in which he used to apply cow dung Compost only once in a year. Due to which he was not able to get good production from his farming. But as the expenses of his family increased, he shifted his farming towards multi-cropping, but he stayed away from the use of chemical fertilizers due to which the cow dung manure was not supplying enough nutrients to his crops. Due to which they were not able to get good production. Bandha Brijiya came to Krishi Vigyan Kendra in the year 2021 and shared his problem with the scientists that the production in his farm is not increasing but we will not use chemical fertilizers to increase our production because Bandha comes from a primitive tribe family. Scientists of Krishi Vigyan Kendra advised them to implement the components of natural farming and said that this will increase production.

3. Plan, Implement and Support/KVK Intervention(s):

Bandha Brijiya keeps taking technical assistance from Krishi Vigyan Kendra Gumla from time to time. He did all his farming using traditional methods only. But in the year 2022, Krishi Vigyan Kendra advised them to do farming in natural way using the components used in natural farming in one acre and also gave them training in doing natural farming for 2 days. He started doing natural farming in one acre at his place from 2022. Under which he mainly cultivates vegetables. In collaboration with Agricultural Science Center Gumla, a floor has been constructed to collect cow urine in the cow shed located at Bandha Brijiya. They were also provided drums (200 and 50 litres), buckets (5 litres) and 1 liter measuring instruments for preparing beejamrit, jeevamrit and

insecticides. Due to which they can easily collect cow urine and prepare the material used in natural farming.

4. Details of Practices followed by the farmer :

After 2 days training, Bandha Brijiya started production of Bijamrit, Ghanjeevamrit, Jeevamrit, Neemastra, Agniastra and Burmastra etc. and under natural farming, crop diversification along with uses of local seeds and Bijamrit, Ghanjeevamrit, Jeevamrit, Neemastra, Agniastra and Burmastra. But in the initial phase, they got less production in natural farming, but when they saw that both the cost and profit in farming is better, then they started natural farming in the entire area. He believes that we should increase the area of natural farming because it brings more income and also improves the fertility of the soil.

Enterprise	Gross Income (annual)	Net income	Cost-Benefit ratio	Economic Impact of technology/intervention (cost saving/ higher yield/etc.)
Average expenditure and Profit under 3 Acre Traditional Farming				
Crops (Maize, Bodi, Groundnut, onion, Green pea, Potato, Brinjal , Chilli, Mustard and Redgram)	**135598.8**	**76028.4**	**2.28**	
Average expenditure and Profit under 3 Acre Natural Farming				
Crops (Maize, Bodi, Groundnut, Onion, Green pea, Potato, Brinjal , Chilli, Mustard and Redgram)	**175716**	**107427.12**	**2.57**	In the first year, the farmer earns Rs 31398.72 more income from natural farming. At the same time, the fertility of the soil of his field also became quite good.

Soil Fertility Status:

Sampling Time	OC%	pH	Av. N kg/ha	Av. P_2O_5 kg/ha	Av. K_2O kg/ha
Before Natural Farming (year - 2022 Kharif)	0.64	5.75	346.53	12.65	429.25
After Natural Farming (Kharif & Rabi – 2022)	0.81	5.91	451.45	20.13	473.16

5. Results/ Output :

In the first year the farmer earns Rs 31399/- more income from natural farming. At the same time, the fertility of the soil of his field also became quite good. The village of Bandha Brijiya is located at a distance of 18 kilometers from the block headquarters. 100% tribal families live in this village. They all do farming in the traditional way and do not use any chemical fertilizers. Due to which their production is low. Bandha Brijia increased crop diversification by using local seeds along with natural farming components like Beejamrit, Jeevamrit, Ghanjeevamrit and Mulching etc due to which he started getting good results. But in the initial stage he get low production. There was low production in natural farming, but when they saw that the cost of farming was less and profits were better only through natural farming. People see that Bandha Brijiya is increasing its production by using the Beejamrit, Jeevamrit, Ghanjeevamrit and Mulching etc. Then farmers of their village also seen and understand this technology. After this 25 farmers from their village are joining and moving towards natural farming due to which their production is increasing and they are liking the results.

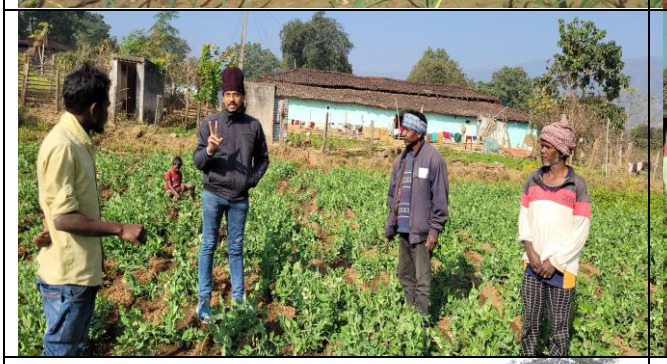
6. **Lesson learned and Future plans :**

By doing natural farming, the fertility of the soil is increasing and quality production is being achieved and the cost of farming is also being reduced due to which our income is also increasing. If natural farming is to be promoted then the government should make arrangements to collect cow urine in the cow sheds of the farmers. Floor will have to be constructed for this. Along with this, resources will also have to be made available to prepare natural products, which will encourage farmers to increase natural farming. Due to which the results of natural farming will be seen.

7. Good Quality Photographs (Farmer's Picture@, Field's Picture, Natural Farming Produce, Farming practices photos, etc.)


प्रत्यक्षण
फसल : प्याज प्रभेद : NS55
गाँव : लेंगडाटांड प्रखण्ड : विशुनपुर
कृषि विज्ञान केन्द्र, गुमला
विकास भारती बिशुनपुर


SPORTS




adidas


adidas




3. Economic Information

Enterprise	Gross Income (annual)	Net income	Cost-Benefit ratio	Economic Impact of technology/intervention (cost saving/ higher yield/etc.)
Expenditure and Profit under traditional Farming				
Crops (Maize, Bodi, Groundnut, onion, Green pea, Potato, Brinjal , Chilli, Mustard and Redgram)	**135598.8**	**76028.4**	**2.28**	
Expenditure and Profit under Natural Farming				
Crops (Maize, Bodi, Groundnut, Onion, Green pea, Potato, Brinjal , Chilli, Mustard and Redgram)	**175716**	**107427.12**	**2.57**	In the first year, the farmer earns Rs 31398.72 more income from natural farming. At the same time, the fertility of the soil of his field also became quite good.

Soil Fertility Status:

Sampling Time	OC%	pH	Av. N kg/ha	Av. P_2O_5 kg/ha	Av. K_2O kg/ha
Before Natural Farming (year - 2022 Kharif)	0.64	5.75	346.53	12.65	429.25
After Natural Farming (Kharif & Rabi – 2022)	0.81	5.91	451.45	20.13	473.16

News Coverage

Read Only - You can't save changes to t...

Name of farmer : Bundha Brijiya
Address: Vill – Langratand, Panchayet - Narma, Block - Bishunpur, Dist - G
Mobile Number : 8252117441
Age: 63
Education: 2nd
Size of land holding (in acre) : 3.0

Brief: The farmer used to get annual income of Rs. **58116.87** f
Field crops, Horticultural crops and Livestock. He faced problems
technological know-how and use techniques of critical inputs
importance of crop/varieties diversification, crop intensification,
judicious need-based irrigation, pest management, and ferti
application. With DFI interventions like skill training, scien
cultivation of different field crops and vegetable crops, demonstra
of improved varieties and area expansion in rabi season duc
judicious use of irrigation water and benefited government flex
program PM Kisan Samman Nidhi & Soil Health Card he get
annual income of Rs. **213433.65.**

51% 6:28 pm

Kisan Diwas 2021: लोहे की फार पजाने वाले आदिम जनजाति किसान बंधा बृजिया जैविक खेती से कैसे कर रहे दोगुनी आमदनी

आदिम जनजाति किसान बंधा बृजिया की वार्षिक आय करीब दो लाख 13 हजार रुपये है. शुरुआती दौर में वे किसानों की लोहे की फार पजाने का काम करते थे और परंपरागत तरीके से खेती किया करते थे. अब जैविक खेती कर रहे हैं.

By Prabhat khabar Digital |
Updated Date Thu, Dec 23, 2021, 4:53 PM IST

Kisan Diwas 2021: किसान बंधा बृजिया | प्रभात खबर

51% 6:28 pm

Updated Date Thu, Dec 23, 2021, 4:53 PM IST

Kisan Diwas 2021: किसान बंधा बृजिया | प्रभात खबर

Kisan Diwas 2021: झारखंड के गुमला जिले के बिशुनपुर प्रखंड के लंगड़ा टांड़ गांव के आदिम जनजाति किसान बंधा बृजिया आज किसानों के लिए प्रेरणा स्रोत हैं. इसकी मुख्य वजह वैज्ञानिक पद्धति से खेती करना एवं ऑर्गेनिक खाद को बढ़ावा देना है. किसान बंधा बृजिया पूर्व में परंपरागत तरीके से खेतीबारी करते थे, परंतु सात साल पूर्व वे कृषि विज्ञान केंद्र बिशुनपुर से जुड़कर वैज्ञानिक पद्धति व **ऑर्गेनिक खेती** कर रहे हैं.

विकास भारती ,बिशुनपुर में प्राकृतिक ख पर किसानों का दो दिवसीय प्रशिक्षण शु

बिशुनपुर (गुमला)। कृषि विज्ञान केंद्र गुमला विकास भारती बि
द्वारा संचालित परियोजना जैविक खेती विस्तार वर्ष 2022 - 2
अंतर्गत जिला स्तरीय दो दिवसीय 10,11 जनवरी आवासीय प्र
विषयक «प्राकृतिक खेती% पर आयोजित किया गया। इस प्रशिक्ष
उद्घाटन विकास भारती के संयुक्त सचिव महेंद्र भगत द्वारा किया गया
प्रशिक्षण का मुख्य उद्देश्य है कि जिले के सभी प्रखंडों से आए किसा
जैविक खेती का मास्टर ट्रेनर बनाना। जिनको प्रशिक्षण में प्राकृतिक
को बनाने पर प्रायोगिक कार्य कराते हुए सिखाया जाएगा कि यह जीव
खेती के अंतर्गत उपयोग किए जाने वाले बीजामृत, जीवामृत,
जीवामृत, नीमास्त्र, ब्रह्मास्त्र, अग्निस्त्र को कैसे बनाकर इसका प्रयोग
। साथ ही साथ इस प्रशिक्षण में प्रतिभागियों को केंद्र के निर्देशन इक
किए जा रहे प्राकृतिक खेती को भी दिखाया जाएगा।प्राकृतिक
परियोजना अंतर्गत देश के 425 कृषि विज्ञान केंद्रों में यह कार्यक्रम भ
कृषि अनुसंधान परिषद द्वारा चलाया जा रहा है। साथ ही साथ भारतीय
अनुसंधान परिषद अपने 25 केंद्रों पर इसका डाटा परीक्षण करा रहा है
मौके पर केंद्र के वैज्ञानिक डॉक्टर निशा तिवारी, इंजीनियर इश
डॉक्टर नीरज कुमार वैश्य, सुश्री शीला उरांव, शिवकुमार साहू सहि
लोग उपस्थित रहे।

प्राकृतिक खेती पर दो दिवसीय जिला विज्ञान केंद्र द्वारा आयोजित दो दिवसीय प्रशिक्षण का कार्यक्रम संपन्न

बिशुनपुर (गुमला) । कृषि विज्ञान केंद्र गुमला विकास भारती बिशुनपुर द्वारा संचालित परियोजना जैविक खेती विस्तार वर्ष 2022 - 23 के अंतर्गत जिला स्तरीय दो दिवसीय 10-11 जनवरी आवासीय प्रशिक्षण विषयक 'प्राकृतिक खेती' पर आयोजित प्रशिक्षण का समापन सत्र महेंद्र भगत, सचिव विकास भारती की अध्यक्षता में किया गया। इस तरीके का प्रशिक्षण का मुख्य उद्देश्य है कि जिले के सभी प्रखंडों से आए किसानों को प्राकृतिक खेती का मास्टर ट्रेनर बनाना। जिनको प्रशिक्षण में प्राकृतिक उत्पादों को बनाने पर प्रायोगिक कार्य कराते हुए सिखाया गया प्राकृतिक खेती के अंतर्गत उपयोग किए जाने वाले बीजामृत, जीवामृत, घन - जीवामृत, नीमास्त्र, ब्रह्मास्त्र, अग्निस्त्र को कैसे बनाकर और प्रयोग करेंगे साथ ही साथ इस प्रशिक्षण में प्रतिभागियों को केंद्र के निर्देशन इकाई पर भ्रमण कराकर प्राकृतिक खेती को दिखाया गया। प्राकृतिक खेती परियोजना अंतर्गत देश के 425 कृषि विज्ञान केंद्रों में यह कार्यक्रम भारतीय कृषि अनुसंधान परिषद द्वारा चलाया जा रहा है साथ ही साथ भारतीय कृषि अनुसंधान परिषद अपने 25 केंद्रों पर इसका डाटा परीक्षण करा रहा है। इस प्रशिक्षण के समापन सत्र के दौरान केंद्र के वैज्ञानिक डॉक्टर निशा तिवारी, मास्टर प्रशिक्षक डॉक्टर नीरज कुमार वैश्य, राजीव कुमार सिंह फार्म प्रबंधक सहित कई लोग उपस्थित रहे।

रांची एक्सप्रेस 12/1/2023

प्राकृतिक खेती पर प्रशिक्षण शिविर संपन्न

गुमला। कृषि विज्ञान केंद्र विकास भारती बिशुनपुर द्वारा संचालित परियोजना जैविक खेती विस्तार वर्ष 2022-23 के अंतर्गत जिला स्तरीय दो दिवसीय प्राकृतिक खेती पर आयोजित प्रशिक्षण शिविर बुधवार को संपन्न हो गया। प्रशिक्षण के समापन सत्र विकास भारती के महेंद्र भगत उपस्थित थे। इस तरीके का प्रशिक्षण का मुख्य उद्देश्य जिले के सभी प्रखंडों से आए किसानों को प्राकृतिक खेती का मास्टर ट्रेनर बनाना था। जिनको प्रशिक्षण में प्राकृतिक उत्पादों को बनाने पर प्रायोगिक कार्य कराते हुए सिखाया गया। प्राकृतिक खेती के अंतर्गत उपयोग किए जाने वाले बीजामृत, जीवामृत, घन जीवामृत, नीमास्त्र, ब्रह्मास्त्र, अग्निस्त्र को कैसे बनाकर और प्रयोग करेंगे। इस प्रशिक्षण के समापन सत्र के दौरान केंद्र के वैज्ञानिक डॉक्टर निशा तिवारी, मास्टर प्रशिक्षक डॉक्टर नीरज कुमार वैश्य, सहित राजीव कुमार सिंह फार्म प्रबंधक उपस्थित थे।

खबर मंत्र 12/01/2023

प्राकृतिक खेती के लिए जाना जाएगा गुमला

दैनिक जागरण 12// 23

संवाद सहयोगी, गुमला: कृषि विज्ञान केंद्र गुमला विकास भारती बिशुनपुर द्वारा संचालित परियोजना जैविक खेती विस्तार वर्ष 2022 – 23 के अंतर्गत जिला स्तरीय दो दिवसीय आवासीय प्रशिक्षण के दूसरे दिन बुधवार को "प्राकृतिक खेती" पर विकास भारती के संयुक्त सचिव महेंद्र भगत ने कहा कि जिले के सभी प्रखंडों से आए किसानों को प्राकृतिक खेती का मास्टर ट्रेनर बनाना, ताकि पूरे जिले में प्राकृतिक के रुप में गुमला की पहचान हो सके। मौके पर प्राकृतिक उत्पादों को बनाने पर प्रायोगिक कार्य कराते हुए सिखाया गया।

जीवामृत बनाने का दिया जा रहा प्रशिक्षण • जागरण

प्राकृतिक खेती के अंतर्गत उपयोग किए जाने वाले बीजामृत, जीवामृत, घन – जीवामृत, नीमास्त्र, ब्रह्मास्त्र, अग्निस्त्र को बनाने और प्रयोग के बारे बताया गया। प्रशिक्षण के उपरांत प्रशिक्षणार्थियों को केंद्र के निर्देशन पर भ्रमण कराकर प्राकृतिक खेती को दिखाया गया। प्राकृतिक खेती परियोजना अंतर्गत देश के 425 कृषि विज्ञान केंद्रों में यह कार्यक्रम भारतीय कृषि अनुसंधान परिषद द्वारा चलाया जा रहा है। साथ ही साथ भारतीय कृषि अनुसंधान परिषद अपने 25 केंद्रों पर इसका डाटा परीक्षण करा रहा है। किसानों को बारीकी से प्राकृतिक खेती के महत्व को बताया गया। किसानों ने भी अपनी जिज्ञासा को शांत करने के लिए कई सवाल पूछे। अधिकारियों द्वारा किसानों को जानकारी दी गई। समापन सत्र के दौरान केंद्र की वैज्ञानिक डा. निशा तिवारी, मास्टर प्रशिक्षक डा. नीरज कुमार वैश्य,राजीव कुमार सिंह फार्म प्रबंधक आदि उपस्थित थे।

Title: A Successful venture from Dairy and Fish Farming

Name: Manish Kumar Sahu
Address: Village – Palkot, Dist – Gumla, Jharkhand

Profile

Age	:	40 years
Education	:	Graduate
Family size	:	10
Landholding	:	5 acres
Farming experience	:	20 years
Crops grown	:	Paddy, Maize, Mustard, Potato, Fodder crops
Livestock/ Fisheries/ Enterprises	:	He is Operating Dairy farm (150 cow), Fish hatchery unit and value addition in dairy products
Recognition/Awards	:	Nil
Annual income (Rs.)	:	60,00,000.00

Nature of farm activities and technologies adopted :

- Manish Kumar is having 150 cows and 35 calves. Daily milk production is around 900 liter. He adds value to the milk and produces Khoa, curd, sweets and Ghee which he sells in his own outlet Hindustan dairy at Gumla district headquarter.
- He has 20 ponds (leased) in which he is doing fish production (150 q/annum) and also having a fish hatchery unit in which he is producing about 15 lakhs/fingerlings annum. He is earning approx 40 lakhs/annum from fish and fingerlings production
- He is producing Hybrid napier, Lucern & Maize in 11 acre of leased land.
- He is also growing rice crop in 5 acre
- He is continuously guided by the scientists of KVK Gumla about scientific dairy farming, fish farming fodder production etc.
- He is also selling fish and fingerlings in local market and adjoining districts.

Description of farm as entrepreneurship and business to generate annual income of million (Rupees ten lakh):

- Quality Milk production and its value addition is the major income generating activity of Mr. Manish. He sells best quality milk and milk products at his own outlet.
- Mr. Manish is having Jersey, Sahiwal and Gir breed of cows at his farm. He sells total bull production at local market.
- His total income from dairy farming and value added products is approx 20,00,000/annum and from fish farming is 40,00,000/annum.

Dairy Unit

Fish pond

Fodder production

4.6. Any other initiative taken by the KVK

i. Participatory Seed Production through seed village
ii. Breed chain development of pig
iii. Breed chain development of Goat
iv. Vermi village development with the support of NFSM/RKVY
v. Bora Bandi "A low cost water conservation method" at Village-Gunia (Ghaghra)
vi. Awareness for wheat threshing by thresher machine for feed safety
vii. Coping strategies towards climate change.
viii. Popularization of zero tillage machine
ix. Lac seed production
x. Swachch Bharat Abhiyan
xi. Technological backstopping in adoptive village of MP.
xii. Adoption of village by PC and SMS.
xiii. Agricultural knowledge at rural school
xiv. IARI Post office linkage programme.
xv. Soil health card
xvi. Crop insurance
xvii. Rain water harvesting (Dobha model)
xviii. Traditional bee keeping
xix. Safe storage
xx. Renovation of well
xxi. Women empowerment through value addition
xxii. Involvement of SHG in seed production programme
xxiii. Mushroom spawn production
xxiv. Skill training under ASCI
xxv. Haushing management in Goat & Pig
xxvi. Establishment of lac processing unit
xxvii. Ducry unit
xxviii. Micro irrigation system
xxix. Custruction of NADEP unit
xxx. Pramotion of seed drill machine
xxxi. Mango Orchard development
xxxii. Pramotion of meditional and aerometic plants
xxxiii. Promotion of organic rice cultivation
xxxiv. Empowerment of women through mushroom cultivation
xxxv. Biotech Kiasn
xxxvi. Establishment of Nutritional garden
xxxvii. Establishment of bottom mushroom production unit
xxxviii. Establishment of mushroom spawn production unit
xxxix. Van-aushadhi vatika in 18 village with 200 farm women
xl. Establishment of Dargon fruit cultivation unit at farm.
xli. Establishment of solar based water lifting unit at farm.
xlii. Establishment of transformer and electric supply at KVK farm.
xliii. FPO formation.
xliv. New NICRA village survey and work implementation (NICRA – Phase-III)
xlv. Natural farming
xlvi. Bamboo cultivation

5. LINKAGES

5.1. Functional linkage with different organizations

SN	Name of the agency	Nature of the Linkage
1.	District agriculture department	Planning and monitoring
2.	SAMETI, Ranchi	Training and Demonstration
3.	District Horticulture deportment	Training and Demonstration
4.	District Animal husbandry deportment	Training and Demonstration
5.	District Fishery deportment	Training and Demonstration
6.	District Soil conservation Deportment	Training and Demonstration
7.	District Forest deportment	Planting material distribution
8.	Integrated Trible Development Agency, Gumla	Project implementation
9.	Banks like BOI, SBI, and PNB etc.	SHG linkage
10.	NABARD	Kisan club , SHG and linkages
11.	NGOs	Capacity building
12.	BAU, Ranchi	Training, Demonstration and Seed availability
13.	ICAR- RCER, Plandu, Ranchi	Training, Demonstration and Seed or planting material availability
14.	CRIDA, Hydarabad	Project implemented
15.	IINR&G, Namkum, Ranchi	Training and Brood lac availability
16.	All KVKs of Jharkhand	Information and seed exchange
17.	IMD, Pune	Metrological data collection
18.	IIWR Karnal	Trial on Wheat
19.	ASCI, New Delhi	Skill Training
20.	Dist. Industrial Department	Market Chain
21.	NSC Patna and Ranchi	Seed
22.	PC Unit Jabalpur	AICRP on Niger
23.	Dist. Cooperative Department	FPO formation
24.	DRMR, Bharatpur, Rajasthan	Training and Demonstration
25.	JSLPS	Training and Demonstration
26.	JTDS	SHG and linkages
27.	CURRS, Hazaribagh	DBT Project Kisan Hub
28.	Davyan Krishi Vigyan Kendra Ranchi	Seed/animals components/ bee box
29.	Regional Fodder Station, Kalayni, WB	Fodder Seed
30.	BARC, Mumbai	Groundnut Seed

5.2. Details of Externally funded project & Programmes during 2023 (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.)
District level Kisan Mela	Kisan Mela	March 2023	NABARD	75,000.00
District level Kisan Mela	Kisan Mela	March 2023	DAO Gumla	2,03,196.00

6. PERFORMANCE INDICATORS

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

SlNo	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	Jan-Mar	10.5	92226.00	Jan-Mar	6000.00		Sell
						Apr-Dec	108.0		Apr-Dec	132600		
					Worms	Jan-Mar	0.02		1600.00			
3.	Nursery unit	2018-19	0.20 ha	Vegetables	Seedling	5675		45392.00	39138.00			Sell-12140 Farm use-3240 Stock in hand -10450
				Spices	Seedling	2025						
				Flower	Plant	500						
				Fruits	Plant	2630						
				Fodder	Slip	7000						
				Medicinal	Slip	8000						
4.	Goatry	2017-18	0.30 ha	Black bangal	Kids	02 no		34485.00	-			Stock in hand
5.	Duckry	2018-19	1500 sq ft	Indian runner	Egg	191 no		1275.00	1347.00			Sell
6.	Pig	2018-19	366 sq ft	Jharsuk	Piglet	56 no		149967.00	174880.00			Stock in hand-13 no Sell-38 no Piglet Mortality-5 no Pig sell-2 no.
					Pig	02 no						
7.	Mushroom unit	2015-16		Oyester	Spawn	0.635 q		-	10800.00			Sell
8.	Custom hiring			Drone		307 acre		5521.00	218500.00			
				Tractor		3 hr						
	Total							**328866.00**	**584865.00**			

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	
Wheat	04/11/22	08/04/23	0.20	Sabour nirjal	Seed	1.73	Nov-Dec	2619.00	4000.00	Sell
							Jan-Dec	2275.00		
Wheat	12/11/22	11/04/23	0.15	DBW-187	Seed	1.15	Nov-Dec	3939.00	5760.00	Sell
							Jan-Dec	2175.00		
Mustard	15/11/22	10/03/23	0.18	PM-30	Seed	1.30	Nov-Dec	3639.00	11440.00	Sell
							Jan-Dec	100.00		
Paddy	04/08/23	29/11/23-08/12/23	1.6	CR Dhan-305	Seed	46.26	67379.00		87894.00	Stock in hand
	09/08/23		0.10	Black rice	Seed	1.9			5700.00	Stock in hand
Paddy	27/07/23	22/11/23	0.20	Swarna shreya	Seed	6.16	11903.00		18480.00	Stock in hand
Ragi	02/08/23	07/11/23	0.10	BM-03	Seed	1.04	5281.00		4160.00	Stock in hand
Sesame	11/07/23	01/11/23	0.10	Kanke safed	Seed	0.07	1148.00		1050.00	Damage deu to rain
Niger	22/08/23	09/11/23-16/11/23	1.0	Birsa niger-3	Seed	2.64	15439.00		26400.00	Stock in hand
Redgram	11/07/23		0.40	Birsa Arhar-2	Seed	0.40	13418.00		Fruiting	
Dhaincha	03/07/23		0.40	Dhaincha	Seed	0.40	2168.00		-	Damage due to poor germination
Lentil	17/12/23		0.40	IPL-220	Seed	0.40	2367.00		-	Growth stage
Sweet corn	11/10/23		0.06	KSCH-333	Green cob	0.10	3092.00		-	Fruiting stage
Mustard	20/10/23		0.30	PM-30	Seed	0.30	5961.00		-	Fruiting stage
Paddy (OST)	12/07/23	27/10/23	0.04	Pac-807	Non Seed	2.22	5437.00		3782.00	Sell
Sunflower trial	11/11/23		0.04	SH-23 SH21 LSFH-171	Seed	-	637.00			Flowering
Wheat+Pea (OST	09/11/23		0.04	Sabour nirjal +	Seed	-	16440.00			Growth
Teprocia	2021-22	19/01/23	0.02	Candida	Seed	0.03	400.00		625.00	Sell
Tomato	10/11/22	17/02/23-25/03/23	0.06	Swarna Sampada	Non seed	3.67	Nov-Dec	1196.00	3700.00	
							Jan-Dec	1800.00		
							Total	2996.00		

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	
Brinjal	11/11/22	04/02/23-18/03/23	0.04	Swarna pratibha	Non seed	4.35	Nov-Dec	1796.00	4552.00	Seed
							Jan-Dec	2710.00		
							Total	4506.00		
Cauliflower + Cabbage	12/11/22	13/02/23-18/03/23	0.03	Aghani + Blue jay	Non seed	1.84	Nov-Dec	996.00	1840.00	Cauliflower damage due to cold
							Jan-Dec	1000.00		
							Total	1996.00		
Okra	12/03/23	11/05/23	0.04	Mahico Bhindi-10	Non seed	0.03	3497.00		50.00	Damage due to grazing
Bottle gourd	19/02/23	06/05/23-24/05/23	0.03	Anokhi	Non seed	3.71	4325.00		3075.00	Damage due to wilting
Chilli	18/05/23	-	0.02	Agni	Non seed	-	800.00		-	Damage due to grazing
Brinjal	23/08/23	09/11/23-29/12/23	0.03	RC-BR-22	Non seed	1.59	5081.00		3790.00	Harvesting going on
Chilli	07/10/23	-	0.02	Agni	Non seed	-	1912.00		-	Flowering stage
Turmeric	10/05/23	-	0.02	Rajendra Sonia	Seed	-	765.00		-	Growth stage
Yam	07/05/23	-	0.07	Gajendra	Seed	-	13742.00		-	Growth stage
Drumstick	29/07/23	-	50 plant	PKM-1	Non seed	-	1402.00		-	Growth stage
Potato	14/10/23	23/12/23 Harvesting going on	0.05	Lalgulab/ Kufri	Non seed	0.45	6027.00		720.00	Harvesting going on
Tomato	11/11/23		0.01	Swarna Prakash		-	446.00		-	Flowering stage
Corainder + Spianch	21/12/23		0.02	All green		-	1245.00		-	Growth stage
Orange	28/10/15-29/10/18		0.09	Nagpur Santara	Fruit	-	4058.00		-	No fruiting
Lemon	08/08/15		0.04	Kagji	Fruit	-	1384.00		-	No fruiting

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	
HD Guava	21/07/09 24/08/17		0.50	L-49, KG Guava, Allahabad Safeda	Fruit	-	8010.00	-	Pruning
Mango (B Block)	21/06/13	03/06/23	2.0	Langra	Fruit	With tree and 1.47 q	22480.00	170000.00	
Mango (C D Block)	20/07/08			Amrapali, Himsagar	Fruit	-	4493.00	4630.00	
Mango (A Block)	22/08/17	10/06/23	0.60	Amrapali, Langra	Fruit		7580.00		
Pomegranate + Litchi	25/04/11 2022		0.31	Ganesh, Bhagwa	Fruit	-	Nov-Dec 989.00 Jan-Dec 1475.00 Total 2464.00	-	Pruning Growth stage
Papaya	27/07/23-04/08/23		0.06	Ranchi Papaya	Fruit	-	5177.00	-	Growth stage
Litchi	24/12/23		47 plants	Shahi	Fruit	-	3187.00	-	Growth stage
Lemongrass	-	18/10/23-21/10/23	0.15	Krishna	Oil	4.4 liter	3060.00	6600.00	Stock in hand
Natural Farming									
Rabi 2022									
Potato	15/11/22-27/12/22	17/01/23-13/02/23	0.20	Lal Gulab	Non seed	2.25	8130.00	2250.00	Sell
Maize				Suwan-1		-		-	Maize crop damage
Radish				Japl White		1.10		1100.00	Sell
Okra				Mico-10		-		-	Okra crop damage
							Total	3350.00	
Summer 2023									
Radish	18/03/23-23/03/23	-	0.12	Japani white	Non seed	-	3047.00	-	Crop damage due to grazing
Cowpea				Gomati					

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	
Kharif 2023									
Millet	11/07/23-23/08/23	10/10/23-21/11/23	0.20	TNA-0202, DHBM-93-2, STA-3156, JK-41, BM-03	Non seed	0.10	12828.00	1000.00	Stock in hand
Ragi									Stock in hand
Maize						0.15		600.00	Maize crop damage due to insect
Rabi 2023									
Potato	02/12/23-14/12/23	-	0.20	Altimatam, Lal Gulab	Non seed	-	5084.00	-	Crop growth stage
Wheat				HD-2967					
Gram				GNG-15					

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	118.5 q	92226.00	138600.00	Sell
2	Worm	0.02 q		1600.00	
3	Jeevamruth	8800 lit	21826.00	132000.00	Sell and farm use
4	Ghanjeevamrut	4.0 q			Natural farming plot use
5	Neemastra	50.0 lit			Natural farming plot use
6	Dasparni	100.0 lit			Natural farming plot use
7	Beejamrit	50 lit			Natural farming plot use
8	Azolla	1.5 q		3750.00	Sell
9	Wheat Straw	3.0 q		1800.00	Sell
	Total		**114052.00**	**277750.00**	

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.	Goatry	Black Bengal	Kid	02 no	34485.00	-	Stock in hand
2.	Piggery	Jharsuk	Piglet	56 no	149967.00	174880.00	38 no piglet sell 02 no pig sell 13 no piglet stock in hand 05 no mortality
			Pig	02 no			
3.	Duckry	Indian runner	Egg	191 no	1275.00	1347.00	
4.	Poultry	Jharseem, Sonali, Red Divyayan	Chicks	264 no	4744.00	7320.00	Sell

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)
January 23	42	84	
January 23	10	70	
January 23	13	65	
February 23	07	07	
February 23	15	15	
February 23	11	11	
February 23			
February 23	20	140	
February 23	17	85	
March 23	25	575	
March 23	19	95	
March 23			
April 23	10	50	

April 23	16	80	
April 23	17	119	
May 23	13	91	
May 23	21	105	
May 23	20	80	
May 23			
May 23	50	100	
May 23			
June 23	20	80	
June 23			
June 23	21	630	
June 23	19	95	
June 23	16	80	
July 23			
July 23	20	100	
August 23	15	225	
August 23	20	100	
September 23	13	52	
September 23	10	70	
October 23	18	90	
October 23	15	75	
October 23	14	70	
October 23	19	95	
December 23	26	390	
December 23			
Total:			

(For whole of the year)

6.7 Utilization of staff quarters

Whether staff quarters has been completed **:** Completed

No. of staff quarters **:** 06

Date of completion **:** 9th March 2008

Occupancy details:

Months	Q I	QII	Q III	QIV	Q V	QVI
January 23	√	√	√	√	√	√
February 23	√	√	√	√	√	√
March 23	√	√	√	√	√	√
April 23	√	√	√	√	√	√
May 23	√	√	√	√	√	√
June 23	√	√	√	√	√	√
July 23	√	√	√	√	√	√
August 23	√	√	√	√	√	√
September 23	√	√	√	√	√	√
October 23	√	√	√	√	√	√
November 23	√	√	√	√	√	√
December 23	√	√	√	√	√	√

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 (2023-24) *(Rs. In Lakhs)*

Item	Released by ICAR		Expenditure		Unspent balance as on -
	Kharif	Rabi	Kharif	Rabi	
Sesame	1,00,000.00	-	1,00,000.00	-	-
Niger	1,49,952.00	-	1,49,952.00	-	-
Mustard	-	-	-	96,276.00	(-) 96,276.00
Linseed	-	-	-	46,850.00	(-) 46,850.00
Sunflower	-	-	-	88,558.00	(-) 88,558.00

7.3. Utilization of funds under CFLD on Pulses (2023-24) *(Rs. In Lakhs)*

Item	Released by ICAR		Expenditure		Unspent balance as on 1st April 2022
	Kharif	Rabi	Kharif	Rabi	
Blackgram	0.00	0.00	1,11,132.00	-	(-) 1,11,132.00
Pigeon pea	0.00	0.00	2,55,072.00	-	(-) 2,55,072.00
Lentil	0.00	0.00	-	1,66,611.00	(-) 1,66,611.00

7.4. Utilization of KVK funds during the year 2023 (Not audited)

Sl. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	21273384.00	21273384.00	21273384.00
2	Salary head balance Refund to ATARI	222554.00	222554.00	222554.00
	Total	**21495938.00**	**21495938.00**	**21495938.00**
3	Contingencies (General)			
A	TA	124964.00	124964.00	124964.00
B	HRD	8592.00	8592.00	8592.00
C	Miscllenеaus (POL, Stationary, Postage, Repair of vehicle, Telephone etc.	959260.00	959260.00	959260.00
D	Extension, Training (RY & PF) & Material	118637.00	118637.00	118637.00
E	Operational	696000.00	696000.00	696000.00
F	Maintainance of Building	40000.00	40000.00	40000.00
G	**Total (General)**	**1947453.00**	**1947453.00**	**1947453.00**
4	TSP			
A	TSP General	765997.00	765997.00	765997.00
B	TSP Capital	1578594.00	1578594.00	1578594.00
TOTAL (A)		**2344591.00**	**2344591.00**	**2344591.00**
GrandTotal		**25787982.00**	**25787982.00**	**25787982.00**
B. Non-Recurring Contingencies				
1	-	-	-	-
2	-	-	-	-
3	-	-	-	-
4	-	-	-	-
TOTAL (B)		**-**	**-**	**-**
C. REVOLVING FUND		**-**	**-**	**-**
GRAND TOTAL (A+B+C)		**25787982.00**	**25787982.00**	**25787982.00**

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

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year (Kind + cash)
2021 (Jan 21 to Dec 21)	36,84,236.37	15,91,855.00	11,47,968.19	41,28,123.18
2022 (Jan 22 to Dec 22)	41,28,123.18	12,23,271.00	9,82,935.00	43,68,459.78
2023 (Jan 23 to Dec 23)	43,68,459.78	16,25,826.00	10,05,518.00	**49,88,767.80**

7.6. i. **Number of SHGs formed by KVKs:** No SHG was formed by the KVK during the reporting period

(ii)Association of KVKs with SHGs (2023) 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 2023-24. The details of SHGs activities are listed below:

SL	Activities	No. of SHG	Mode of Convergence	Village	Block
1	Millet Cultivation	10	Aspirational Block development Scheme	Rampur,Jairagi	Dumri
2	Lac cultivation	02	ARYA	Kataidamar	Sisai
3	Bee Keeping	01	ARYA	Chainpur	Chainpur
4	Mustard Cultivation	01	DRMR	Chundri	Ghaghra
5	Poultry Farming	01	ARYA	Borang	Bishunpur
6	Mushroom cultivation	04	JSLPS	Toto, Kurag, Shivrajpur, ReheKubbatoli	Gumla, Ghaghra,Bishunpur
7	Medicinal, Aromatic and NTFP	5	JSLPS	Serka, Beti and Rehe Kubatoli,	Bishunpur
8	Commercial Vegetable and Mango production	6	NICRA	Shivrajpur	Ghaghra,
9	Millet based food products and value addition	5	JSLPS, FPO and DSW (District Social Welfare) Gumla	Gumla, Palkot, Bishunpur	Gumla, Palkot, Bishunpur
10	Goat Farming	2	ARYA	Sirkot, Ajiyatu	Ghaghra
	Total	**27**			

iii. Details of marketing channels created for the SHGs

SHG associated with KVK during 2023-24 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.

For promotion of millet-based food products in the district, Shri Sushant Gaurav (Deputy Commissioner, Gumla) had taken an initiative in this direction and accordingly established Ragi Processing Plant named "Johar millet café" 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 developed a whatsapp group of associated SHG members and accordingly right information has been collected for further marketing.

Details of market available during 2023-24 for associated SHG and their commodities

SN	Commodity	Quantity (in q)	Access to processing/ sellers point	Value (Rs. In lakh)
1	Lac	70	Lac purchasing centre developed under ARYA in Nagar (Sisai)	42.00
2	Mustard	240	LAMPS, Milinda oil extracting centre & JSLPS	13.56
3	Honey	45	Dabour, CFC Vikas Bharti Bishunpur	13.50
5	Mushroom	30	Local Market	6.00
6	Lemon grass oil	90 lit	Rural Service Centre, Banalat, Bishunpur	1.35
7	Poultry	1200 pc	Local Market	2.8
8	Goat	14	Local Market	5.6
9	Millet based food products	70	Outlet (Johar millet café) at Gumla, Anganwadi Centre through DSW,Gumla, watsapp online store	36
	Total	**469 q, 90 lit and 1200 pc**		**120.81**

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
04/01/23	01-Rabi workshop	Rabi	√		
07/02/23	01 (Meeting on Ragi Mission)	Rabi			√
27/02/23	01 (Kisan Mela at KVK reg)	Rabi			√
03/03/23	01 (Kisan Mela at KVK)	Rabi			√
03/04/23	01-Fishries development meeting	Summer			√
13/05/23	01-DPR in training-cum-meeting hall	Summer			√
08/06/23	01-Ragi meeting	Kharif			√
27/07/23	01-Kharif workshop at Gumla (ATMA)	Kharif		√	-
28/07/23	01-Contingent plan meeting	Kharif			√
15/09/23	01-Drought reg	Kharif			√
12/09/23	01-Drought reg	Kharif			√
05/10/23	SAMETI governing body meeting	Rabi			
15/11/23-31/12/23	Viksit Bharat Sankalp Yatra	Rabi			√
21/12/23	Rabi workshop	Rabi			√
22/12/23	SAC meeting	Rabi			√
14/03/23	01-(Meeting with ATMA)	Rabi		√	
12/07/23	01-(Meeting with ATMA)	Kharif		√	
12/09/23	01-(Meeting with ATMA)	Kharif		√	
23/09/23	01-(Meeting with ATMA)	Kharif		√	
15/10/23	01-(Meeting with ATMA)	Rabi		√	
05/10/23	01-(Meeting with ATMA)	Rabi		√	
25/10/23	01-(Meeting with ATMA)	Rabi		√	
21/10/23	01-(Meeting with ATMA)	Rabi		√	

7.8 Revenue generation

Sl.No.	Name of Head	Income (Rs.)	Sponsoring agency
1.	NABARD	75000.00	NABARD
2.	Dist Soil conservation office	180000.00	
3.	AICRP Niger FLD	58369.00	
	Total	**313369.00**	

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)
Plant hopper	Mango	15/02/23-05/04/23	800	40	243 ha

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)
Lumpy	Cows	1-25/04/2023	22	45	-

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	

8.4. PPV & FR Sensitization training Programme : NA

Date of vaccination programme	Resource Person	No. of participants	Registration (crop wise)	
			Name of crop	No. of registration

8.5. KVK Portal and Mobile App: NA

Sl. No.	Particulars	Description
1.	No. of visitors visited the portal	
2.	No. of farmers registered in the portal	
3.	Mobile Apps developed by KVK	
4.	Name of the App	
5.	Language of the App	
6.	Meant for crop/ livestock/ fishery/ others	
7.	No. of times downloaded	

8.6 Details of KVK Portal

No. of events added by KVK	No. of facilities added by KVK	No. of filled Report on Package of Practices				No. of filled profile report							
		Crop	Horticulture	Livestock	Fisheries	Employees	Posts	Finance	Soil Health Cards	Appliances	Crops	Resources	Fish
2023 (Jan23 – Dec 23) **Total - 5666**	13	4	3	-	-	16	16	-	-	-	-	-	-

8.7 Kisan Mobile Advisory Services/KMAS (m-Kisan Portal/National Farmers Portal/ SMS Portal)

Sl. No.	Discipline	No. of Advisories	No. of Messages (Text)	Total messages	No. of Farmers
1.	Crop	04	04	04	97102
2.	Livestock	02	02	02	48536
3.	Weather	04	04	04	97107
4.	Marketing				
5.	Awareness	02	02	02	48554
6.	Enterprises				
7.	Others				
	Total	**12**	**12**	**12**	**291299**

8.5 Kisan Sarathi

Name of KVK	No. of Farmers Registered on Portal
Gumla	4286

8.6. a. Observation of Swachhta hi Sewa (2nd -31st Oct 2023)

Date/ Duration of Observation	Total No of Activities undertaken	No. of Participants			
		Staffs	Farmers	Others	Total
18/10/23	Cleaning of KVK Campus	02	19		21
20/10/23	Awareness programm at Helta village	03	13		16
21/10/23	Awareness programm at Helta village	02	08		10
07/10/23	Toilet cleaning at Jatra Tana Bhagat Vidya Mandir	04	37		41
20/10/23	Road cleaning at Salam Nawatoli	02	12		14
01/10/23	Cleaning of Jatra Tana Bhagat Smarak Chingri	06	20		26
02/10/23	Mairathan Daud, Ghaghra	02	145		147
12/10/23	Cleaning of KVK Campus	10	16		26
06/10/23	Cleaning of KVK Campus	10	25		35
Total	**09 Activity**	**41**	**295**		**336**

b. Observation of Swachta Pakhwada (15 Dec -31st Dec 2023)

Date/ Duration of Observation	Total No of Activities undertaken	No. of Participants			
		Staffs	Farmers	Others	Total
16/12/23	01	01	252		253
17/12/23	01	01	798	01	800
18/12/23	01	01	120		121
19/12/23	01	01	239		240
20/12/23	01	01	307		308
21/12/23	01	01	268		269
22/12/23	-	-	-		-
23/12/23	01	01	123	01	125
23/12/23	01	01	204	02	207
24/12/23	01	01	285		286
25/12/23	-	-	-		-
26/12/23	-	-	-		-
27/12/23	01	01	193		194
28/12/23	01	01	385	01	387
29/12/23	01	01	396		397
30/12/23	-		-		-
31/12/23	-		-		-

c. Details of quarterly budget expenditure on Swachh activities including SAP

S.No	Activities	No of village covered	Total Expenditure (Rs.in Lakhs)
1.	Vermicomposting		1,00,000.00
2.	Other than vermicomposting activities under Swachata		

8.7. Details of '*Pre-Rabi Campaign'* Programme :

Date of programme	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 (Yes/No)	Coverage by other channels (Number)
				MLAs Attended the programme	Chairman ZilaPanchayat	Distt. Collector/ DM	Bank Officials	Farmers	Govt. Officials, PRI members etc.	Total		

8.8 . Vikisit Viksit Bharat Sanklap Yatra (LLB and ULB)

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	100	100	60712	300

8.9. 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	Contingent crops	Training-03	166	
			Kisan Gosthi-04	162	

9. Information on Visit of Ministers 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)
03/03/2023	Shri Narendra Singh Tomar	Minister of State for Agriculture and Farmers Welfare of India	

10. List of other visitors (MP/MLA/DM/VC/Zila Parishad/Other Head of Organization/Foreigners)

Date	Name of the person	Purpose of visit
18/01/2023	IIM Ranchi Scholores	Farm Visit
20/02/2023	Shri Sushan Gourav, DC Gumla	Farm Visit
03/03/2023	Shri Narendra Singh Tomar Minister of State for Agriculture and Farmers Welfare of India	Inauguration of District Level Kisan Mela
03/03/2023	Shri Sudarshan Bhagat Hon'ble MP Lohardaga	Inauguration of District Level Kisan Mela
03/03/2023	Shri Samir Oraon, MP Rajyasabha, Jharkhand	Inauguration of District Level Kisan Mela
03/03/2023	Dr. P. K. Rai, Director, DRMR, Bharatpur Rajasthan	Inauguration of District Level Kisan Mela
03/03/2023	Dr. Abhijeet Kar, Director NISA, Ranchi	Inauguration of District Level Kisan Mela
03/03/2023	Dr. Ajeet Kumar Singh, Senior Scientist KVK Ranchi	Inauguration of District Level Kisan Mela
03/03/2023	Dr. Ranjay Kumar, Senior Scientist KVK Chatra	Inauguration of District Level Kisan Mela
03/03/2023	Smt. Kiran Mala Bara, Zila Parishad, Gumla	Inauguration of District Level Kisan Mela
03/03/2023	Shri Sushan Gourav, DC Gumla	Inauguration of District Level Kisan Mela
03/03/2023	Shri Sushan Gourav, DC Gumla	Inauguration of District Level Kisan Mela
29/03/2023	Director , NCDC, New delhi	FPO Raidih & Gumla
03/04/2023	Team NIRD New Delhi	Follow up of PM Man Ki Baat programme (Lemon grass)
21/04/2023	Shri C.P. Radhakrishnan Hon'ble Governor	Inauguration of Singi Dai Van Vigyan Kendra
21/04/2023	Shri Samir Oraon, MP Rajyasabha, Jharkhand	Inauguration of Singi Dai Van Vigyan Kendra
01/05/2023	ZMC team of NICRA visit	KVK and NICRA village
02/05/2023	ZMC team of NICRA visit	KVK and NICRA village
04/05/2023	IIM Ranchi Scholores	Visit to KVK

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

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

- Year:
- Introduction / General Information:

Trial Name	Area covered	Variety name	Duration	Method of planting	Sowing	Grain Yield	Cost of cultivation (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	BCR
Kharif										
Rabi										

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	171	4183
b.	Women		
c.	Rural Youths	34	711
d.	Extension Personnel	03	126
2)	OFT	**No. of OFTs**	**No. of beneficiaries**
		16	200
3)	FLD	**No. of FLDs**	**No. of beneficiaries**
		1540	1677
4)	Mobile agro- advisory to farmers	**No. of advisory**	**No. of beneficiaries**
		327	295804
5)	Other activities		
a.	Participants in extension activities (No.)	82527	
b.	Production of seed (q)	64.88	
c.	Production of Planting material (No. in lakh)	1.98	
d.	Production of Livestock strains (No. in lakh)	0.05	
e.	Production of fingerlings (No. in lakh)	10.00	
f.	Testing of Soil, water, plant, manures samples (Nos.)	487	
g.	Asset creation (Number; Sprayer, ridge maker, pump set, weeder etc.)	904	
h.	No. of other programmes (Swachha Bharat Abhiyaan, Agriculture knowledge in rural school, Planting material distribution, Vaccination camp etc.)	203	

b. Fund received under TSP in 2023-24 (Rs. In lakh): 5,25,000.00

c. Achievements of physical outcome under TSP during 2023

Sl. No.	Description	Unit	Achievements
1	Change in family income	%	76
2	Change in family consumption level	%	85
3	Change in availability of agricultural implements/ tools etc.	No. per household	04

d. Location and Beneficiary Details during 2023

District	Sub-district	No. of Village covered	Name of village(s) covered	ST population benefitted (No.)		
				M	F	T
Gumla	-	171	Khatanga, Nawatoli, Nawadih, Shivrajpur, Nawatoli,Kubatoli, Chundari, Nawadih, Lalmati, Belagara, Ghaghra, Totambi, Lahastanr, Sehal Bansitoli, Barakhatanga, Sikwar, Chengari, Duko, Lahastand, Cheto, Dardag, Duko, Chota Ajiyatu, Ghutti, Gunia, Podi, Khambhiya, Naradih, Katanga, Belagara, Dardag, Hapamuni, Bendi, Mokro, Sikwar, Dewaki, Borang, Benti, Jori. Bari Samdari, Chapatoli, Tumse, Role, Langratand, Arangloya, Karamtoli, Kubatoli, Chatakpur, Serka, Banari, Serka, Katiya, Chatam, Helta, Kubatoli, Serka, Chapatoli, Chirodih, Bishunpur, Hesrag, Jehangutwa, Salam, Bhathipath, Jawari, Jawadih, Dumberpath, Gobarsela, Sato, Chatam, Kubatoli, Manjira, Salam, Banalat, Bendi, Beti, Helta, Amatipani, Oreya, Chatakpur, Jori, Bhadauli, Badgown, Sammal, Nagar, Khajurtoli, Semra Hrratoli, Pandariya, Lakeya Gharatoli, asaitoli, Jakutoli, Kataidamar, Kusumtoli, Sainda, Sammal, Nagar, Lalmati, Bargaown, Kataidamar, Lalmati, Bhandartoli, Gokhulpur, Olmunda, Konatoli, Bangaru, Telgaon, Toto Dhaknatoli, Nawadih, Toto Nawatoli, Phori Jungatoli, Kulabira, Sawaria, Phati, Khorajamtoli, Kulabira, Telgown, Tirra dumartoli, Gardhsaru. Pugu, Basua, Kalinga, PatgacchaKolambi,, Kumhariya, Gumla, Dhangaon , Nawatoli, Kotam, Kasira, Paharpanari, Keradih, Bertoli, Katkaya, Bansdih, Baglata, Marda baigatoli, Sipringa, Masgown, ariyamtoli Tilhaitoli, Singpur, Jarda, Nawadih, Ratantoli, Matimtoli, Karounda kheda, Tapkara, Orbenga, Nathpur, Nawatoli, Korkotoli, Tengariya, Panisani, Kulukera Kasira, Nathpur, Pinjradipa, Turiamba, Kumbhro, Bharno, Amboa, Duttra, Lalmati, Chitarpur, Tintangar, Bambiyari, Turbul, Arhara	37358	45217	82575

11.3. Details of Scheduled Caste Sub Plan (SCSP)

Sl.	Activities	Physical Achievement	
1)	Trainings	No. of Trainings/Demos	No. of beneficiaries
a.	Farmer		
b.	Women		
c.	Rural Youths		
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)		
f.	Testing of Soil, water, plant, manures samples (Nos.)		

11.4. NICRA (Technology Demonstration component)

a. Natural Resource Management

Name of intervention undertaken	Numbers under taken	No of units	Area (ha)	No of farmers covered / benefitted									Remarks
				SC		ST		Other		Total			
				M	F	M	F	M	F	M	F	T	
Summer ploughing	38	-	21	-	-	16	20	2	6	18	26	44	By farmers
Outlet & Inlet cleaning at Shivrajpur	02	02	-	-	-	-	-	-	-	-	-	13	2 Pond
Cleaning of Canal at Nawatoli	02	02	-	-	-	-	-	-	-	-	-	16	250 meter
Cleaning of Canal at Shivrajpur	01	01	-	-	-	-	-	-	-	-	-	10	100 meter
Dhaincha (Green manuring)	4	4	1.6	-	-	3	1	-	-	3	1	4	To improve soil health and crop productivity
Promotion of Natural farming	20	20	4.0	-	-	10	8	2	-	12	8	20	
Compost enrichment	20	20	-	-	-	7	10	2	1	9	11	20	
Regular ploughing of mango orchard to incorporate the plant litter in soil	25	25	10.8	-	-	11	14	-	-	11	14	25	
Soil Health Card				-	-	43	27	-	-	43	27	70	

b. Crop Management / Production

Name of intervention undertaken		Area (ha)	No of farmers covered / benefitted									Remarks
			SC		ST		Others		Total			
			M	F	M	F	M	F	M	F	T	
Drought tolerant/improved crop varieties	Paddy Var.Swarna Shreya	7.6	-	-	13	17	-	-	13	17	30	Drought tolerance crop variety.
	Ragi Var.-BM-3	6.0	-	-	7	13	-	-	7	13	20	
	Blackgram GPU-28	2.0	-	-	8	4	-	-	8	4	12	
	Red Gram Var.Rajeev Lochan	1.0	-	-	5	2	-	-	5	2	7	Tolerance YMV & Wilt.
	Mustard Var.PM-30	5.65	-	-	11	6	-	-	11	6	17	Bio- fortified variety
Advancement of planting dates of *rabi* crops in areas with terminal heat stress (10-12 days advancement in	Wheat Sabour Nirjal	3.0	-	-	7	5	-	-	7	5	12	Less water requiring crop variety
	Wheat HD 2967	2.0	-	-	4	2	-	-	4	2	6	
	Wheat DBW252	1.0	-	-	2	2	-	-	2	2	4	
	Wheat K8027	0.4	-	-	0	1	-	-	-	1	1	

Name of intervention undertaken		Area (ha)	No of farmers covered / benefitted									Remarks
			SC		ST		Others		Total			
			M	F	M	F	M	F	M	F	T	
date of sowing)	Lentil Var.-IPL-220	1.0	-	-	2	1	-	-	2	1	3	
	Linseed Var.- JLS-95	2	-	-	8	0	-	-	8	0	8	
Nutrient Management	Dhaincha	1.6	-	-	3	1	-	-	3	1	4	To improve soil health and crop productivity
Introduction of Heat tolerant crop for higher income & nutritional security	Okra- Anukranti (F_1)	3.0	-	-	9	7	-	-	9	7	16	• Cropping strategy for higher income. • Heat tolerate crop.
	Summer Moong Var.- IPM 2-3	3.4	-	-	7	9	-	-	7	9	16	
	Litchi Var.-Shahi litchi	2	-	-	6	4	-	-	6	4	10	

c. Livestock and fisheries

Name of intervention undertaken	Number of animals covered	No of units	Area (ha)	No of farmers covered / benefitted									Remarks
				SC		ST		Other		Total			
				M	F	M	F	M	F	M	F	T	
FLD on Composite fish farming		03	1.4		-	06	-	-	-	06		06	Promotion of composite fish faring

d. Institutional interventions

Name of intervention undertaken	No of units	Area (ha)	No of farmers covered / benefitted									Remarks
			SC		ST		Other		Total			
			M	F	M	F	M	F	M	F	T	
Custom Hiring Centre	01 (03 Implements)	10 ha	-	-	13	12	-	-	-	-	25	Farmers has succeeded in accessing the implements from custom hiring center
Climate literacy through a village level weather station	01		-	-	-	-	-	-	–	–	1024 household	Two in a week
Fodder Bank	140	140 unit	-	-	13	-	-	-	13	-	140	Establishment of wheat fodder storage at farm.
Seed Bank	-	63 ha			63	28			63	28	91	Establishment of Rice seed bank at NICRA villages through Beej Gram Program

e. Capacity building

Thematic area	No of Courses	No of beneficiaries								
		SC		ST		Other		Total		
		M	F	M	F	M	F	M	F	T
Scientific pig farming	1	-	-	9	7	-	-	9	7	16
Importance of PPR & FMD vaccination	2	-	-	47	29	-	-	47	29	76
Scientific cultivation of groundnut	1	-	-	8	5	-	-	8	5	13
Scientific cultivation of Rice and Fingermillet	1	-	-	16	19	-	-	16	19	35
Scientific cultivation of Fodder crop (Hybrid Napier)	1	-	-	9	5	-	-	9	5	14
Integrated Pest Management	1	-	-	4	12	-	-	4	12	16
Integrated Nutrient management	1	-	-	9	0	-	-	9	0	9
Scientific mango cultivation	1	-	-	10	5	-	-	10	5	15
Total	**09**	**-**	**-**	**112**	**82**	**-**	**-**	**112**	**82**	**194**

f. Extension activities

Thematic area	No of activities	No of beneficiaries								
		SC		ST		Other		Total		
		M	F	M	F	M	F	M	F	T
Field Day on Mustard (PM-30)	1	-	-	12	9	-	-	12	9	21
Field Day on Wheat (Sabour Nirjal)	1	-	-	16	19	-	-	16	19	32
Agri-Drone Technology Demonstration	1	-	-	17	27	-	-	17	27	44
Exposure visit	2	-	-	10	8	-	-	5	3	8
Kisan Gosthi	4	-	-	74	88	-	-	74	88	162
ZMC Visit	1	-	-	33	17	-	-	33	17	50
Soil Health Camp	1	-	-	11	21	-	-	11	21	32
Meri LiFE Program	1	-	-	17	35	-	-	17	35	52
ICAR Foundation Day	1	-	-	26	22	1	0	27	22	49
Field Day on Ragi (BM-3)	1	-	-	10	14	-	-	10	14	24
Total	**14**	**-**	**-**	**226**	**260**	**1**	**0**	**227**	**260**	**487**

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

SN	No. of blocks allocated	No. of blocks	No. of FPOs registered	Average no of members per FPO	No. of FPO received Management cost	No. of FPO received Equity Grant	No. of FPOs doing business
1	02	Gumla & Raidih	02	389.5	02	02	01

Number of commodity-based organizations/ farmers' cooperative society/ FPO formed/ associated with during last one year (Details of the group/society may be indicated)

S	Name of the FPO	Registration No and Date	Date of Trust Registration Address	Proposed Activity	Commodity Identified	No. of Members	Financial position (Rupees in lakh)	Success indicator
1	Gumla Sabjee Utpadan Sahyog Samiti Ltd.	05GUM/ 2021 13/07/21	13/07/2021 Kulhi, Panchayat-Aanjan, Block – Gumla (835233)	1. Marketing of raw vegetables, cereals, pulses, oilseed crops, Fertilizers and Pesticides 2. Production of cash crops 3. Marketing of NTFP	Tomato	353		1. Highly …. for cash crop production. 2. Convergence with line department
2	Raidih Fal Utpadan Sahyog Samiti Ltd.	04GUM/ 2021 03/07/21	0307/2021 Manjhatoli, Panchayat-Kuruchhatarpur, Block – Raidih (835232)		Mango			1. Farmers are getting higher rate compared to local market. 2. Agri seed, fertilizer, pesticides has been available at doorstep. 3. Convergence with line departments

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 (Hesrag, Kubatoli, Chatakpur, Bishunpur)	1.02 ha	03	40	01	20	03	36

b. Details of OFT/FLD

	Area (ha/ no. of Unit/Enterprise)	No. of farmers/ beneficiaries
OFT		
Nutritional Garden		
Bio-fortified Crops		
Value addition (in no. of Unit or no. of Enterprise)	02 (Rabi 2022-01, Kharif 2023-01)	60
Other Enterprises (in no. of Unit or no. of Enterprise)	01 (Rabi 2022)	30
	Area (ha/ no. of Unit/Enterprise)	**No. of farmers/ beneficiaries**
FLD		
Nutritional Garden	1.02 ha (Rabi 2022-0.62 ha, Rabi 2023-0.4 ha)	40
Bio-fortified Crops	PM-30 (30 ha)	65
	IPL 220 (20 ha)	109
Value addition (in no. of Unit or no. of Enterprise)		
Other Enterprises (in no. of Unit or no. of Enterprise)		
Mushroom production	40 unit (Rabi 2022-15, Rabi 2023-25)	40

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.	Chatakpur	Backyard/Kitchen Garden	5	1815.0	5
	Hesrag		4		4
	Banalat		4		4
	Balatu		2		2
2.		Community level			
3.		Terrace Garden			
4.		Vertical Garden			
TOTAL			**15**	**1815.0**	**15**

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 benefi-ciaries

e. Details of Value addition in Nutri-Smart village

Name of Nutri Smart Village	**Name of Crop/ veg./ fruits/ other**	**Name of Value-added product**	**Activity (OFT/FLD)**	**No. of farmers/ beneficiaries**
Kurag	Mushroom	Mushroom nuggets	FLD	02

f. Training programmes in Nutri-Smart village

Name of Nutri Smart Village	**Area of Training**	**No of courses**	**No. of beneficiaries**
Shivrajpur, Gunia, Banalat	Cutting tailoring, Value addition of millet and Mushroom production	03	25

g. Extension activities under NARI Project

Name of Nutri-Smart Village	**Title of Activity**	**No. of activities**	**No. of beneficiaries**
Shivrajpur	Kisan Gosthi	01	49

h. Details of recipe contest (if applicable)

No of events organised	**Name of location/village**	**No. of participants**
1. 28/08/236	Bishunpur	62
2. 23/09/23	Ghaghra	34
3. 12/10/23	Palkot	64

11.7 Attracting and Retaining Youth in Agriculture (ARYA)

Name of enterprises	**No. of entrepreneurial units established**	**No. of Training programs organized**	**No. of rural youth trained**		**No. of youth established units**		**Total entrepreneurial units formed**	**Total entrepreneurial units Functional**
			Male	**Female**	**Male**	**Female**		
Goat farming	14	03	29	32	06	01	07	07
Pig farming	09	03	32	43	07	02	05	05
Lac cultivation	21	03	47	05	11	05	16	16
Bee Keeping	05	01	13	09	03	00	03	03

11.8 Out-scaling of Natural Farming

a. **Overall achievements**

S.No	Name of Activity	No. of activities	No. of beneficiaries
1.	Awareness programme	68	3341
2.	Training programme	03	80
3.	Demonstrations	12	12

b. Details of Training programmes

S.No	Name of training programme	Date	Location/Venue	No. of beneficiaries
1	Natural Farming	10-11/01/2023	KVK HQ	40
2	Natural Farming	11/11/2023	Vill- Kotam	28
3	Natural Farming	01/12/2023	KVK HQ	12

c**. Details of Awareness programmes**

S.No	Name of Activity	Date	Location/Venue	No. of beneficiaries
1.	Natural Farming Awareness	04/01/23	KVK HQ	34
2.	Natural Farming Awareness	04/01/23	Charda	61
3.	Natural Farming Awareness	04/01/23	Brinda	35
4.	Natural Farming Awareness	06/01/23	ATIC Basia	62
5.	Natural Farming Awareness	06/01/23	Dumri block	32
6.	Natural Farming Awareness	07/01/23	Rengola	65
7.	Natural Farming Awareness	10/01/23	Ghaghra block	59
8.	Natural Farming Awareness	10/01/23	Palkot block	31
9.	Natural Farming Awareness	11/01/23	Chainpur block	76
10.	Natural Farming Awareness	11/01/23	Bharno block	47
11.	Natural Farming Awareness	12/01/23	Jari block	33
12.	Natural Farming Awareness	12/01/23	Kamdara block	57
13.	Natural Farming Awareness	12/01/23	Bishunpur block	48
14.	Natural Farming Awareness	17/01/23	KVK HQ	13
15.	Natural Farming Awareness	18/01/23	KVK HQ	128
16.	Natural Farming Awareness	23/01/23	Kurag	16
17.	Natural Farming Awareness	29/01/23	KVK HQ	29
18.	Natural Farming Awareness	11/04/23	Bishunpur block	36
19.	Natural Farming Awareness	10/05/23	KVK HQ	32
20.	Natural Farming Awareness	30/08/23	KVK HQ	42
21.	Natural Farming Awareness	21/11/23	Devaki	63
22.	Natural Farming Awareness	25/11/23	Ward no. 2 Gumla	15
23.	Natural Farming Awareness	28/11/23	Kulabira	34
24.	Natural Farming Awareness	29/11/23	Brinda	34
25.	Natural Farming Awareness	18/11/23	Karaundi	84
26.	Natural Farming Awareness	19/11/23	Mamarla	90
27.	Natural Farming Awareness	28/11/23	Upat Khatanga	80
28.	Natural Farming Awareness	04/11/23	KVK HQ	53
29.	Natural Farming Awareness	17/11/23	Sisi Karamtoli	64
30.	Natural Farming Awareness	20/11/23	Bhadauli	74

S.No	Name of Activity	Date	Location/Venue	No. of beneficiaries
31.	Natural Farming Awareness	22/11/23	Banari	69
32.	Natural Farming Awareness	30/11/23	Adar	33
33.	Natural Farming Awareness	30/11/23	Bangri	57
34.	Natural Farming Awareness	19/11/23	Baghima	45
35.	Natural Farming Awareness	20/11/23	Surhu	89
36.	Natural Farming Awareness	22/11/23	Bishunpur	85
37.	Natural Farming Awareness	30/11/23	Asni	45
38.	Natural Farming Awareness	25/11/23	Atakora	50
39.	Natural Farming Awareness	27/11/23	Bendora	109
40.	Natural Farming Awareness	21/11/23	Dumbo	45
41.	Natural Farming Awareness	30/11/23	Bhurso	46
42.	Natural Farming Awareness	28/12/23	Jarjatta	21
43.	Natural Farming Awareness	18/12/23	Barwenagar	48
44.	Natural Farming Awareness	23/12/23	Bendora	39
45.	Natural Farming Awareness	27/12/23	Kasir	60
46.	Natural Farming Awareness	28/12/23	Adar	45
47.	Natural Farming Awareness	02/12/23	Sarango	34
48.	Natural Farming Awareness	02/12/23	Kuru Chatarpur	67
49.	Natural Farming Awareness	04/12/23	Ghaghra	58
50.	Natural Farming Awareness	11/12/23	Konbir	56
51.	Natural Farming Awareness	13/12/23	Sisi Karamtoli	26
52.	Natural Farming Awareness	14/12/23	Gobindpur	77
53.	Natural Farming Awareness	15/12/23	Sikri Ambatoli	30
54.	Natural Farming Awareness	16/12/23	Aamgaon meral	52
55.	Natural Farming Awareness	20/12/23	Malam	51
56.	Natural Farming Awareness	01//12/23	Ghatobagicha	45
57.	Natural Farming Awareness	02/12/23	Bilingbira	47
58.	Natural Farming Awareness	04/12/23	Chundari	33
59.	Natural Farming Awareness	05/12/23	Naudiha	30
60.	Natural Farming Awareness	06/12/23	Jhikirma	45
61.	Natural Farming Awareness	20/12/23	Kuhipathy	40
62.	Natural Farming Awareness	21/12/23	Bamda	44
63.	Natural Farming Awareness	24/12/23	Duko	25
64.	Natural Farming Awareness	02/12/23	Jarda	28
65.	Natural Farming Awareness	04/12/23	Kulabira	35
66.	Natural Farming Awareness	10/12/23	Palkot	24
67.	Natural Farming Awareness	11/12/23	Nagar	22
68.	Natural Farming Awareness	29/12/23	Kugaon	59
	Total			**3341**

e. Details of Demonstrations

S.No	Name of Crop	Location of Demo.	Area of Demo.
	Kharif 2023		
1	Maize+Cowpea	Borang & Langratanr	4.0
2	Blackgram	Langratanr	3.0
3	Groundnut	Nawadih	0.50
4	Ladyfinger	Nawadih	0.50
	Rabi 2023		
1	Wheat	Borang & Langratanr	2.5
2	Gram	Nawadih	1.0
3	Potato	Nawadih	5.5
4	Onion	Nawadih	3.0

11.9 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
01	12	105	19	310	29045	0

11.10 KSHAMTA : NA

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

11.11 Agri-Drone

S. N	Name on the project implementation center (PIC)	No. of kisan drones sanctioned	No. of kisan drones purchased by the PIC	Procurement of no of drones in process	Area covered under the kisan drone demonstration (ha)	No. of demonstration conducted	No. of Pilot training proposed	No. of Pilot training conducted
1	KVK Gumla	01	01	00	315.41	789	02	02

11.12 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)	Remarks	No. of farmer adopted practicing IFS	% Change in adoption during the year
1	Rainwater harvesting pond		0.12	-	-	-			
2	HD Guava		0.50	-	8010.00	-	Pruning work		
3	Pomegranate		0.31	-	989.00	-	Pruning work		
4	Vegetable	*Rabi & Summer*	0.20	9.86 q	5510.00	10092.00	Sell		
5	Crops (*Rabi & Kharif*)		0.20	7.89 q	14178.00	22480.00	1.73 q sell 6.16 q stock in hand		
6	Dairy	Milk	0.20	3715.5 lit	266006.00	184890.00	Sell		
		Cow & Calf		02 (Calf)		12000.00	Value stock in hand		
		Urine		373 lit		1865.00	Sell		
		Cowdung		50 q		8275.00	Sell		
		Vermi compost		89.75 q		107700.00	Sell		
7	Goatry	Kids	0.30	02 no	34485.00	6000.00	Value stock in hand		
		Goat		13 no		78000.00	Value stock in hand		
		Goat dung		10 q		5000.00	Value stock in hand		
8	Duck	Egg	0.013	191 no	1275.00	1347.00	Sell		
		Duck		10 no		3000.00	Value stock in hand		
9	Mushroom		0.0016	-	--	--			
10	Vermicompost		0.0017	118.5 q	92226.00	140200.00	Sell		
	Worm			0.02 q					
10	Jeevamruth		0.004	800 lit	21826.00	132000.00	Sell		
11	Pig	Piglet	0.033	56 no	149967.00	193380.00	38 no piglet sell 13 no Piglet stock in hand and value amount 02 no pig sell 07 no pig stock in hand and value amount		
		Pig		09 no.		135000.00			
	Total		**1.88 & 1.89 1 Unit**	**286.02 q 283 no 12888.50 lit**	**594472.00**	**1041229.00**			

a. 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.	Rainwater harvesting pond	01	01	0.12	01	03	01	210
2.	HD Guava	01	01	0.50	01	08	01	198
3.	Pomegranate	01	01	0.31	01	02	01	148
4.	Vegetable	01	01	0.20	01	04	06	109
5.	Crops	01	01	0.20	01	02	05	33
6.	Dairy	01	01	0.20	01	02	02	61
7.	Goatry	01	01	0.30	01	02	10	66
8.	Duck	01	01	0.013	01	01	05	61
9.	Mushroom	01	01	0.0016	01	02	20	51
10.	Vermicompost	01	01	0.0017	01	03	10	51
11.	Pig	01	01	0.033	01	04	01	130

11.13 Report on Digital Farming Initiatives in Agriculture/ Digital Ag. Extension Service

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					

11.14 Any other programme organized by KVK, not covered above

Sl. No.	Name of the programme	Date of the programme	Venue	Purpose	No. of participants

12 Good quality action photographs with caption in JPEG FORMAT SEPARATELY of overall achievements of KVK during the year (best 10) : ATTACHED