3.3 ACHIEVEMENTS OF FRONTLINE DEMONSTRATIONS(FLD)

A. Overall achievements of FLDs conducted during the year 2023

S.No	Crop category	No. of FLD	Area / No	No of beneficiaries	Yield in Demo (q/ha)	Yield in check (q/ha)
	Cereals	1	12	27	45.5	38.7
	Oil Seed					
	Pulses	1	02	15	6.7	7.9
	Horticulture Crops (Brinjal)	1	02	10	332.36	298.30
	Other crops	1	02	08	25	17
	Hybrid crop					
	Livestock					
	Fisheries					
	Other enterprises (Mushroom)	2	2	35	1.5 kg./bag	-
	Women empowerment					
	Farm Machinery	1	03	06	312.15	67.9
	Grand Total					

B. Details of FLDs conducted during the year 2023

1. Cereals

Crea	Thematic	Name of the	No. of	Area	Yield	(q/ha)	%	*Econ	omics of (Rs./		ation	*I	Economic (Rs./	s of chec /ha)	k
Crop	Area	technology demonstrated	Farmers	(ha)	Demo	Check	Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Paddy (S.Sampann)	ICM	Demonstration of highYielding variety under SCSP	27	12	45.5	38.7	17.5	38000	88725	50725	2.33	35000	75465	40465	2.15

2. Oilseeds

Cron	Thomatic Area	Name of the	No. of	Area	Yield	(q/ha)	%	*Ec		of demonstrat s./ha)	ion	:		cs of check s./ha)	-
Crop	Thematic Area	technology demonstrated	Farmers	(ha)	Demo	Check	Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
								COSt	Return	Return	DCK	COSt	Return	Return	DCK
Total															
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

3. Pulses

Cron	Thematic Area	Name of the	No. of	Area	Yield	(q/ha)	%	*Ecor	nomics of (Rs.		ation	*I	Economics (Rs./		-
Crop	Themauc Area	technology demonstrated	Farmers	(ha)	Demo	Check	Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Greengram	ICM	Scientific cultivation of Greengram	15	2.0	6.7	7.9	17.9	21779	55300	33521	2.53	22890	32500	9610	1.42
	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

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

Cron	Thomatic Area	Name of the	No. of	Area	Yield	(q/ha)	%	*Economi	ics of demo	nstration (I	Rs./ha)	*]	Economics (Rs./l		
Crop	Thematic Area	technology demonstrated	Farmers	(ha)	Demo	Check	Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR

Brinjal	Water Management	Raised Bed & Mulching	10	2	332.36	298.30	11.42	2,35,160	4,98,540	263380	2.12	294375	447450	153075	1.52
	Total														

5. Other crops

Crop	Thematic	Name of the	No. of	Area	Yield (q/ha)	% change		her neters	*Eco	nomics of c (Rs./ł		tion	*	Economics (Rs./ł		
Crop	area	technology demonstrated	Farmer	(ha)	Demons ration	Check	in yield	Demo	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Makhana	Yield Increment	Demonstration of High yielding variety	8	2.0	25	17	47.05			88000	180000	92000	1.05	75000	122400	47400	0.63
Iviakilalia		variety															
		Total															

6. Demonstration details on crop hybrid varieties

	Name of the	No. of	Area	Yield (kg	g/ha) / major	parameter		Economic	s (Rs./ha)	
Crop	Hybrid	Farmers	(ha)	Demo	Local check	% change	Gross Cost	Gross Return	Net Return	BCR
Cereals										
Bajra										
Maize										
Paddy										
Sorghum										
Wheat										
Others (Pl. specify)										
Total Cereals										
Oilseeds										
Castor										
Mustard										
Safflower										
Sesame										
Sunflower										
Groundnut										
Soybean										
Others (Pl. specify)										
Total Oilseeds										
Pulses										
Greengram										
Blackgram										
Bengalgram										
Redgram										
Others (Pl. specify)										
Total Pulses										
Vegetable crops										
Bottle gourd										
Capsicum										
Cucumber										
Tomato										

Brinjal							
Okra							
Onion							
Potato							
Field bean							
Others (Pl. specify)							
Total Veg. Crops							
Commercial Crops							
Cotton							
Coconut							
Others (Pl. specify)							
Total Commercial Crops							
Fodder crops							
Napier (Fodder)							
Maize (Fodder)							
Sorghum (Fodder)							
Others (Pl. specify)							
Total Fodder Crops							
Zeen envioe to be mealed a	 -1	L	• • • • • • • • • • • • • • • • • • • •	 	1		

7. Livestock

Cotogony	Thematic	Name of the	No. of	No. of	Maj param		% change	Other par	rameter	*Eco	nomics of (Rs		tion	*	Economic (Re		, L
Category	area	technology demonstrated	Farmer	units	Demons ration	Check	in major parameter	Demons ration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Dairy																	
Cow																	
Buffalo																	
Poultry																	
Rabbitry																	
Piggery																	
Sheep and goat																	
Duckery																	

Others									
(Pl.									
specify)									
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

8. Fisheries

Thematic	technology	No. of	No.	-		% change	Other par	rameter	*Eco			ation	*			ζ.
area	demonstrated	Farmer	units	Demons ration	Check	parameter	Demons ration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
	Total				•	•	•	•	•	•		•				
		Inematic area technology demonstrated Image: Area Image: Area Image: Area Ima	Inematic area technology demonstrated No. of Farmer Image: Strateging of the strategi	Inematic area technology demonstrated No. of Farmer of units Image: Strategy demonstrated Image: Strategy demonstrated Image: Strategy demonstrated of Image: Strategy demonstrated Image: Strategy demonstrated Image: Strategy demonstrated Image: Strategy demonstrated Image: Strategy demonstrated Image: Strategy demonstrated Image: Strategy demonstrated Image: Strategy demonstrated Image: Strategy demonstrated Image: Strategy demonstrated Image: Strategy demonstrated Image: Strategy demonstrated Image: Strategy demonstrated Image: Strategy demonstrated Image: Strategy demonstrated Image: Strategy demonstrated Image: Strategy demonstrated Image: Strategy demonstrated Image: Strategy demonstrated Image: Strategy demonstrated Image: Strategy demonstrated Image: Strategy demonstrated Image: Strategy demonstrated Image: Strategy demonstrated Image: Strategy demonstrated Image: Strategy demonstrated Image: Strategy demonstrated Image: Strategy demonstrategy demonstrated Image: Strategy demonstrategy d	Thematic area Name of the technology demonstrated No. of Farmer No. of of units parameter Image: Parameter Image: Parameter Image: Parameter Image: Parameter Image: Parameter Image: Parameter Image: Parameter Image: Parameter Image: Parameter Image: Parameter Image: Parameter Image: Parameter Image: Parameter I	Inematic area technology demonstrated No. of Farmer of of units parameters Image: Area of Demons ration Image: Area of Check Image: Area of Tation Image: Area o	Thematic area Name of the technology demonstrated No. of Farmer INO. of of units parameters % change in major parameter Demons ration Check parameters % Image: I	Thematic area Name of the technology demonstrated No. of Farmer No. of of units No. of Demons ration parameters Demons ration % change in major parameter Other parameters 1 1 1 1 1 1 Demons ration Demons ration Demons parameter Demons ration 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Thematic area Name of the technology demonstrated No. of Farmer No. of of units No. of of parameters No. of Demons ration No. of Check Mo. of in major parameter Other parameter 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Thematic area Name of the technology demonstrated No. of Farmer No. of units no. of units parameters Demons ration % change in major parameter Other parameter 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Thematic areaName of the technology demonstratedNo. of FarmerNo. of of unitsNo. of of unitsNo. of of parametersNo. of ParametersNo. of of unitsNo. of of unitsNo. of of unitsNo. of parametersNo. of paramet	Thematic technology demonstratedNo. of FarmerNo. of of unitsNo. of of unitsNo. of of nemons rationParameters% change in major parameterOther parameterOther parameter $(Rs.)$ CostReturn111	Thematic areaName of the technology demonstratedNo. of FarmerNo. of of unitsNo. of of rationNo. of rationNo. of rat	Thematic areaName of the technology demonstratedNo. of FarmerNo. of of unitsNo. of parametersNo. of parametersMonop parameterOther parameterOther parameterOther parameterCheck ReturnGross ReturnReturnNo. of Return** BCRGross Cost11	Image area No. of the technology demonstrated No. of farmer No. of one parameters No. of mins Demons ration Check Other parameter Check Gross ration Return Return Return Return BCR Cost Return Return	Thematic rareaNo. of farmerNo. of of unitsNo. of of unitsNo. of of unitsNo. of rationNo. of

* 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

Catagory	Name of the	No. of	No.of	Maj param		% change	Other par	rameter	*Econom	nics of dem or Rs./v		n (Rs.)	*I	Economic (Rs.) or	s of check Rs./unit	k
Category	technology demonstrated	Farmer	units	Demons ration	Check	in major parameter	Demons ration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Oyster mushroom	Enterprise development	Oyster Mushroom Production	25	1.5 kg. per Bag	-	-	-	-	50/bag	200/bag	150	3.0	-	-	-	-

Button mushroom	Enterprise development	Button Mushroom Production	10	2.0 kg per bag	-	-	-	194/bag	358/bag	164	0.84	-	-	-	-
Vermicompost															
Sericulture															
Apiculture															
Others (pl.specify)															
	Total														

10. Women empowerment

Name of technology	No. of demonstrations	Name of technology	Obser	vations	No. of Beneficiaries
			Check	Demonstration	
Women					
Drudgery Reduction					
Enterprises					
Farming System					
Health and nutrition					
Kitchen Garden	02	Household food security by kitchen gardening and nutrition gardening	0.5 kg per day	1.25 kg per day	225
Nutrigarden					
Storage Technique					
Value addition					
Women Empowerment	01	Income Generation	-	1200/ month	10
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	Сгор	No. of Farmer	Area (ha)	Filed obser (output/mat		% change in major parameter	Labor reduction (man days)	Cost reduction (Rs./ha or Rs./Unit)
						Demons ration	Check			
Sowing and planting tools and machineries	01	Paddy Drum Seeder	Paddy	06	03	312.15	67.9	359.7	14.40	5587
Total Sowing and planting Machineries										
Intercultural operation tools and machineries										
Irrigation management tools and machineries										
Plant protection tools and machineries										
Harvesting tools										

and machineries					
Postharvest					
processing tools and machineries					
and machineries					
Total					
mechanization					
tools and					
machineries					
Others					
Total of Others					

Extension and Training activities under FLD

Sl.N	Activity	Date	No. of activities	Number of	Remarks
0.	5		organized	participants	
1.	Field days	08.11.2023, 23.12.2023	02	100	
2.	Farmers Training	04.04.2023,15,04,2023,	03	74	
		11.07.2023			
3.	Media coverage	16.07.2023, 29.11.2023,	03	-	
		23.12.2023			
4.	Training for	13.09.2023, 14.10.2023,	03	224	
	extension	29.11.2023			
	functionaries				

Technical Feedback on the demonstrated technologies (if any)

Sl. No	Crop	Feed Back
1.	Paddy	Tractor operated inclient plate planter is very suitable for DSR (Dry field condition) for reduction of cost of cultivation
2.	Bruinjal	Crop stablishment on raised bed is found suitable for crop growth and productivity
3.	Green gram	The yield obtained from Zero tillage sown plots is found sustainable
4.	Mushroom	Production of oyster mushroom helpfull in eradication of malnutrition among farming communities

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

1. Technical Parameters:

				Yiel	d gap (l w.r.to	•				Yie	ld obtai (q/ha)	ned	Yield	l gap mi (%)	nimized
Sl. No	Crop demonstrate d	Existing (Farmer's) variety name	Existin g yield (q/ha)	Distric t yield (D)	Stat e yiel d (S)	Potentia l yield (P)	Name of Variety + Technology demonstrated	Numbe r of farmers	Are a in ha	Max.	Min	Av.	D	S	Р
1.	Rape seed (Rai) Rabi 2022-23	Locally unidentifie d	8.3	210	225	(-)240	Rajendra Suflam+ Varietal replacemen t & IPM	100	40	14.2 5	11.5	13.2 5	37.35	11.62	11.67
2.	Linseed Rabi 2022-23	Locally unidentifie d	6.3	205	230	(-)385	Sabour Tisi- 1 + Varietal replacemen t & IPM	75	30	11.2	9.6	10.3 0	24.27	21.89	14.17
3.	Lentil Rabi 2022-23	Locally unidentifie d	12.5	290	275	(-) 420	HUL 57+ Varietal replacemen t & IPM	50	20	15.9	10.6	14.5 8	32.78	31.42	27.1
4.	Green Gram (summer) Summar 2023	Locally unidentified (small grain)	6.7	220	230	330	Sikha Varietal replacement and INM	50	20	9.7	6.8 5	8.7	28.1 6	30.6 3	42
5	Rape seed (Rai)	Locally unidentifie					RH 725 +	100	40						Crop Standin

	Rabi 2023	d	Varietal replacemen t & IPM				g
6	Linseed Rabi 2023	Locally unidentifie d	Sabour Tisi- 1 + Varietal replacemen t & IPM		10		Crop Standin g
7	Lentil Rabi 2023	Locally unidentifie d	IPL 316 + Varietal replacemen t & IPM	50	20		Crop Standin g

2. Economic parameters

		F	armer's Exi	sting plot			Demonstrat	ion plot	
S1.	Variety demonstrated & Technology	Gross	Gross	Net	B:C	Gross	Gross	Net	B:C
No.	demonstrated	Cost	return	Return	ratio	Cost	return	Return	ratio
		(Rs/ha)	(Rs/ha)	(Rs/ha)	1410	(Rs/ha)	(Rs/ha)	(Rs/ha)	14110
1.	Rajendra suflum, seed treatment with Carbendazim @2 gm /kg of seed + foliar spray of carbendazim @2gm/lit. of water at the time of flowering, Pendimethalin @ 11/acre,sulphur@30kg/ha, imidachloropid, @ 250ml/ha, Multiplex nutrient mixture @ 250ml/acre	16230	38950	22720	2.39	19640	60955	41315	3.10
2.	Sabour Tisi-1, seed treatment with Carbendazim @2 gm /kg of seed + foliar spray of carbendazim @2gm/lit. of water at the time of flowering, Pendimethalin @11/acre, Multiplex nutrient mixture @250ml/acre	13540	32650	19110	2.41	15450	48850	33400	3.16
3.	HUL-57 seed @40kg/ha, Seed Treatment carbendazin@2.5g/kg, pendimethalin@3.3l/ha,Rhizobium20g,PSB20g/kg seed, Multiplex 250 ml/acre,Biofert	16850	40870	24020	2.42	18930	62195	43265	3.28
4.	Sikha, Seed Treatment carbendazin@2.5g/kg, pendimethalin@3.3l/ha,Rhizobium20g,PSB20g/kg seed, Multiplex 250 ml/acre,Biofert	22890	32500	9610	1.42	24675	43500	18825	1.76

3. Socio-economic impact parameters

S1.	Crop and	Total	Produce sold	Selling	Produce	Produce	Purpose for which	Employment
No.	variety	Produce	(Kg/household)	Rate	used for	distributed	income gained was	Generated
	Demonstrated	Obtained		(Rs/Kg)	own	to other	utilized	(Mandays/house
		(kg)			sowing	farmers		hold)
					(Kg)	(Kg)		
1	Rapeseed Mustard/ Rai (Rajendra suflam), Varietal replacement & IPM	22100	195.75	55	5	5	For enhancement of farming activity & household consumption	11
2	Linseed (Sabour Tisi-1), Varietal replacement & INM	16140	315.5	45	20	20	For enhancement of farming activity & household consumption	6
3	Lentil (HUL 57), Varietal replacement & INM	31960	265	48	40	40	For enhancement of farming activity & household consumption	10
4	Green gram (Sikha)	17400.00	220.00	50.00	Nil	Nil	 Household consumption Sale of seed for procurement of paddy seed Savings 	22.5

S1.	Technologies	Farmers' Perception parameters					
No.	demonstrated (with name)	Suitability to their farming system	Likings (Preference)	Affordability	Any negative effect	Is Technology acceptable to all in the group/village	Suggestions, for change/improvement, if any
1	Varietal replacement & IPM (Rajendra Suflam)	The crop is suitable to the farming system	Practicing INM and IPM enhanced the yield performance	Yes, low price and easy to applicable & suitable in late sown condition	Attack of aphids	Yes, preferably acceptable	MSP should be such that it overcomes the negative effect of damage due to adverse weather condition
2	Varietal replacement & IPM (Sabour Tisi- 1)	The crop is suitable to the farming system	Possibility of cultivation in paira cropping mode	Less cost of cultivation	Minor attack of wilt & alternaria leaf spot	Yes, acceptable due to low cost of cultivation without requirement of any irrigation facility	Variety with more higher yield than local variety should incorporate.
3	Varietal replacement & IPM(HUL- 57)	The crop is suitable to the farming system	Possibility of cultivation in paira cropping mode	Less cost of cultivation	Minor attack of wilt	Yes, acceptable due to low cost of cultivation without requirement of any irrigation facility	MSP should be such that it overcomes the negative effect of damage due to adverse weather condition
4	Viart Varietal replacement and IPM	The crop is suitable to the farming system	Improved variety and technology of cultivation is preferred by the farmers	Good	Not observed	Yes	New variety is demand, measures to control weed infestation

B. Pulse / Oilseed Farmers' perception of the intervention demonstrated

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
Rape seed/Mustard (Rabi			
2022-23)			
1. The crop is suitable to the farming system	Satisfactory yield obtained	33.13 % higher yield obtained over local check	Varietal acceptance for future cropping plan
2. Seed treatment with fungicide @ 2.5 gm/kg seed with carbendazim3. Application of	Incidence of white rust is low due to seed treatment Incidence of sucking pest is low		MSP should be such that it overcomes the negative effect of damage due to adverse weather condition
imidachlorprid 17.8SL @ 1ml/L of water	due to seed treatment		
Linseed (Rabi 2022-23)			
1. The crop is suitable to the farming system	Satisfactory yield obtained	03.46 % higher yield obtained over local check	Variety is at par with the local variety
2.Seed treatment with fungicide @ 2.5 gm/kg seed with carbendazim	Incidence of wilt is low due to seed treatment		MSP should be such that it overcomes the negative effect of damage due to adverse
3. Application of monocrotophos @ 500ml per Acre of land	Incidence of leaf cutter pest low due to seed treatment		weather condition
Lentil (Rabi 2022-23)			
1. Varietal Demonstration	Satisfactory yield obtained	27.84 % higher yield obtained over local check	Varietal acceptance for future cropping plan
 2. Application of bio fertilizer for seed treatment with Rhizobium @ 5gm/kg seeds 2. Treatment with 2.5gm 	Incidence of wilt is low due to seed treatment with chemical fungicide & better yield with application of bio-fertilizers.		MSP should be such that it overcomes the negative effect of damage due to adverse weather condition

C. Specific Characteristics of Technology and Performance

carbendazim with 1 kg of seeds. 3. Application of insecticide @ 3ml/L of water 4. Spray of Multiplex @ 3 L/ha Green Gram (Summer	Incidence of borer is low due to spray of Chlorpyriphos 50% + Cypermethrin 5% EC		
2023)			
1. Varietal Demonstration	Satisfactory yield obtained	33.84 % higher yield obtained over local check	Varietal acceptance for future cropping plan
2. Spraying of	Low incidence of YVMV		Demand of small seed size
Imidachloprid for the			variety due to taste difference
management of YVMV			
vector white fly			

D. Extension activities under FLD conducted till dates:

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
1.	Training Programme	10.01.2023, 24.01.2023, 03.02.2023,14.02.2023, 02.08.2023,	184
2.	Diagnostic Vist	11.01.2023, 13.01.2023,21.01.2023, 01.02.2023, 03.05.2023, 08.08.2023,17.08.2023	69
3.	Field Day	20.03.2022,12.04.2023	51