Dr. RAJENDRA PRASAD CENTRAL AGRICULTURAL UNIVERSITY, PUSA, SAMASTIPUR (BIHAR)

ANNUAL REPORT

2023

KRISHI VIGYAN KENDRA

NARKATIAGANJ (WEST CHAMPARAN)

Dr. RAJENDRA PRASAD CENTRAL AGRICULTURAL UNIVERSITY, PUSA, SAMASTIPUR (BIHAR)

ANNUAL REPORT - 2023

KRISHI VIGYAN KENDRA
NARKATIAGANJ (WEST CHAMPARAN)

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Published By:
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Narkatiaganj (West Champaran)
Dr. RAJENDRA PRASAD CENTRAL AGRICULTURAL UNIVERSITY, PUSA, SAMASTIPUR (BIHAR)

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PROFORMA FOR ANNUAL REPORT 2023 (01st January- 31st December 2023

1. GENERAL INFORMATION ABOUT THE KVK

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

Name and address of KVK	Telephone		E-Mail
	Office	FAX	
Krishi Vigyan Kendra, Narkatiaganj, West Champaran Pin: 845455	6287797161	–	head.kvk.narkatiyaganj@rpcau.ac.in
		Facebook	Krishi Vigyan Kendra West Champaran-II
		WhatsApp's	6287797161

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

Name and address of Host Organization	Telephone		E mail
	Office	FAX	
DRPCAU, Pusa, Samastipur-848125, Bihar	06274-240226	06274-240255	vc@rpcau.ac.in

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr RP Singh	-	9532460717	head.kvk.narkatiyaganj@rpcau.ac.in

1.4. Year of sanction of KVK with council order No. and date: 2019

1.5. Year of start of KVK: 2019

1.5. Staff Position (**as on 31st December 2023**)

Sl. No.	Sanctioned post	Name of the Incumbent	Designation	Discipline	Pay Scale with Present Basic	Date of joining	Permanent/ probation	Category (SC/ST/ OBC/ Others)
1.	Senior Scientist& Head	Dr RP Singh	Senior Scientist and Head	Plant Pathology	Rs.131400-217100 with present basic: Rs.143600.00	19/09/2020	Permanent	Others
2.	Subject Matter Specialist	Dr. Bhushan Kumar Singh	Subject Matter Specialist	Animal Science (Veterinary Science)	Rs 56100-177500 with present basic: Rs. 59500.00	07/03/2022	Permanent	OBC
3.	Subject Matter Specialist	Dr. Abhik Patra	Subject Matter Specialist	Crop Production (Soil Science)	Rs 56100-177500 with present basic: Rs. 59500.00		Permanent	Others
4.	Subject Matter Specialist	Dr. Pankaj Malkani	Subject Matter Specialist	Agril. Engg.	Rs 56100-177500 with present basic: Rs. 59500.00		Permanent	Others
5.	Subject Matter Specialist	Vacant						
6.	Subject Matter Specialist	Vacant						
7.	Subject Matter Specialist	Vacant						
8.	Programme Assistant	Vacant						
9.	Computer Programmer	Vacant						
10.	Farm Manager	Vacant						
11.	Accountant / Superintendent	Vacant						
12.	Stenographer	Vacant						
13.	Driver	Filled	Driver (Bolero/Jeep)	M. Sc. Physics, MBA	Rs. 21700-69100/- with present basic pay: Rs. 23800/-	10/03/2021	Permanent	Others (EWS)
14.	Driver	Filled	Driver (Tractor)	B. Com.	Rs. 21700-69100 with present basic pay: Rs. 23800/-	01/03/2021	Permanent	OBC
15.	Supporting staff	Filled	Supporting staff	Graduate	Rs. 18000-56900/- with basic pay: Rs. 19700/-	27/02/2021	Permanent	OBC
16.	Supporting staff	Filled	Supporting staff	Graduate	Rs. 18000-56900/- with basic pay: Rs. 19700/-	27/02/2021	Permanent	OBC

1.6. Total land with KVK (in ha):

S. No.	Item	Area (ha)	Name of infrastructure
1	Under Buildings	1.25	Administrative Building, Farmers Hostel and Godowns
2.	Under Demonstration Units	0.25	Poultry Unit, Azolla,Vermicompost and solar system
3.	Under Crops	16	
4.	Orchard	-	
5.	Agro-forestry	1.00	
6.	Others with details	0.20	Pond
	Total	**18.7**	

Total area should be matched with breakup

1.7. Infrastructure Development:

A) Buildings and others

S. No.	Name of infrastructure	Not yet started	Completed up to plinth level	Completed up to lintel level	Completed up to roof level	Totally completed	Plinth area (sq.m)	Functional/ non-functional*	Source of funding
1.	Administrative Building	Yes				✓			ICAR-ATARI, Patna
2.	Farmers Hostel	No				✓			ICAR-ATARI, Patna
3.	Staff Quarters (6)	No							
4.	Piggery unit	No							
5	Fencing	Old wire fencing almost damaged. Needs to be constructed							
6	Rain Water harvesting structure	No							
7	Threshing floor	Yes. Old needs to be repaired						Yes	
8	Farm godown	Old						Yes	
9.	Dairy unit	No							
10.	Poultry unit	Yes (Temporarily in old godown)							

11.	Goatry unit	No							
12.	Mushroom Lab	No							
13.	Mushroom production unit	No							
14.	Shade house	No							
15.	Soil test Lab	No							
16	Others, Please Specify	Vermi-compost							ICAR-ATARI, Patna

* If not in use, then since when and reason for non-use

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total km. Run	Present status
Bolero	2020	755309.00	70956 km	Good
Bike	2020	50666.00	15024 km	Good
Scooty	2020	50248.00	4563 Km	Good

C) Equipment & AV aids

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
a. Lab equipment : **There is no lab equipment**				
b. Farm machinery :				
Bud Chipping Machine	2023	2500	Working	ICAR-ATARI, Patna
c. AV Aids				
Public Address system	2023	24,600	Functional	ICAR-ATARI, Patna
Multi Media Projector	2023	38,000	Functional	ICAR-ATARI, Patna

D) Farm implements

Name of implements	Year of purchase	Cost (Rs.)	Present status	Source of fund
Tractor	2020	702856.64	Good	ICAR
Tractor	2021	-	Good	CRA project
Disc plough	2021	-	Good	CRA project
Tractor Trolley	2021	-	Good	CRA project
Happy seeder (2 nos)	2021	-	Good	CRA project
Cultivator	2021	-	Good	CRA project
Laser leveler	2021	-	Good	CRA project
Rotavetor	2021	-	Good	CRA project
Multicrop planter (2 nos.)	2021	-	Good	CRA project
Reeper-cum-binder	2021	-	Good	CRA project
Zero tillage machine	2021	-	Good	CRA project
Drum seeder (9 nos.)	2021	-	Good	CRA project

1.8. Details SAC meeting* conducted in the year

Date	Number of Participants	Total statutory member present (State line dept.)	Salient Recommendations	Action taken	If not conducted, state reason
22/08/2023	42	8	Project proposal submission under TSP programme	Proposed project was submitted to DEE, RPCAU, Pusa on 27/09/2023.	
			Agro mobile advisories should be circulated after prier information to DEE, RPCAU, Pusa.	Agro mobile advisories are circulating only after giving information and getting publication number from DEE, RPCAU .	
			Collection of soil sample data from working areas of KVK, Narkatiaganj.	33 Soil samples from Bagaha block sent to RPCAU for testing and 2300 samples from Ramnagar block were made available for Harinagar Sugar Mill for the testing.	
			Submission of projects to the NABARD for the KVK, Narkatiaganj.	Project prepared for the financial year 2024-25 as discussion with DDM. NABARD.	

			Preparation of comparative chart with crop productivity data of KVK, Narkatiaganj in comparison to the productivity of state and national.	Comparative chart prepared and incorporated in the KVK-at a glance.	
			Preparation of a display board for the different activities of KVK, Narkatiaganj for displaying in front of KVK office.	Display board for different activities of KVK, Narkatiaganj was displayed in front of the office.	
			Promotion of Nano-Urea through training and kisan goshthi.	Nano-Urea is promoting through different training programmes and kisan goshthies and also an OFT is conducted on application of Nano-Urea on Paddy.	
			Signing of MOUs with NABARD funded NGOs.	In process since any MOUs will under signed by DEE, RPCAU.	
			Study on constraints in adoption of micro-irrigation techniques and possibilities of refinements.	Study is under process.	
			Timely sending of quality seeds to DOS, Dholi.	Seeds of paddy 364q, non seed paddy 53.55q, Dhaincha 0.71q and Ragi 4q were timely sent to the DOS, Dholi.	
			Promotion of DSR in paddy and procurement of ratoon management device from SRI, Pusa.	02 trainings on DSR was conducted and an OFT on DSR was also conducted. For procurement of RMD from SRI, letter sent on dated-12/10/2023, vide letter no.-279/KVK, Narkatiaganj.	
			Promotion of STT for preventing red rot disease in sugarcane.	STT plants were distributed under FLD for 10 farmers and under SCSP programme for 25 farmers and training was conducted on STT.	
			Organizing of regular training programme on appropriate use of weedicides.	Total 04 training programmes were organized for 118 farmers	
			Preparation of KVK-at a glance.	Prepared and inaugurated by Honb'le V.C., RPCAU, Pusa.	
			Sending of five important problems of different disciplines to the university for working on A.I.	Five problems of different disciplines were sent to university.	

** Salient recommendation of SAC in bullet form*
Attach a copy of SAC proceedings along with list of participants

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

Sl. No.	Items	Information
1	Major Farming system of the district	Agriculture + Livestock, Agriculture + Poultry, Agriculture + Fisheries, Crop Production + Vegetable Production, Agriculture + Poultry + Fish farming, Agri. + Goat rearing
2	One district one product (NITI Ayog)	Sugarcane based products
2	Agro-climatic Zone	Zone-I (North West Alluvial Plain Zone)
3	Agro ecological situation	Hot Sub-humid (moist), Eco-sub region
4	Soil type	Sandy loam, Coarse sandy loam, Fine sandy loam and loamy soil
5	Productivity of major crops of districts	
	Paddy	60499 MT
	Wheat	214663 MT
	Pulse	27.69 MT
	Oilseed	37.70 MT
	Veg. (name)	
	Fruit (Name)	
	Others	
	Enterprises	
6	Mean yearly temperature, rainfall, humidity of the district	
7	Production of major livestock products like, , etc.	
	milk	498 MT
	egg	
	meat	

Note: Please give recent data only

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

Sl. No.	Name of Taluk	Name of the block	Name of the villages	Major crops & enterprises	Major problems identified (crop-wise)	Identified Thrust Areas
	Narkatiaganj	Narkatiaganj	Samhauta	Sugarcane, Rice, Wheat and Vegetables	Lack of improved variety, Low socio-economic status, lack of farm mechanization	Promotion of HYVs and farm mechanization
			Narkatiaganj	Sugarcane, Rice, Wheat and Vegetables	Lack of improved variety, Low socio-economic status, lack of farm mechanization	Promotion of HYVs and farm mechanization
			Ajauaa	Sugarcane, Rice, Wheat and Vegetables	Lack of improved variety, Low socio-economic status, lack of farm mechanization	Promotion of HYVs and farm mechanization
			Barnihar	Sugarcane, Rice, Wheat and Vegetables	Lack of improved variety, Low socio-economic status, lack of farm mechanization	Promotion of HYVs and farm mechanization
	Bagha	Bagha-2	Santpur	Sugarcane, Rice, Wheat, Oilseed and Vegetables	Lack of improved variety, Low socio-economic status, lack of farm mechanization	Promotion of HYVs and farm mechanization
			Rampuwa harijan tola	Sugarcane, Rice, Wheat, Oilseed and Vegetables	Lack of improved variety, Low socio-economic status, lack of farm mechanization	Promotion of HYVs and farm mechanization
			Jhanduaatola	Sugarcane, Rice, Wheat, Oilseed and Vegetables	Lack of improved variety, Low socio-economic status, lack of farm mechanization	Promotion of HYVs and farm mechanization
			Bairagi Sonbersa	Sugarcane, Rice, Wheat, Oilseed and Vegetables	Lack of improved variety, Low socio-economic status, lack of farm mechanization	Promotion of HYVs and farm mechanization
			Gurwaliya	Sugarcane, Rice, Wheat, Oilseed and Vegetables	Lack of improved variety, Low socio-economic status, lack of farm mechanization	Promotion of HYVs and farm mechanization
		Bagha-1	Salha	Sugarcane, Rice, Wheat, Oilseed and Vegetables	Lack of knowledge about improved variety, Low socio-economic status, lack of farm mechanization	Promotion of HYVs and farm mechanization
		Bagha-1	Rajwatia	Sugarcane, Rice, Wheat, Oilseed and Vegetables	Lack of knowledge about improved variety, Low socio-economic status, lack of farm mechanization	Promotion of HYVs and farm mechanization
		Gaunaha	Hardi	Sugarcane, Rice, Wheat, Oilseed and Vegetables	Lack of knowledge about improved variety, Low socio-economic status, lack of farm mechanization	Promotion of HYVs and farm mechanization
		Ramnagar	Sonebersa	Sugarcane, Rice, Wheat, Oilseed and Vegetables	Lack of knowledge about improved variety, Low socio-economic status, lack of farm mechanization	Promotion of HYVs and farm mechanization
			Katsikari	Sugarcane, Rice, Wheat, Oilseed and Vegetables	Lack of knowledge about improved variety, Low socio-economic status, lack of farm mechanization	Promotion of HYVs and farm mechanization
			Harpur	Sugarcane, Rice, Wheat, Oilseed and Vegetables	Lack of knowledge about improved variety, Low socio-economic status, lack of farm mechanization	Promotion of HYVs and farm mechanization

2. c. Details of village adoption programme during 2023:

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

Name of village	Block	Action taken for development
Katsikari	Ramnagar	FLD and promotion of intercropping and STT in sugarcane
Barnihar	Narkatiaganj	CFLD and promotion of STT in sugarcane

2.1 Priority thrust areas of KVKs

S.No.	Crop/Enterprises	Thrust Area
1.	Sugarcane	Promotion of HYVs with intercropping and IPM/IDM practices for quality seed production & yield maximization
2.	Rice	Promotion of HYVs and introduction of IPM/IDM strategies
3.	Farm mechanization	Promotion of farm mechanization in cultivation practices of crops for cost and drudgery reduction & yield maximization
4.	Vegetable crops	Introduction of HYVs, INM, IPM and IDM strategies
5.	Drudgery reduction	Promotion of weed management tools, maize sheller, groundnut decorticator (sitting type) etc.
6.	Rabi pulses	Promotion of HYVs of rabi pulses for nutritional security
7.	Oilseed crops	Promotion of HYVs, INM, IPM and IDM strategies
8.	RCT	Promotion of Resource Conservation Technology
9.	Livestock	Raising productivity of livestock by upgrading the genetic potential by artificial insemination and use of mineral mixture, disease and parasitic control, proper feeding and management
10.	Kitchen gardening	Kitchen gardening for production of nutritional food by women farmers
11.	IFS	Promotion of IFS for income generation and nutritional security
12.	Orchard management	Promotion of IPM, IDM and INM practices in mango, litchi etc. orchard
13.	Hygienic produce production	Promotion of use of bio-fertilizers, bio-pesticides and organic manures

3. TECHNICAL ACHIEVEMENTS

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

OFT											FLD										
No. of technologies tested:											No. of technologies demonstrated:										
Number of OFTs		Number of farmers									Number of FLDs		Number of farmers								
Target	Achievement	Target	Achievement								Target	Achievement	Target	Achievement							
			SC		ST		Others		Total					SC		ST		Others		Total	
			M	F	M	F	M	F	M	F	T				M	F	M	F	M	F	M	F	T
8	8	53	0	0	0	4	49	0	49	4	53	4	4	72	7	30	8	2	24	1	37	33	72

Training											Extension activities										
Number of Courses		Number of Participants									Number of activities		Number of participants								
Target	Achievement	Target	Achievement								Target	Achievement	Target	Achievement							
			SC		ST		Others		Total					SC		ST		Others		Total	
			M	F	M	F	M	F	M	F	T				M	F	M	F	M	F	M	F	T
100	102	2500	441	671	224	30	1394	156	2083	848	2923	450	480	20000	7310	3238	2850	510	16157	6717	**2631 7**	**10465**	**36782**

285	142	427	58.07963	273	248	119

Impact of capacity building											Impact of Extension activities										
Number of Participants trained		Number of Trainees got employment (self/ wage/ entrepreneur/ engaged as skilled manpower)									Number of Participants attended		Number of participants got employment (self/ wage/ entrepreneur/ engaged as skilled manpower)								
Target	Achievement	SC		ST		Others		Total			Target	Achievement	SC		ST		Others		Total		
		M	F	M	F	M	F	M	F	T			M	F	M	F	M	F	M	F	T
420	427	75	24	40	3	95	11	210	38	248	6500	6874	155	33	57	6	380	19	592	58	650

Seed production (q)		Planting material (in numbers)	

Target (Crop and variety)	Achievement (q)	Sold (q)	Target (crop and variety)	Achievement	Sold (number)
180 (Wheat DBW – 187)	109	109	Cauliflower (Hybrid)	1900	1900
Alsi (JLS – 95 and JLS – 66)	1.17	1.17	Cabbage (Hybrid)	650	650
Sugarcane (Rajendra Ganna -1 and CoP – 9301)	1099.6	1099.6	Tomato(Hybrid)	1910	1910
Ragi (Rajendra Madua – 1 and Rajendra Madua – 8)	4.0	4.0	Brinjal (Hybrid)	795	795
2.0 (Dhaincha)	0.71	0.71	Chilli (Hybrid)	1750	1750
280 (Paddy Rajendra Mahsuri – 1)	364	364	Onion(Mahalakshmi Nashik, Divyashakti, Ratnamali, N-53)	131130	131130
			Others (Ridge gourd, Bottle gourd)(Hybrid, N-shivani)	331	331
			Papaya(Red Lady)	171	171
			Custard Apple	140	140
			Black Berry	70	70
Total	1478.48 q	1478.48 q	Grand Total	138847	138847

Livestock strains (in no's) and fish fingerlings produced (in lakh)*		**Soil, water, plant, manures samples tested (in lakh)**	
Target	Achievement	Target	Achievement
		0.023	0.023

* Give no. only in case of fish fingerlings

3.2 ACHIEVEMENTS ON TECHNOLOGIES ASSESSED AND REFINED (OFT)

3.2. 1 Technology Assessed by KVK (Discipline wise)

A	**Technologies assessed under various crops (Cereal Crop Production)**			
	Thematic areas	**Number of the technologies (Technology Interventions)**	**No. of trials**	**No. of Locations**
1	Integrated Nutrient Management			
2	Varietal Evaluation			
3	Integrated Pest Management			
4	Integrated Crop Management			
5	Integrated Disease Management	1	3	6
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	1	7	7
14	Storage Technique			
15	Others (Pl. specify)			
16	Cropping Systems			
17	Farm Mechanization	1	7	5
18	Others	2	12	10
	Total	**5**	**29**	**28**
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	Varietal Evaluation			
3	Integrated Pest Management	**1**	**3**	**7**
4	Integrated Crop Management			

5	Integrated Disease Management			
6	Small Scale Income Generation Enterprises			
7	Weed Management			
8	Resource Conservation Technology			
9	Post-harvest Technology / Value addition			
10	Others if any specify			
	Total	**1**	**3**	**7**
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			
2	Breeding management/Evaluation of Breeds			
3	Feed and Fodder management	1	10	03
4	Nutrition Management	1	10	03
5	Production and Management			
6	Processing and Value addition			
7	Fisheries management			
8	Others (waste, ITK etc)			
	Total	**2**	**20**	**06**
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			
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			
5	Others			
	Total	**8**	**52**	**41**

3.2.2 OFT (All discipline)

- **Thematic area: Nutrient management**
- **Problem definition/Name of OFT: Excessive use of chemical fertilizer and spiralling price of urea leads to increase in cost of cultivation**

1.	Title of On farm Trial (OFT)	Improvement of Nitrogen Use Efficiency in Wheat (*Triticum aestivum*)
2.	Problem diagnosed	Excessive use of chemical fertilizer and spiraling price of urea leads to increase in cost of cultivation
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Technological Options: Technology Details Farmers practice: RDF (N:P:K :: 100:40:20 kg ha^{-1})

		TO1: 50% of RDN and 100% PK + nano urea @ 4 ml lt^{-1} water (single spray at 35 DAS) TO2: 50% of RDN and 100% PK + 2 sprays of nano urea at (35 DAS) and (60-65 DAS) @ 4 ml lt^{-1} water (Timely sown variety of BAU Sabour. BAU Ranchi and RPCAU, Pusa, ICAR RCER, Patna)
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	House of the OFT finalization workshop, BAU, Sabour
5.	Production system and thematic area	Crop production (improvement of nitrogen use efficiency)
6.	Performance of the Technology with performance indicators	• Soil data before and after (pH, EC, OC, NPK,), • Yield data • No. of effective tillers/ m^2 • 1000 grain wt. • Spike wt. • Straw yield • Economics
7.	Final recommendation for micro level situation	An on-farm trial for studying the nitrogen use efficiency of fertilizers in wheat crop was conducted in 7 different locations in West Champaran district of Bihar. The result showed that the maximum effective tillers/m^2 (182), test weight (41.2 g), spike weight (2.31 g) was recorded more in farmers practice: RDF (100:40:20) kg/ha however, the differences were not significant when compared to TO2: 50% of RDN and 100% PK + 2 sprays of nano urea at (35 DAS) and (60-65 DAS) @ 4 ml lt^{-1} water. The grain yield and straw yield of wheat showed the similar result. After consideration of economics analysis, it was found that farmers practice resulted in the highest B:C ratio (2.35) due the higher labour cost for foliar fertilization than broadcasting of urea. Although yield and economic benefits were also not availed by using nano-urea, sporadic availability and subsequent hike in price of urea granules enhances the cost of cultivation in farmers practice. In addition, timely availability of nano-urea could help

		the farmers particularly during peak season of wheat. Moreover, subsidy on urea granule is hidden fact which is not taken into consideration during the economic analysis which surely could made the spraying of nano-urea economically viable. Therefore, application of recommended dose of fertilizer (N:P:K :: 100:40:20 kg ha^{-1}) may be the best option for the of wheat production in Rabi season.
8.	Constraints identified and feedback for research	High labour cost for the nano urea spraying operation
9.	Process of farmers participation and their reaction	Training and field day

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

Thematic area	**Technology options with detailed treatments**	**Area (ha in crop & Fodder)/ Nos (in livestock)**		**Yield (q/ha)**	**Cost of cultivation (Rs./ha)**	**Gross return (Rs/ha)**	**Net return (Rs./ha)**	**BC ratio**
		Proposed	**Actual**					
Nutrient management	Farmers practice: RDF (N:P:K :: 100:40:20 kg ha^{-1})	0.07	0.07	46.2	41814	98205	56391	2.35
	TO1: 50% of RDN and 100% PK + nano urea @ 4 ml lt^{-1} water (single spray at 35 DAS)	0.07	0.07	41.7	39215	88582	49367	2.26
	TO2: 50% of RDN and 100% PK + 2 sprays of nano urea at (35 DAS) and (60-65 DAS) @ 4 ml lt^{-1} water	0.07	0.07	44.6	41052	94775	53723	2.31

Please provide all the OFTs in same format Photographs in jpg. (Attach separately also with captions)

	
Crop performance at 60 DAS	Crop performance at harvesting stage

- **Thematic area: Nutrient management**
- **Problem definition/Name of OFT: Excessive use of chemical fertilizer and spiralling price of urea leads to increase in cost of cultivation**

1.	Title of On farm Trial (OFT)	Improvement of Nitrogen use efficiency in Rice (*Oryza sativa*)
2.	Problem diagnosed	Excessive use of chemical fertilizer and spiraling price of urea leads to increase in cost of cultivation
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Technological Options: Technology Details Farmers practice: RDF (N:P:K :: 100:40:20 kg ha^{-1}) TO1: 50% of RDN and 100% PK + nano urea @ 4 ml lt^{-1} water (single spray at 35 DAS) TO2: 50% of RDN and 100% PK + 2 sprays of nano urea at (35 DAS) and (60-65 DAS) @ 4 ml lt^{-1} water (Timely sown variety of BAU Sabour. BAU Ranchi and RPCAU, Pusa, ICAR RCER, Patna)
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	House of the OFT finalization workshop, BAU, Sabour
5.	Production system and thematic area	Crop production (improvement of nitrogen use efficiency)

6.	Performance of the Technology with performance indicators	• Soil data before and after (pH, EC, OC, NPK,), • Yield data • No. of effective tillers/ m^2 • 1000 grain wt. • Panicle wt. • Straw yield • Economics
7.	Final recommendation for micro level situation	An On-farm trial for studying the nitrogen use efficiency of fertilizers in rice crop was conducted in 7 different locations in West Champaran district of Bihar. The result showed that the highest number of effective tillers/m^2 (329), test weight (23.5 g), panicle weight (2.56 g) was recorded more farmers practice: RDF (100:40:20) kg/ha however, the differences were not significant when compared to TO2: 50% of RDN and 100% PK + 2 sprays of nano urea at (35 DAS) and (60-65 DAS) @ 4 ml lt^{-1} water. The grain yield and straw yield of wheat showed the similar result. After consideration of economics analysis, it was found that farmers practice resulted in the highest B:C ratio (2.33) due the higher labour cost for foliar fertilization than broadcasting of urea. Although yield and economic benefits were also not availed by using nano-urea, sporadic availability and subsequent hike in price of urea granules enhances the cost of cultivation in farmers practice. In addition, timely availability of nano-urea could help the farmers particularly during peak season of rice. Moreover, subsidy on urea granule is hidden fact which is not taken into consideration during the economic analysis which surely could made the spraying of nano-urea economically viable. Therefore, application of recommended dose of fertilizer (N:P:K :: 100:40:20 kg ha^{-1}) may be the best option for the of wheat production in Kharif season.

8.	Constraints identified and feedback for research	High labour cost for the nano urae spraying operation
9.	Process of farmers participation and their reaction	Training and field day

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

Thematic area	Technology options with detailed treatments	Area (ha in crop & Fodder)/ Nos (in livestock)		Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Proposed	Actual					
Nutrient management	Farmers practice: RDF (N:P:K :: 100:40:20 kg ha^{-1})	0.07	0.07	44.1	41405	96277	54871	2.33
	TO1: 50% of RDN and 100% PK + nano urea @ 4 ml lt^{-1} water (single spray at 35 DAS)	0.07	0.07	41.9	42556	91415	48859	2.15
	TO2: 50% of RDN and 100% PK + 2 sprays of nano urea at (35 DAS) and (60-65 DAS) @ 4 ml lt^{-1} water	0.07	0.07	43.3	43602	94416	50815	2.17

Please provide all the OFTs in same format Photographs in jpg. (Attach separately also with captions)

	
Input distribution under on-farm trial	Spraying of nano urea under on-farm trial

- **Thematic area: Integrated Pest Management**
- **Problem definition/Name of OFT: 1. Plant Protection**

1.	Title of On farm Trial (OFT)	**Assessment of management practices for red banded caterpillar in mango**
2.	Problem diagnosed	Low yield of mango due to severe infestation of red banded caterpillar
3.	Details of technologies selected for assessment/~~refinement~~ (Mention either Assessed or Refined)	F.P.: Spray of Chlorpyriphas as and when symptoms appears. TO_1: Collection and destruction of all fallen fruits, Spray of Deltamethrin 0.0028 % (2.8%EC) @ 1ml/lit at marble size and repeat after two weeks TO_2: Two Sprays of Thiacloprid 21.7 SC 0.04 % (@ 2ml/lit) at 25-30 days intervals
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Proceeding of OFT finalization workshop on Agronomy/Soil Science for KVKs Bihar and Jharkhand (Zone-IV) held during 29-30 September, 2022
5.	Production system and thematic area	Insect pest Management
6.	Performance of the Technology with performance indicators	• Reduction % in pest population • Number of damaged fruits/100 randomly selected shoot Economics

7.	Final recommendation for micro level situation	Red banded mango caterpillar (RBMC) is a serious threat in the mango growing areas of West Champaran district. The treatment (T1) where collection and destruction of all fallen fruits, spray of Deltamethrin 0.0028 % (2.8%EC) @ 1ml/lit at marble size and repeat after two weeks was used, and registered minimum infestation and highest net returns & benefit-cost ratio of 5.82.
8.	Constraints identified and feedback for research	The main factors limiting mango production and productivity were illnesses, insect pests, bird damage, expensive inputs, lack of expertise, and inaccessibility of high-quality pesticides, hormones, and improper orchard management. High labour costs and a lack of high volume spraying machines in the area were also noted as barriers. Throughout the study period, other issues included middlemen taking advantage of mango growers, a lack of government effort in loan funding and subsidy granting, and a lack of cooperation between the growers and the state/district horticulture department.
9.	Process of farmers participation and their reaction	Mangos are an essential fruit for domestic consumption and are vital to the community's economy as a source of income for farmers. Based on the study's findings, the following recommendations could be made to help mango growers in the study area produce higher-quality mangos by raising their level of acceptance and expertise. The evaluated technology met the farmer's satisfaction. The farmer is eager to implement the scientific package of techniques for producing mangoes.

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

Technology option	**Infestation level**		**% reduction of fruit infestation over control**	**Yield (q/ha)**	**Cost of cultivation (Rs. /ha)**	**Gross return (Rs/ha)**	**Net return (Rs. /ha)**	**BC ratio**
	% fruit infestation at early stage	**% fruit infestation at harvest stage**						
Farmers Practices: - Spray of chlorpyriphos as and when symptoms appear	24 **%**	55 **%**	-	75	88000	262500	174500	2.98

TO_1: Collection and destruction of all fallen fruits, Spray of Deltamethrin 0.0028 % (2.8%EC) @ 1ml/lit at marble size and repeat after two weeks	08 **%**	14**%**	78%	202	121500	707000	585500	5.82
TO_2: Two Sprays of Thiacloprid 21.7 SC 0.04 % (@ 2ml/lit) at 25-30 days intervals	12 **%**	20 **%**	64%	135	97600	472500	374900	4.84
SEM (±)					-	-	-	-
CD (5%)					-	-	-	-

Please provide all the OFTs in same format Photographs in jpg. (Attach separately also with captions); Variety: Danka, Rate: Rs 3500/qt.

Input distribution

Treatment application

2. Plant Protection Discipline

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

- **Thematic area: Integrated Disease Management**
- **Problem definition/Name of OFT: Plant Protection**

1	**Title of On Farm Trial**	**Assessment of technology for red rot management in sugarcane**
2	**Problem Diagnose**	Lower yield and poor crop establishment in sugarcane due to severe incidence of red rot
3	**Details of Technologies selected for assessment/refinement**	**Farmers Practice:** Carbendazim 50% WP @ 2 g/lit of water spray on cane set
		TO-I: Sett treatment with *Trichoderma viride* (tv 1) @ 4 g/l and *Pseudomonas fluorescens* @ 10 g /lit of water for 10 minutes
		TO-II: Azoxystrobin 18.2%+Difenoconazole 11.4% SC @ 1 ml /lit of water 2-3 spray at 15 days interval from July
4	**Source of Technology**	Proceeding of OFT finalization workshop on Agronomy/Soil Science for KVKs Bihar and Jharkhand (Zone-IV) held during 29-30 September, 2022
5	**Replication**	06
7	**Production System & Thematic Area**	Sugarcane and integrated disease management (IDM)
8	**Performance of Technology with performance indicator**	1. % disease reduction 2. no. of tillers 3. no. of cane/10 sqm 3. wt. of per cane 4. length of cane 5. yield (q/ha) 6. BCR.

Thematic area	**Technology options with detailed treatments**	**Area (ha in crop & Fodder)/ Nos (in livestock)**		**Yield (q/ha)**	**Cost of cultivation (Rs./ha)**	**Gross return (Rs/ha)**	**Net return (Rs./ha)**	**BC ratio**
		Proposed	**Actual**					
Integrated Disease Management	**Farmers Practice:** Carbendazim 50% WP @ 2 g/lit of water spray on cane set							
	TO-I: Sett treatment with *Trichoderma viride* (tv 1) @ 4 g/l and *Pseudomonas fluorescens* @ 10 g /lit of water for 10 minutes	Crop is in standing position, results awaited.						

	TO-II: Azoxystrobin 18.2%+Difenoconazole 11.4% SC @ 1 ml /lit of water 2-3 spray at 15 days interval from July	

Input distribution

Field visit

OFT1 (Agricultural Engineering)

Thematic area: Farm Mechanization (Wheat crop Mechanization)

Problem definition: Labor shortage during peak season and the higher cost of harvesting

Technology assessed:

(Farmer practice): Manual harvesting + threshing using thresher

T.O.1: Wheat cutting using Reaper cum binder + threshing using thresher

T.O.2: Complete harvesting using combine- harvester

1.	Title of On farm Trial	Assessment of appropriate wheat harvest technology to farmers practice
2.	Problem diagnosed	Labor shortage during peak season and the high cost of harvesting
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	(Farmer practice): Manual harvesting + threshing using thresher T.O.1: Wheat cutting using Reaper cum binder + threshing using thresher T.O.2: Complete harvesting using combine- harvester
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	House of the OFT finalization workshop, RPCAU, Pusa and PAU Ludhiana
5.	Production system and thematic area	Farm Mechanization (Wheat crop mechanization)
6.	Performance of the Technology with performance indicators	Cost of operation (Rs/ha) Field capacity in cutting/harvesting (ha/hr) Field efficiency in cutting/harvesting (%) Crop Yield (kg/ha) B:C ratio
7.	Final recommendation for micro level situation	An On-farm trial was conducted in seven locations in West Champaran district of Bihar to assess the effectiveness of different wheat harvesting technologies. Results indicated that field efficiency in

		harvesting was higher with two specific methods: T.O.1, which involves cutting using a Reaper cum binder and a thresher for threshing (80%), and T.O.2, which utilizes a combine harvester for complete harvesting (74%), compared to traditional farmer practices with manual sickle-based harvesting and a thresher for threshing (57.14%). Grain yield was similar across the methods, but harvesting losses were slightly higher with farmers practices. T.O.2 had the highest effective field capacity (0.67 $hahr^{-1}$), followed by T.O.1 (0.273 $hahr^{-1}$), and then traditional practices (0.008 $hahr^{-1}$). The cost of harvesting per hectare was significantly lower with T.O.1 (Rs. 6375) and T.O.2 (Rs. 5000) compared to farmers practice (Rs. 8063). Economic analysis revealed that T.O.2 had the highest benefit-to-cost ratio (2.71), making it more favorable for farmers, but it is recommended for farmers with larger land holdings. However, T.O.1 may be more suitable for farmers with medium to large land holdings and who also engage in animal husbandry, as cattle in the region consume wheat stubbles.
8.	Constraints identified and feedback for research	Labor shortage during peak season, higher labor cost and higher cost of harvesting
9.	Process of farmers participation and their reaction	Field visit and farmers interaction and feedback Reaction-Acceptability of technology among farmers Compatibility in the existing cropping system

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

Technology option	**No. of trials**	**Yield component**			**Yield (q/ha)**	**Field efficiency in harvesting operation**	**Effective field capacity in harvesting operation (ha/hr)**	**Cost of harvesting operation**	**Cost of cultivation (Rs./ha)**	**Gross return (Rs/ha)**	**Net return (Rs./ha)**	**BC ratio**
		No. of effective tillers/m2	No. of spikelet per panicle	Test wt. (100 grain wt.)								
Manual harvesting + threshing using thresher	7	181	2.32	41.2	46.2	57.14	0.008	8063	35528	88110	52852	2.48

Wheat cutting using Reaper cum binder + threshing using thresher	7	184	2.29	42	46.5	80	0.273	6375	33840	88110	54270	2.603
Complete harvesting using combine-harvester	7	185	2.30	41.7	47	74	0.67	5000	32465	88110	55645	2.71

Manual harvesting using sickle

Wheat cutting using reaper cum binder

Wheat cutting using combine- harvester

OFT2 (Agricultural Engineering)

Thematic area: *Drudgery reduction in* Sugarcane

Problem definition: Tedious job of sugarcane cutting which increased early human fatique and less setting cutting rate with farmers used sickle

Technology assessed: T.O. I (Farmer practice): Set cutting by traditional chopper

T.O.2: Bud cutting by bud chipping machine

T.O.3: Single node cutting by node cutting machine

1.	Title of On farm Trial	Assessment of different methods of cutting sets of sugarcane for plantation
2.	Problem diagnosed	Tedious job of sugarcane set cutting which increased early human fatique and lower setting cutting rate
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	T.O. I (Farmer practice): Set cutting by traditional chopper T.O.2: Bud cutting by bud chipping machine T.O.3: Single node cutting by node cutting machine
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	RPCAU Pusa
5.	Production system and thematic area	Drudgery reduction in Sugarcane
6.	Performance of the Technology with performance indicators	Set cutting per hour Germination (%) Crop Yield B:C ratio Ergonomics: - Heart rate (beats/min), Average energy expenditure(kJ/min), and Rest pause time
7.	Final recommendation for micro level situation	

8.	Constraints identified and feedback for research	Early labor fatigue due to improper traditional set cutting machine (sickle) and higher sett cutting cost
9.	Process of farmers participation and their reaction	Field visit and farmers interaction and feedback Reaction-Acceptability of technology among farmers Compatibility in the existing cropping system

Table:

Technology option	No. of trials	Ergonomics parameter			Rest pause time (min)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Germination(%)	Heart rate(Beats/min)	Energy expenditure						
Bud cutting by bud chipping machine										
Single node cutting by node cutting machine										
(Farmer practice (Set cutting by traditional chopper)										

Bud chipping machine

Node cutter machine

Traditional sugarcane chopper

Progress of sugarcane treatment at different stages

Results: ***Result Awaited***

- **Thematic area: Animal Science**
- **Problem definition/Name of OFT: Assessment of *Azolla* feeding on milk production in dairy cow**

1.	Title of On farm Trial (OFT)	**Assessment of *Azolla* feeding on milk production in dairy cow**
2.	Problem diagnosed	**Poor availability and high cost of good quality of concentrate feeds.** **Fodder cultivation practice is poor.**
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmers Practice: Indiscriminate feeding of wheat and paddy straw with concentrate and mineral mixture T.O.-1: Use of *Azolla* @ 1.5 kg per animal per day + 80% of required quantity of concentrate with existing fodder T.O.-2: Use of *Azolla* @ 2.0 kg per animal per day + 75% of required quantity of concentrate with existing fodder
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	ICAR (NDRI)
5.	Production system and thematic area	Dairy Production (Dairy Animal Nutrition)
6.	Performance of the Technology with performance indicators	T.O.-2 had maximum milk production 17.5% higher than F.P. while T.O.-1 was 15% higher then F.P. T.O.-1&2 had similar 4% increase in fat percent in milk. B:C ratio 1.85 was found highest in T.O.-2.
7.	Final recommendation for micro level situation	Azolla feeding in dairy cattle @ 2.0 kg per animal per day with 75% of required quantity of concentrate and fodder.
8.	Constraints identified and feedback for research	Growth of azolla in long duration is not even. Identification of different verities of azolla on the basis of agro climatic zones.
9.	Process of farmers participation and their reaction	Training, Method demonstration Field visit and personal communication.

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

Thematic area	**Technology options with detailed treatments** **(For Sixty Days)**	**Area (ha in crop & Fodder)/ Nos (in livestock)**		**Yield (Milk)** **(**Kg/Cow**)**	**Cost of cultivation (Rs./Cow)**	**Gross return (Rs/Cow)**	**Net return (Rs/Cow)**	**BC ratio**
		Proposed	**Actual**					
Dairy Production (Dairy Animal Nutrition)	Farmers Practice: Indiscriminate feeding of wheat and paddy straw with concentrate and mineral mixture	10	10	6.15	11707	14760	3053	1.26
	T.O.-1: Use of *Azolla* @ 1.5 kg per animal per day + 80% of required quantity of concentrate with existing fodder	10	10	7.07	9834	16968	7134	1.72
	T.O.-2: Use of *Azolla* @ 2.0 kg per animal per day + 75% of required quantity of concentrate with existing fodder	10	10	7.22	9366	17328	7962	1.85

Please provide all the OFTs in same format Photographs in jpg. (Attach separately also with captions)

	
Data collection under OFT	Input Distribution under on-farm trial

- **Thematic area: Animal Science**
- **Problem definition/Name of OFT: Assessment of *Azolla* feeding on milk production in dairy cow**

1.	Title of On farm Trial (OFT)	**Evaluation of area specific mineral mixture in dairy cattle**
2.	Problem diagnosed	**Non availability of area specific mineral mixture.** **High cost of generalized commercial mineral mixture.**
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmers Practice: Indiscriminate feeding of wheat and paddy straw with concentrate and salt T.O.-1: Feeding of wheat/paddy straw with concentrate as per requirements with Commercial mineral mixture** @ 50 gm/day/cow. T.O.-2: Feeding of wheat/paddy straw with concentrate as per requirements with Area specific mineral mixture* (ICAR-RCER, Patna) @ 50 gm/day/cow
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	ICAR RCER (Patna)

5.	Production system and thematic area	Dairy Production (Dairy Animal Nutrition)
6.	Performance of the Technology with performance indicators	T.O.-2 had maximum milk production 12.00% higher than F.P. while T.O.-1 was 8% higher then F.P. T.O.-2 had 4% increase while T.O.-1 had 3.5% increase in fat percent in milk in comparison to F.P.. B:C ratio 1.63 was found highest in T.O.-2.
7.	Final recommendation for micro level situation	Feeding of wheat/paddy straw with concentrate as per requirements with Area specific mineral mixture* (ICAR-RCER, Patna) @ 50 gm/day/cow
8.	Constraints identified and feedback for research	Commercially non availability of (Swarnamin)Area specific mineral mixture (ICAR-RCER, Patna).
9.	Process of farmers participation and their reaction	Training, Method demonstration Field visit and personal communication.

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

Thematic area	**Technology options with detailed treatments** **(For Ninty Days)**	**Area (ha in crop & Fodder)/ Nos (in livestock)**		**Yield (Milk)** **(**Kg/Cow**)**	**Cost of cultivation (Rs./Cow)**	**Gross return (Rs/Cow)**	**Net return (Rs/Cow)**	**BC ratio**
		Proposed	**Actual**					
Dairy Production (Dairy Animal Nutrition)	Farmers Practice: Indiscriminate feeding of wheat and paddy straw with concentrate and salt	10	10	6.12	15565	22032	6467	1.41
	T.O.-1: Feeding of wheat/paddy straw with concentrate as per requirements with Commercial	10	10	7.70	16565	25704	9139	1.55

	mineral mixture** @ 50 gm/day/cow.							
	T.O.-2: Feeding of wheat/paddy straw with concentrate as per requirements with Area specific mineral mixture* (ICAR-RCER,Patna) @ 50 gm/day/cow	10	10	7.88	16065	26185	10120	1.63

Please provide all the OFTs in same format Photographs in jpg. (Attach separately also with captions)

	
Input application	Data collection under OFT

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 of beneficiaries	Yield in Demo (q/ha)	Yield in check (q/ha)
	Cereals	**1**	**2 ha.**	**10**	**42.6**	**36.4**
	Oil Seed					
	Pulses					
	Horticulture Crops					
	Other crops					
	Hybrid crop					
	Livestock	**01**	**100 goat**	**32**	**98 (live animals)**	**61 (live animals)**
	Fisheries					
	Other enterprises	**1**	**2 ha.**	**20**	**43.8**	**38.8**
	Women empowerment					
	Farm Machinery	**1**	**2ha**	**10**	**50.2**	**49**
	Grand Total	**4**	**6ha, 100 goat**	**69**		

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
Wheat	Cultivation of bio-fortified wheat variety	Wheat variety DBW–187 (2022 – 2023)	10	2	42.6	36.4	17.0	41319.5	96687.5	55368	2.34	37986	82810	44824	2.18
Paddy	Agronomic bio-fortification	Foliar application of Zn at tillering, panicle initiation and pre-flowering stage @ 0.5% Zn (2023)	20	2	43.8	38.8	12.8	38868	95615.4	56747	2.46	37812.6	84700.4	46887.8	2.24
Wheat	Cultivation of bio-fortified wheat variety	Wheat variety DBW–187 (2023 – 2024)	10	2	Crop is standing in field and result awaited										

Total															

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
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

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

	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.

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
	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

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

		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										
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										

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
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										

* 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																	
Rabbitry																	
Piggery																	

Sheep and goat	Disease Management	PPR vaccination and Fenbendazole deworming	32	100	Live animal-98 Mortality-2 animal	Live animal-61 Mortality-39	Mortality rate in demo-2.00% Mortality rate in check-39.00 %	-	-	201100	490000	288900	2.43	200000	305000	105000	1.52
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

View of Front line demonstartion on PPR vaccination and Deworming

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																	
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

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															
Button mushroom																
Vermicompost																
Sericulture																
Apiculture																
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

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					
Kitchen Garden					
Nutrigarden					
Storage Technique					
Value addition					
Women Empowerment					
Others					
Total - Women					
Children					
Health and nutrition					
Others					
Total - Children					
Other if any					
Total others					
Grand Total					

11. Farm implements and machinery

	No. of FLDs	Name of the implement	Crop	Name of the technology demonstrated	No. of Farmer	Area (ha)	Grain Yield (q/ha)		% Change in major parameter	Gross return Rs/ha and B:C ratio				Cost reduction (Rs./ha or Rs./Unit)
							Demonstration	Check		Demonstration Ration (Rate 1750)	Check	Demonstration	Check	Demo
Sowing and planting tools and machineries	1	Manual Rice - wheats seeder	Paddy	Manual rice wheat seeder	10	2	50.2	49	2.44	89858	87710	2.14	1.71	9225

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														
Total mechanization tools and machineries														
Others														
Total of Others														

* 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

Sl.No.	Activity	Date	No. of activities organized	Number of participants	Remarks
1.	Field days	04.07.2023, 18/4/2023 and 30/10/2023	3	101	
2.	Farmers Training	11.05.2023, 7/7/2023, 2/9/2023, 3/10/2023, 5/12/2023 and 12/12/2023	7	65	Manual rice wheat seeder demonstration
3.	Media coverage				
4.	Training for extension functionaries				



Front line demonstartion on Manual rice wheat seeder at farmers field


Data collection under FLD on farmer’s field

Technical Feedback on the demonstrated technologies (if any)

Sl. No	Crop	Feed Back
1	Wheat	Due to late sowing the wheat crop growth performance is hampered and crop – weed competition suppresses the wheat growth
2	Paddy	Due to low and late rainfall causes damage to the early paddy growth and predominant zinc deficiency symptoms appears in the check plots

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

1. Technical Parameters:

Sl. No.	Crop demonstrated	Existing (Farmer's) variety name	Existing yield (q/ha) 7 years	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
1.	Mustard (2022 – 2023)	Local and mixed	8.20	76.8	118	250	Mustard var. DRMRIJ-31 (Giriraj) @ 5 kg/ha, Sulphur @ 5 kg/ha, Zinc @ 0.5% foliar, Boron @ 0.2% foliar, Mancozeb, Imidacloprid	100	40	17.4	8.6	12.7	65.4	7.63	49.2
2.	Lentil (2022 – 2023)	Local and mixed	6.7	128	112	160	IPL-316, PSB, Rhizobium, Mancozeb,	50	20	17.8	13.4	15.1	17.9	34.3	5.63

							Emamectin benzoate								
3.	Chickpea (2022 – 2023)	Local and mixed	5.6	102	105	200	RVG-202, PSB, Rhizobium, Mancozeb, Emamectin benzoate	50	20	16.5	10.2	12.7	24.5	20.9	57.5
4.	Lentil (2023 – 2024)	Local and mixed	6.7	128	112	180	IPL-220, Rhizobium, Mancozeb, Emamectin benzoate	40	16	Crop is standing in field and result awaited					

2. 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
1.	Mustard var. DRMRIJ-31 (Giriraj) @ 5 kg/ha, Sulphur @ 5 kg/ha, Zinc @ 0.5% foliar, Boron @ 0.2% foliar, Mancozeb, Imidacloprid	23645	44690	21045	1.89	27037	69215	42178	2.56
2.	IPL-316, PSB, Rhizobium, Mancozeb, Emamectin benzoate	19052	40200	21148	2.11	34318	90600	56282	2.64
3.	RVG-202, PSB, Rhizobium, Mancozeb, Emamectin benzoate	16975	29876	12901	1.76	26994	67754	40760	2.51
4.	IPL-220, Rhizobium, Mancozeb, Emamectin benzoate	Crop is standing in field and result awaited							

3. Socio-economic impact parameters

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. DRMRIJ-31 (Giriraj) @ 5 kg/ha, Sulphur @ 5 kg/ha, Zinc @ 0.5% foliar, Boron @ 0.2% foliar, Mancozeb, Imidacloprid	50800	40640	52.8	3048	7112	To improve the livelihood of the farmer	26/acre demo plot
2.	IPL-316, PSB, Rhizobium, Mancozeb, Emamectin benzoate	30200	24160	68.6	1812	4228	To improve the livelihood of the farmer	26/acre demo plot
3.	RVG-202, PSB, Rhizobium, Mancozeb, Emamectin benzoate	25400	20320	64.2	1524	3556	To improve the livelihood of the farmer	26/acre demo plot
4.	IPL-220, Rhizobium, Mancozeb, Emamectin benzoate	Crop is standing in field and result awaited						

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

Sl. No.	Technologies demonstrated (with name)	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, if any
1.	Mustard var. DRMRIJ-31 (Giriraj) @ 5 kg/ha, Sulphur @ 5 kg/ha, Zinc @ 0.5% foliar, Boron @ 0.2% foliar, Mancozeb, Imidacloprid	Sugarcane is the main crop for the farmers. Farmers are tried to include mustard in between two sugarcane planting seasons.	Due to drought, farmers want to take oilseed crops in early season i.e. October. variety DRMRIJ-31 is highly yielding dwarf variety are preferable and application of sulfur and boron enhances oil content in mustard.	Can afford	Aphid infestation during flowering stage	The farmer was satisfied with the technology transferred. The farmer is enthusiastic to adopt the scientific package of practices for oilseed production.	Short duration high yielding and fertilizer responsive variety
2.	IPL-316, PSB, Rhizobium, Mancozeb, Emamectin benzoate	Sugarcane is the main crop for the farmers. Farmers are tried to include lentil in between	Due to drought, farmers want to take pulses in early season i.e. October. variety IPL-316 is highly	Can afford	Not at all	The farmer was satisfied with the technology transferred. The farmer is enthusiastic to adopt the scientific package of	Short duration high yielding and fertilizer responsive variety

		two sugarcane planting seasons	yielding dwarf variety are preferable and application of Rhizobium enhances soil fertility			practices for pulses production	
3.	RVG-202, PSB, Rhizobium, Mancozeb, Emamectin benzoate	Sugarcane is the main crop for the farmers. Farmers are tried to include chickpea in between two sugarcane planting seasons	Due to drought, farmers want to take pulses in early season i.e. October. variety RVG-202 is highly yielding dwarf variety are preferable and application of Rhizobium enhances soil fertility	Can afford	Not at all	The farmer was satisfied with the technology transferred. The farmer is enthusiastic to adopt the scientific package of practices for pulses production	Short duration high yielding and fertilizer responsive variety
4.	IPL-220, Rhizobium, Mancozeb, Emamectin benzoate	Crop is standing in field and result awaited					

C. Specific Characteristics of Technology and Performance

Crop and variety Demonstrated	Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
Mustard var. DRMRIJ-31 (Giriraj) @ 5 kg/ha, Sulphur @ 5 kg/ha, Zinc @ 0.5% foliar, Boron @ 0.2% foliar, Mancozeb, Imidacloprid	Plant height (cm)	182.6	106.2	High plant survival/unit area, performance of germination higher, plant height, no. of branches, seeds/siliqua found more. It may be up-scaled in 500 ha
	Number of primary branches/plant	5.14	3.86	
	Siliquae/plant	420	215	
	Length of Siliquae	4.9	2.7	
	Seeds/siliquae	18	11	
	1000 seed weight (g)	5.26	4.23	
	Seed yield per plant (gm)	58.3	28.2	
	Harvest index (%)	26.4	24.9	
IPL-316, PSB, Rhizobium, Mancozeb, Emamectin benzoate	Plant height (cm)	31.4	23.8	High plant survival/unit area, performance of germination higher, plant height, no. of branches, seeds/siliqua found more. It may be up-scaled in 500 ha
	Branches/plant	5.46	3.67	
	Pods/plant	52.7	44.8	
	Seeds/pod	1.58	1.24	
	1000 seed weight (g)	29.7	22.8	
	Harvest index (%)	42.5	40.1	
RVG-202, PSB, Rhizobium, Mancozeb, Emamectin benzoate	Plant height (cm)	41.6	33.6	High plant survival/unit area, performance of germination higher, plant height, no. of branches, seeds/siliqua found more. It may be up-scaled in 500 ha
	Pods/plant	48.2	36.8	
	Seeds/pod	2.4	2.2	
	Seed index (g)	22.8	18.5	
	Harvest index (%)	33.6	31.9	

D. Extension activities under FLD conducted:

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
1	Method demonstration on manual rice - wheat seedere	04.07.2023	30
2	Method demonstration and training	11.05.2023	25
3	Animal Health Camp for goats	22.05.2023, Siktor, Bagaha-1	32
4	Field day, field visit & advisory services in mustard	1/4/2023, Tarharwa	32
5	Field day, field visit & advisory services in mustard	3/4/23, Narkatiyaganj	41
6	Training on production and protection technology in Lentil and critical input distribution	30/10/2023, Narkatiyaganj	9
4.	Training on production and protection technology in Lentil and critical input distribution	6/11/2023, Salha	15
5.	Training on production and protection technology in Lentil and critical input distribution	9/11/2023 Salha	10
6.	Training on production and protection technology in Lentil and critical input distribution	10/11/2023, Mishrauli	6

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


Input distribution in CFLD pulses


Field visit under CFLD pulses

ssExtension and Training activities under FLD

F. Farmers' training photographs

G. Quality Action Photographs of field visits/field days and technology demonstrated.

H. Details of budget utilization

Crop (Provide crop wise information)	**Items**	**Budget Received (Rs.)**	**Budget Utilization (Rs.)**	**Balance (Rs.)**
Mustard (2022 – 2023)	i) Critical input	220200	211200	Nil
	ii) TA/DA/POL etc. for monitoring	0	5000	Nil
	iii) Extension Activities (Field Day)	0	4000	Nil
	iv) Publication of literature	0	0	Nil
	Total	220200	220200	Nil
Lentil (2022 – 2023) and Chickpea (2022 – 2023)	i) Critical input	79200	329100	-249900
	ii) TA/DA/POL etc. for monitoring	0	8000	-8000
	iii) Extension Activities (Field Day)	0	5000	-5000
	iv) Publication of literature	0	0	0
	Total	79200	342100	-262900
Lentil (2023 – 2024)	i) Critical input	80400	119000	-38600

	ii) TA/DA/POL etc. for monitoring	0	8000	-8000
	iii) Extension Activities (Field Day)	0	4000	-4000
	iv) Publication of literature	0	0	0
	Total	80400	131000	-50600

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									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
I. Crop Production													
Weed Management	1	9	7	16	1	6	7	0	2	2	10	15	25
Resource Conservation Technologies													
Cropping Systems													
Crop Diversification													
Integrated Farming													
Water management													
Seed production													
Nursery management													
Integrated Crop Management													
Fodder production													
Production of organic inputs													
Others, (cultivation of crops)	1	14	4	18	5	7	12	0	0	0	19	11	30
II. Horticulture													
a) Vegetable Crops													
Integrated nutrient management													
Water management													
Enterprise development													
Skill development													
Yield increment													
Production of low volume and high value crops													
Off-season vegetables													
Nursery raising													
Export potential vegetables													
Grading and standardization													
Protective cultivation (Green Houses, Shade Net etc.)													
Others, if any (Cultivation of Vegetable)													
Training anssssd pruning													
b) Fruits													
Layout and Management of Orchards													
Cultivation of Fruit													
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													

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
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													
Post-harvest technology and value addition													
Others, if any													
III. Soil Health and Fertility Management													
Soil fertility management													
Soil and Water Conservation													
Integrated Nutrient Management	1	19	9	28	1	1	2	0	0	0	28	10	30
Production and use of organic inputs	1	13	1	14	1	10	11	0	0	0	14	11	25
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency													
Soil and Water Testing													
Others, if any													
IV. Livestock Production and Management													
Dairy Management													
Poultry Management	02	06	02	08	15	28	43	0	0	0	21	30	51
Piggery Management													
Rabbit Management													
Disease Management	01	02	0	02	10	11	21	0	0	0	12	11	23
Feed management													
Production of quality animal products													
Others, if any Goat farming													
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													
Minimization of nutrient loss in processing													
Gender mainstreaming through SHGs													
Storage loss minimization techniques													
Enterprise development													
Value addition													

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
Income generation activities for empowerment of rural Women													
Location specific drudgery reduction technologies													
Rural Crafts													
Capacity building													
Women and child care													
Others, if any													
VI. Agril. Engineering													
Installation and maintenance of micro irrigation systems													
Use of Plastics in farming practices													
Production of small tools and implements													
Repair and maintenance of farm machinery and implements	1	19	4	23	2	0	2	6	0	6	27	4	31
Small scale processing and value addition													
Post-Harvest Technology													
Others, if any	2	35	0	35	7	1	8	3	0	3	45	11	56
VII. Plant Protection													
Integrated Pest Management	01	15	1	16	5	10	15	0	0	0	20	11	31
Integrated Disease Management	01	12	20	32	6	20	26	2	0	2	20	40	60
Bio-control of pests and diseases	01	28	8	36	11	4	15	3	0	3	42	12	54
Production of bio control agents and bio pesticides													
Others, if any	01	22	0	22	3	0	3	0	0	0	25	0	25
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													

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
Production of Bee-colonies and wax sheets													
Small tools and implements													
Production of livestock feed and fodder													
Production of Fish feed													
Others, if any													
X. Capacity Building and Group Dynamics													
Leadership development													
Group dynamics													
Formation and Management of SHGs													
Mobilization of social capital													
Entrepreneurial development of farmers/youths													
WTO and IPR issues													
Others, if any													
XI Agro-forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													
XII. Others (Pl. Specify)													
TOTAL	14	194	56	250	67	98	165	14	2	16	283	166	441

B) Rural Youth Including the sponsored training programmes (on 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
Mushroom Production	1	0	0	0	14	16	30	0	0	0	14	16	30
Bee-keeping													
Integrated farming													
Seed production	2	1	6	7	24	24	48	0	0	0	25	30	55
Production of organic inputs													
Integrated Farming													
Planting material production													
Vermi-culture	2	44	2	46	13	3	16	3	0	3	60	5	65
Sericulture													
Protected cultivation of vegetable crops													
Commercial fruit production													
Repair and maintenance of farm machinery and implements	2	14	0	14	8	36	44	3	0	3	38	23	61
Nursery Management of Horticulture crops													
Training and pruning of orchards													
Value addition													
Production of quality animal products													
Dairying	1	26	0	26	2	0	2	0	0	0	28	0	28
Sheep and goat rearing	2	48	0	48	4	0	4	3	0	3	55	0	55
Quail farming													
Piggery													
Rabbit farming													
Poultry production	1	4	1	5	0	38	38	0	0	0	4	39	43

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
Ornamental fisheries													
Enterprise development													
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													
Micro-sprinkler irrigation for water conservation	1	0	0	0	0	30	30	0	0	0	0	30	30
Solar power irrigation system	2	42	0	42	10	0	10	8	0	8	60	0	60
TOTAL	14	179	9	188	75	147	222	17	0	17	284	143	427

C) Extension Personnel Including the sponsored training programmes (on 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													
Value addition													
Integrated Pest Management	1	12	2	14	5	1	6	0	0	0	17	3	20
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	1	14	0	14	3	0	3	0	0	0	17	0	17
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													
TOTAL	**2**	**26**	**2**	**28**	**8**	**1**	**9**	**0**	**0**	**0**	**34**	**3**	**37**

D) Farmers and farm women 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
I. Crop Production													
Weed Management	3	32	7	39	31	15	46	3	0	3	69	16	85
Resource Conservation Technologies													
Cropping Systems													
Crop Diversification													
Integrated Farming													
Water management													
Seed production													
Nursery management													
Integrated Crop Management	4	56	0	56	29	4	33	26	0	26	111	4	115
Fodder production													
Production of organic inputs													
Others, (cultivation of crops)	5	39	0	39	16	11	27	39	10	49	94	21	115
II. Horticulture													
a) Vegetable Crops													
Integrated nutrient management													
Water management													
Enterprise development													
Skill development													
Yield increment													
Production of low volume and high value crops													
Off-season vegetables													
Nursery raising													
Export potential vegetables													
Grading and standardization													
Protective cultivation (Green Houses, Shade Net etc.)													
Others, if any (Cultivation of Vegetable)													
Training and pruning													
b) Fruits													
Layout and Management of Orchards													
Cultivation of Fruit													
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													

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
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													
Post-harvest technology and value addition													
Others, if any													
III. Soil Health and Fertility Management													
Soil fertility management													
Soil and Water Conservation													
Integrated Nutrient Management													
Production and use of organic inputs													
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency													
Soil and Water Testing													
Others, if any													
IV. Livestock Production and Management													
Dairy Management	05	27	15	42	10	46	56	21	0	21	58	61	119
Poultry Management	01	2	0	2	0	0	0	20	0	20	22	0	22
Piggery Management													
Rabbit Management													
Disease Management	06	42	14	56	21	74	95	0	0	0	63	88	151
Feed management	03	46	0	46	11	0	11	11	17	28	68	17	85
Production of quality animal products	02	27	0	27	1	24	25	0	0	0	28	24	52
Others, if any Goat farming	01	24	0	24	1	0	1	0	0	0	25	0	25
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													
Minimization of nutrient loss in processing													

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
Gender mainstreaming through SHGs													
Storage loss minimization techniques													
Enterprise development													
Value addition													
Income generation activities for empowerment of rural Women													
Location specific drudgery reduction technologies													
Rural Crafts													
Capacity building													
Women and child care													
Others, if any													
VI. Agril. Engineering													
Installation and maintenance of micro irrigation systems	**2**	**35**	**0**	**35**	**5**	**18**	**23**	**0**	**0**	**0**	**40**	**18**	**58**
Use of Plastics in farming practices													
Production of small tools and implements													
Repair and maintenance of farm machinery and implements	**3**	**46**	**9**	**55**	**24**	**7**	**31**	**0**	**0**	**0**	**70**	**16**	**86**
Small scale processing and value addition													
Post-Harvest Technology													
Others, if any	16	215	19	234	81	145	226	1	0	1	297	164	461
VII. Plant Protection													
Integrated Pest Management	05	155	3	158	10	0	10	1	0	1	166	3	169
Integrated Disease Management	06	115	4	119	21	68	89	11	0	11	147	72	219
Bio-control of pests and diseases	01	34	0	34	1	0	1	0	0	0	35	0	35
Production of bio control agents and bio pesticides													
Others, if any													
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													

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
Fish processing and value addition													
Others, if any													
IX. Production of Inputs at site													
Seed Production													
Planting material production													
Bio-agents production													
Bio-pesticides production													
Bio-fertilizer production													
Vermi-compost production													
Organic manures production													
Production of fry and fingerlings													
Production of Bee-colonies and wax sheets													
Small tools and implements													
Production of livestock feed and fodder													
Production of Fish feed													
Others, if any													
X. Capacity Building and Group Dynamics													
Leadership development													
Group dynamics													
Formation and Management of SHGs													
Mobilization of social capital													
Entrepreneurial development of farmers/youths													
WTO and IPR issues													
Others, if any													
XI Agro-forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													
XII. Others (Pl. Specify)													
TOTAL	**63**	**895**	**71**	**966**	**262**	**412**	**674**	**133**	**27**	**160**	**1293**	**504**	**1797**

E) RURAL YOUTH 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
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													

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
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													

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	1	14	10	24	4	1	5	1	0	1	19	11	30
Integrated Pest Management	1	17	1	18	0	0	0	0	0	0	17	1	18
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													

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
Care and maintenance of farm machinery and implements													
WTO and IPR issues													
Management in farm animals	02	37	0	37	5	0	5	3	0	3	45	0	45
Livestock feed and fodder production													
Household food security													
Women and Child care													
Low cost and nutrient efficient diet designing													
Production and use of organic inputs													
Gender mainstreaming through SHGs													
Crop intensification	1	14	0	14	2	0	2	2	0	2	18	0	18
TOTAL	**5**	**82**	**11**	**93**	**11**	**1**	**12**	**6**	**0**	**6**	**99**	**12**	**111**

G) Consolidated table (ON and OFF Campus)

i. Farmers & Farm Women

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
I. Crop Production													
Weed Management	4	41	14	55	32	21	53	3	2	5	79	31	110
Resource Conservation Technologies													
Cropping Systems													
Crop Diversification													
Integrated Farming													
Water management													
Seed production													
Nursery management													
Integrated Crop Management	4	56	0	56	29	4	33	26	0	26	111	4	115
Fodder production													
Production of organic inputs													
Others, (cultivation of crops)	6	53	4	57	21	18	39	39	10	49	113	32	145
TOTAL	**14**	**150**	**18**	**168**	**82**	**43**	**125**	**68**	**12**	**80**	**303**	**67**	**370**
II. Horticulture													
a) Vegetable Crops													
Integrated nutrient management													
Water management													
Enterprise development													
Skill development													
Yield increment													
Production of low volume and high value crops													
Off-season vegetables													
Nursery raising													
Exotic vegetables like Broccoli													
Export potential vegetables													

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
Grading and standardization													
Protective cultivation (Green Houses, Shade Net etc.)													
Others, if any (Cultivation of Vegetable)													
TOTAL													
b) Fruits													
Training and Pruning													
Layout and Management of Orchards													
Cultivation of Fruit													
Management of young plants/orchards													
Rejuvenation of old orchards													
Export potential fruits													
Micro irrigation systems of orchards													
Plant propagation techniques													
Others, if any(INM)													
TOTAL													
c) Ornamental Plants													
Nursery Management													
Management of potted plants													
Export potential of ornamental plants													
Propagation techniques of Ornamental Plants													
Others, if any													
TOTAL													
d) Plantation crops													
Production and Management technology													
Processing and value addition													
Others, if any													
TOTAL													
e) Tuber crops													
Production and Management technology													
Processing and value addition													
Others, if any													
TOTAL													
f) Spices													
Production and Management technology													
Processing and value addition													
Others, if any													
TOTAL													
g) Medicinal and Aromatic Plants													
Nursery management													
Production and management technology													
Post harvest technology and value addition													
Others, if any													
TOTAL													
III. Soil Health and Fertility Management													
Soil fertility management													
Soil and Water Conservation													

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
Integrated Nutrient Management	4	34	16	50	19	13	32	28	0	28	89	29	110
Production and use of organic inputs	1	13	1	14	1	10	11	0	0	0	14	11	25
Management of Problematic soils													
Micro nutrient deficiency in crops	1	3	0	3	0	0	0	26	1	27	29	1	30
Nutrient Use Efficiency													
Soil and Water Testing													
Others, if any													
TOTAL	**6**	**50**	**17**	**67**	**20**	**23**	**43**	**54**	**1**	**55**	**132**	**41**	**165**
IV. Livestock Production and Management													
Dairy Management	7	33	17	50	25	74	99	21	0	21	79	91	170
Poultry Management	1	2	0	2	0	0	0	20	0	20	22	0	22
Piggery Management	0	0	0	0	0	0	0	0	0	0	0	0	0
Rabbit Management	1	2	0	2	10	11	21	0	0	0	12	11	23
Disease Management	6	42	14	56	21	74	95	0	0	0	63	88	151
Feed management	3	46	0	46	11	0	11	11	17	28	68	17	85
Production of quality animal products	2	27	0	27	1	24	25	0	0	0	28	24	52
Others, if any (Goat farming)	1	24	0	24	1	0	1	0	0	0	25	0	25
TOTAL	**21**	**176**	**31**	**207**	**69**	**183**	**252**	**52**	**17**	**69**	**297**	**231**	**528**
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													
Minimization of nutrient loss in processing													
Gender mainstreaming through SHGs													
Storage loss minimization techniques													
Enterprise development													
Value addition													
Income generation activities for empowerment of rural Women													
Location specific drudgery reduction technologies													
Rural Crafts													
Capacity building													
Women and child care													
Others, if any													
TOTAL													
VI. Agril. Engineering													
Installation and maintenance of micro irrigation systems	2	35	0	35	5	18	23	0	0	0	40	18	58
Use of Plastics in farming practices	0	0	0	0	0	0	0	0	0	0	0	0	0
Production of small tools and implements	0	0	0	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	4	65	13	78	26	7	33	6	0	6	97	20	117
Small scale processing and value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-Harvest Technology	0	0	0	0	0	0	0	0	0	0	0	0	0
Others, if any	18	250	19	269	88	146	234	4	0	4	342	175	517

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
TOTAL	**24**	**350**	**32**	**382**	**119**	**171**	**290**	**10**	**0**	**10**	**479**	**213**	**692**
VII. Plant Protection													
Integrated Pest Management	06	170	4	174	15	10	25	1	0	1	186	14	200
Integrated Disease Management	07	127	24	151	27	88	115	13	0	13	167	112	279
Bio-control of pests and diseases	02	62	8	70	12	4	16	3	0	3	77	12	89
Production of bio control agents and bio pesticides													
Others, if any	01	22	0	22	3	0	3	0	0	0	25	0	25
TOTAL	**16**	**381**	**36**	**417**	**57**	**102**	**159**	**17**	**0**	**17**	**455**	**138**	**593**
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													
TOTAL													
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													
TOTAL													
X. Capacity Building and Group Dynamics													
Leadership development													
Group dynamics													
Formation and Management of SHGs													
Mobilization of social capital													

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
Entrepreneurial development of farmers/youths													
WTO and IPR issues													
Others, if any													
TOTAL													
XI Agro-forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													
TOTAL													
XII. Others (Pl. specify)													
TOTAL	81	1107	134	1241	347	522	869	201	30	231	1666	690	2348

ii. RURAL YOUTH (On and 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
Mushroom Production	1	0	0	0	14	16	30	0	0	0	14	16	30
Bee-keeping													
Integrated farming													
Seed production	2	1	6	7	24	24	48	0	0	0	25	30	55
Production of organic inputs													
Planting material production													
Vermi-culture	2	44	2	46	13	3	16	3	0	3	60	5	65
Sericulture													
Protected cultivation of vegetable crops													
Commercial fruit production													
Repair and maintenance of farm machinery and implements	2	14	0	14	8	36	44	3	0	3	38	23	61
Nursery Management of Horticulture crops													
Training and pruning of orchards													
Value addition													
Production of quality animal products													
Dairying	1	26	0	26	2	0	2	0	0	0	28	0	28
Sheep and goat rearing	2	48	0	48	4	0	4	3	0	3	55	0	55
Quail farming													
Piggery													
Rabbit farming													
Poultry production	1	4	1	5	0	38	38	0	0	0	4	39	43
Ornamental fisheries													
Para vets													
Para extension workers													

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
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													
Micro-sprinkler irrigation for water conservation	1	0	0	0	0	30	30	0	0	0	0	30	30
Solar power irrigation system	2	42	0	42	10	0	10	8	0	8	60	0	60
Enterprise development													
Others if any (ICT application in agriculture)													
TOTAL	**14**	**179**	**9**	**188**	**75**	**147**	**222**	**17**	**0**	**17**	**284**	**143**	**427**

iii. Extension Personnel (On and 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	1	14	10	24	4	1	5	1	0	1	19	11	30
Integrated Pest Management	2	29	3	32	5	1	6	0	0	0	34	4	38
Integrated Nutrient management													
Rejuvenation of old orchards													
Value addition													
Protected cultivation technology													
Formation and Management of SHGs													
Group Dynamics and farmers organization													
Information networking among farmers													

Capacity building for ICT application													
Care and maintenance of farm machinery and implements	1	14	0	14	3	0	3	0	0	0	17	0	17
WTO and IPR issues													
Management in farm animals	2	37	0	37	5	0	5	3	0	3	45	0	45
Livestock feed and fodder production													
Household food security													
Women and Child care													
Low cost and nutrient efficient diet designing													
Production and use of organic inputs													
Gender mainstreaming through SHGs													
Crop intensification	1	14	0	14	2	0	2	2	0	2	18	0	18
Others if any													
TOTAL	**7**	**108**	**13**	**121**	**19**	**2**	**21**	**6**	**0**	**6**	**133**	**15**	**148**

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	
Crop Production	Farmers and farm women	Training programme on package and practices of lentil	1	Off	3	0	3	27	0	27	30
Crop Production	Farmers and farm women	Training programme on integrated weed management in mustard	1	Off	15	10	25	0	0	0	25
Crop Production	Farmers and farm women	Training programme on integrated nutrient management in sugarcane	1	Off	13	12	25	0	0	0	25
Crop Production	Farmers and farm women	Awareness programme on agronomic practices of moongbean production	1	Off	3	0	3	30	0	30	33
Crop Production	Farmers and farm women	Scientific rice cultivation technology	1	Off	0	0	0	30	0	30	30
Crop Production	Farmers and farm women	Package and practices of direct seeded rice cultivation	1	Off	26	0	26	4	0	4	30
Crop Production	Farmers and farm women	Integrated nutrient management in rice	1	Off	28	0	28	2	0	2	30
Crop Production	Farmers and farm women	Integrated weed management in direct seeded rice	1	On	1	8	9	9	7	16	25
Crop Production	Farmers and farm women	Awareness programme on micronutrient management in rice	1	Off	24	4	27	3	0	3	30
Crop Production	Farmers and farm women	Direct seeded rice cultivation technology	1	Off	27	0	27	3	0	3	30
Crop Production	Farmers and farm women	Production technique of pigeon pea	1	On	5	7	12	14	4	18	30
Crop Production	Farmers and farm women	Awareness programme on mungbean production technology	1	Off	13	10	23	2	0	2	25
Crop Production	Farmers and farm women	Integrated nutrient management of pigeon pea	1	On	1	1	2	19	9	28	30

Crop Production	Farmers and farm women	Scientific production techniques of organic manure	1	On	1	10	11	13	1	14	25
Crop Production	Farmers and farm women	Awareness programme on weed management in paddy	1	Off	5	0	5	21	7	28	33
Crop Production	Farmers and farm women	Package and practices of lentil production	1	Off	14	1	15	15	0	15	30
Crop Production	Farmers and farm women	Agronomic practices for chickpea production	1	Off	15	11	26	4	0	4	30
Crop Production	Farmers and farm women	Awareness programme on weed management in mustard	1	Off	14	5	19	11	0	11	30
Crop Production	Farmers and farm women	Production technology of potato	1	Off	12	3	15	10	0	10	25
Crop Production	Farmers and farm women	Integrated nutrient management in wheat crops	1	Off	5	0	5	13	7	20	25
Agril/ Engineering	Farmers and farm women	Various weed management for wheat, how to select appropriate method based upon utility/	1	**Off Campus)**	1	0	1	28	2	30	31
Agril/ Engineering	Farmers and farm women	Site specific based nutrient management techniques/	1	**Off Campus)**	2	0	2	26	0	26	28
Agril/ Engineering	Farmers and farm women	Repair and maintenance of farm machinery and implements	1	**Off Campus)**	2	0	2	28	0	28	30
Agril/ Engineering	Farmers and farm women	Installation and maintenance of micro irrigation systems	1	**Off Campus)**	0	0	0	32	0	32	32
Agril/ Engineering	Farmers and farm women	Precision agriculture to optimize input resources	1	**Off Campus)**	7	0	7	36	0	36	43
Agril/ Engineering	Farmers and farm women	Site selection and design criteria for farm pond construction	1	**Off Campus)**	6	24	30	0	0	0	30
Agril/ Engineering	Farmers and farm women	Various techniques to harness green energy and methods to reduce air/water/ land pollution	1	**Off Campus)**	16	14	30	0	0	0	30
Agril/ Engineering	Farmers and farm women	Installation and maintenance of micro irrigation systems	1	**Off Campus)**	5	18	23	3	0	3	26
Agril/ Engineering	Farmers and farm women	Wheat harvesting technologies	1	**Off Campus)**	1	15	16	9	0	9	25

Agril/ Engineering	Farmers and farm women	Laser land levellor	1	**On campus**	5	1	6	12	10	22	28
Agril/ Engineering	Farmers and farm women	Technologies options available for land transformation: - Laser land levellor	1	**Off Campus)**	5	10	15	10	0	10	25
Agril/ Engineering	Farmers and farm women	Site selection and design criteria for farm pond construction	1	**Off Campus)**	3	0	3	22	0	22	25
Agril/ Engineering	Farmers and farm women	Technologies for direct sowing of rice, its importance, merits and demerits	1	**Off Campus)**	4	0	4	21	0	21	25
Agril/ Engineering	Farmers and farm women	Solar powered irrigation system (SPIS)	1	**Off Campus)**	4	9	13	6	6	12	25
Agril/ Engineering	Farmers and farm women	Weed management in paddy crop for kharif season	1	**Off Campus)**	1	16	17	12	1	13	30
Agril/ Engineering	Farmers and farm women	Different weed management practices	1	**On campus**	5	0	5	23	0	23	28
Agril/ Engineering	Farmers and farm women	Calibration of different agricultural equipment's	1	**On campus**	8	0	8	19	4	23	31
Agril/ Engineering	Farmers and farm women	Various micro irrigation techniques for water saving	1	**Off Campus)**	13	13	26	8	0	8	34
Agril/ Engineering	Farmers and farm women	Solar powered Irrigation system, a way to use green energy for agricultural purpose	1	**Off Campus)**	1	20	21	2	10	12	33
Agril/ Engineering	Farmers and farm women	Repair and maintenance of farm machinery and implements	1	**Off Campus)**	9	7	16	5	9	14	30
Agril/ Engineering	Farmers and farm women	Technologies for sugarcane bud and node making to increase farm mechanization	1	**Off Campus)**	6	18	24	4	0	4	28
Agril/ Engineering	Farmers and farm women	Zero Till machine for sowing of wheat	1	**Off Campus)**	0	6	6	17	0	17	23
Agril/ Engineering	Farmers and farm women	Others, if any(Manual Rice- wheat seeder for direct wheat sowing, a low -cost method for wheat sowing)	1	**Off Campus)**	12	0	12	14	0	14	26
Agril/ Engineering	Farmers and farm women	Repair and maintenance of farm machinery and implements	1	**Off Campus)**	13	0	13	13	0	13	26
Animal Science	Farmers and farm women	Management of dairy animals during different stages of production	1	**Off Campus)**	0	0	0	27	0	27	27
Animal Science	Farmers and farm women	Preventive and curative measures for different	1	**Off Campus)**	1	0	1	24	0	24	25

		diseases in animals									
Animal Science	Farmers and farm women	Scope and limitation of feeding balanced ration and total mixed ration in animals	1	**Off Campus)**	6	14	20	2	3	5	25
Animal Science	Farmers and farm women	Different types of housing system and its importance in animals	1	**Off Campus)**	4	18	22	0	3	3	25
Animal Science	Farmers and farm women	Different technique for management of animals waste in dairy farm	1	**Off Campus)**	0	24	24	0	2	2	26
Animal Science	Farmers and farm women	Control measures of Ecto & Endo parasites in cattle	1	**Off Campus)**	0	16	16	5	1	6	22
Animal Science	Farmers and farm women	Backyard poultry farming	1	**On Campus)**	10	12	22	0	0	0	22
Animal Science	Farmers and farm women	Scientific dairy farming	1	**Off Campus)**	5	0	5	17	0	17	22
Animal Science	Farmers and farm women	Health management in goat	1	**On Campus)**	10	11	21	2	0	2	23
Animal Science	Farmers and farm women	Feeding management of dairy cattle	1	**Off Campus)**	11	17	28	2	0	2	30
Animal Science	Farmers and farm women	Clean milk production	1	**Off Campus)**	1	24	25	0	0	0	25
Animal Science	Farmers and farm women	Feeding management of dairy cattle	1	**Off Campus)**	1	24	25	0	0	0	25
Animal Science	Farmers and farm women	Scientific dairy farming	1	**Off Campus)**	21	0	21	0	0	0	21
Animal Science	Farmers and farm women	Poultry Farming	1	**On Campus)**	5	16	21	6	2	8	29
Animal Science	Farmers and farm women	Different types of housing systems for goat	1	**Off Campus)**	0	27	27	0	3	3	30
Animal Science	Farmers and farm women	Production and preservation of green fodder round the year	1	**Off Campus)**	1	4	5	10	10	20	25
Animal Science	Farmers and farm women	Important bacterial, viral and parasitic diseases in goat	1	**Off Campus)**	3	0	3	20	0	20	23
Animal Science	Farmers and farm women	Important bacterial, viral and parasitic diseases in poultry	1	**Off Campus)**	20	0	20	2	0	2	22

Animal Science	Farmers and farm women	Commercial broiler and layer farming	1	**Off Campus)**	9	0	9	13	5	18	27
Animal Science	Farmers and farm women	Preservation of feeds and fodders	1	**Off Campus)**	5	0	5	20	0	20	25
Animal Science	Farmers and farm women	Feeding schedule for poultry in different production system	1	**Off (Campus)**	6	0	6	24	0	24	30
Plant Protection	Farmers and farm women	Disease and pest management in maize crop	1	**Off (Campus)**	19	0	19	11	0	11	30
Plant Protection	Farmers and farm women	Biocontrol agent and their use in management of plant diseases	1	**Off (Campus)**	33	3	36	1	0	1	37
Plant Protection	Farmers and farm women	Disease and pest management in moong crop	1	**On Campus**	3	0	3	22	0	22	25
Plant Protection	Farmers and farm women	Disease and pest management in oilseed crop	1	**Off (Campus)**	34	0	34	1	0	1	35
Plant Protection	Farmers and farm women	Sett treatment in sugarcane for soil and set borne diseases	1	**Off (Campus)**	31	0	31	4	0	4	35
Plant Protection	Farmers and farm women	Use of *Trichoderma* and *Pseudomonas* in management of sugarcane diseases	1	**Off (Campus)**	29	0	29	6	0	6	35
Plant Protection	Farmers and farm women	Identification and management of important diseases in rice	1	**Off (Campus)**	30	0	30	1	0	1	31
Plant Protection	Farmers and farm women	Importance of *Trichoderma* sp. in sugarcane diseases management	1	**Off (Campus)**	30	0	30	6	0	6	36
Plant Protection	Farmers and farm women	Seed treatment in rice	1	**On (Campus)**	28	8	36	14	4	18	54
Plant Protection	Farmers and farm women	Diseases of rice and their management	1	**On (Campus)**	12	20	32	8	20	28	60
Plant Protection	Farmers and farm women	Diseases of rice and their management	1	**Off (Campus)**	34	0	34	1	0	1	35
Plant Protection	Farmers and farm women	Identification and management of important diseases in mango	1	**Off (Campus)**	32	0	32	3	0	3	35
Plant Protection	Farmers and farm women	Identification and management of red rot in sugarcane	1	**Off (Campus)**	30	0	30	0	0	0	30

Plant Protection	Farmers and farm women	Management of diseases in sugarcane	1	**Off (Campus)**	0	4	4	0	40	40	44
Plant Protection	Farmers and farm women	Integrated disease management in rice	1	**On (Campus)**	15	1	16	5	10	15	31
Plant Protection	Farmers and farm women	Bacterial blight of rice and their management	1	**Off (Campus)**	2	0	2	10	28	38	40

H) Vocational training programmes for Rural Youth

Details of training programmes for Rural Youth

Crop / Enterprise	Identified Thrust Area	Training title*	Duration (days)	No. of Participants			Self-employed after training			Number of persons employed else where
				Male	Female	Total	Type of units	Number of units	Number of persons employed	
Agril. Engineering	Farm mechanization	Repair and maintenance of farm machinery and implements	4	8	23	31	Medium, Small	8	8	23
Agril. Engineering	Farm mechanization	Repair and maintenance of agricultural machinery	4	30	0	30	Medium, Small	30	17	13
Agril. Engineering	Resource conservation	Micro-sprinkler irrigation for water conservation	4	0	30	30	Small	12	0	30
Agril. Engineering	Resource conservation	Solar power irrigation system	4	30	0	30	0	0	0	0
Agril. Engineering	Resource conservation	Solar power irrigation system	5	30	0	30				
Animal Science	Poultry Farming	Poultry Farming	4	5	38	43	Small	37	37	6
Animal Science	Goat Farming	Scientific goat farming	4	55	0	55	Small	46	46	9
Animal Science	Dairy Farming	Commercial Dairy Farming	4	28	0	28	Medium	25	25	3
Plant Protection	Mushroom Production	Mushroom Production	3	14	16	30	Medium	27	27	3
Crop Production	Millet Production	Improved production technology of millets	4	7	18	25	Small	25	25	0
Crop Production	Vermicompost Production	Scientific vermicompost production technology	4	30	5	35	Small	11	11	24
Crop Production	Crop production	Scientific cultivation of rabi crops	4	18	12	30	Medium, Large	30	30	0
Crop Production	Vermicompost Production	Vermicompost Production	4	30	0	30	Small	22	22	8
Total				285	142	427	-	273	248	119

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

I) Sponsored Training Programmes

Sl.	Title	Thematic area	Month	Duration (days)	Client PF/RY/EF	No. of courses	No. of Participants										Sponsoring Agency
							Male			Female			Total				
							Others	SC	ST	Others	SC	ST	Others	SC	ST	Total	

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													
Commercial production of vegetables													
Production and value addition													
Fruit Plants													
Ornamental plants													
Spices crops													
Soil health and fertility management													
Production of Inputs at site													
Methods of protective cultivation													
Other													
Total													
Post harvest technology and value addition													
Processing and value addition													
Other													
Total													
Farm machinery													
Farm machinery, tools and implements													
Other													
Total													
Livestock and fisheries													
Livestock production and management													
Animal Nutrition Management													
Animal Disease Management													
Fisheries Nutrition													
Fisheries Management													
Other													
Total													
Home Science													
Household nutritional security													
Economic empowerment of women													
Drudgery reduction of women													
Other													
Total													
Agricultural Extension													
Capacity Building and Group Dynamics													
Other													
Total													

Grant Total													

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	

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

Total no of training organised	Name of QP/Job role	Title of the training	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kisan Mela participated	04	5000	3000	8000	1500	200	5	0	5	0	0	5005	3000	8005	1500	200
Field Day	02	73	00	73	4	0	1	0	1	0	0	74	0	74	4	0
Kisan Ghosthi	08	305	180	485	197	15	53	0	53	0	0	358	180	538	197	15
Exhibition organized	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Participation in exhibition	2	4000	1500	5500	1600	500	10	0	10	0	0	4010	1500	5510	1600	500
Film Show	1	27	0	27	2	0	1	0	1	0	0	28	0	28	2	0
Method Demonstrations	12	333	107	440	138	21	12	0	12	0	0	345	107	452	138	21
Farmers Seminar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Workshop (Participation)	8	0	0	0	0	0	28	0	28	0	0	28	0	28	0	0
Group discussion	3	14	0	14	1	0	15	0	15	0	0	29	0	29	1	0
Lectures delivered as resource persons	20	580	120	700	70	25	20	0	20	0	0	600	120	720	70	25
Advisory Services (Agro Mobile)	87	10208	2800	13008	4100	1900	87	0	87	0	0	10295	2800	13095	4100	1900
Scientific visit to farmers field	95	1834	931	2765	1002	318	95	0	95	0	0	1929	931	2860	1002	318
Farmers visit to KVK	98	837	443	1280	536	35	98	0	98	0	0	935	443	1378	536	35
Diagnostic visits	95	1834	931	2765	1002	318	95	0	95	0	0	1929	931	2860	1002	318
Exposure visits	02	53	11	64	0	0	04	0	04	0	0	57	11	68	0	0
Ex-trainees Sammelan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Soil health Camp	1	45	0	45	0	30	2	0	2	0	0	47	0	47	0	0
Animal Health Camp	2	2	63	65	62	0	2	0	2	0	0	4	63	67	62	0
Agri mobile clinic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Soil test campaigns																
Farm Science Club Conveners meet	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Self Help Group Conveners meetings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mahila Mandals Conveners meetings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Special day celebration	15	249	122	371	128	0	128	377	122	499	15	249	122	371	128	0
Sankalp Se Siddhi	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Swatchta Hi Sewa	10	90	135	225	62	28	130	0	130	20	0	220	135	355	82	28
Celebration of important date	15	249	122	371	128	0	128	377	122	499	15	249	122	371	128	0
Total	**480**	**25733**	**10465**	**36198**	**10532**	**3390**	**914**	**754**	**902**	**1018**	**30**	**26391**	**10465**	**36856**	**10552**	**3360**

B. Other Extension/content mobilization activities

Nature of Extension Activity	No. of activities
Newspaper coverage	33
Radio talks	0
TV talks	11
Popular articles published	28
Extension Literature	3
Electronic media	35
Any other	
Research paper	9
Review paper	2
Book Chapter	5
Books	2

C. Technology week celebration

Type of activities	No. of activities	Number of participants	Related crop/livestock technology
Demonstration and exposure	01	87	DSR, Micro Irrigation, Azolla, Vermicompost unit, Weather station, etc.

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.)	01	31	2	33	12	0	12	43	02	45
International Women's Day (8th Mar.)	0	0	0	0	0	0	0	0	0	0
Ambedkar Jayanti (14th Apr.)	0	0	0	0	0	0	0	0	0	0
World's Veterinary Day (Last week of April)	0	0	0	0	0	0	0	0	0	0
World 'Milk Day	01	24	1	25	6	0	6	30	1	31
World Environment Day (05 June)	01	07	45	52	10	0	10	17	45	62
International Yoga Day (21st Jun.)	01	08	0	08	10	0	10	18	0	18
ICAR Foundation Day (16 July)	01	49	27	76	10	0	10	59	27	86
Independence Day (15th Aug.)	01	29	1	30	11	0	11	40	1	41
Parthenium Awareness Week	05	48	12	60	30	0	30	78	12	90
Hindi Diwas (14th Sep.)										
Gandhi Jayanti (2nd Oct.)	01	08	01	09	15	0	15	23	1	24
Mahila Kisan Diwas (15th Oct.)	0	0	0	0	0	0	0	0	0	0
World Food Day (16th Oct.)	0	0	0	0	0	0	0	0	0	0
Vigilance Awareness Week	1	0	0	0	15	0	15	15	0	15
National Unity Day (31st Oct.)	0	0	0	0	0	0	0	0	0	0
World Science Day (10th Nov.)	0	0	0	0	0	0	0	0	0	0
National Education Day (11th Nov.)	0	0	0	0	0	0	0	0	0	0
Fisheries day (21 Nov)	0	0	0	0	0	0	0	0	0	0
National Constitution Day (26th Nov.)	0	0	0	0	0	0	0	0	0	0
World Soil Day (5th Dec.)	01	45	3	48	5	0	5	50	3	53
Kisan Diwas (23rd Dec.)	01	0	30	30	4	0	4	4	30	34
Any other day										
Total	**15**	**249**	**122**	**371**	**128**	**0**	**128**	**377**	**122**	**499**

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.	27/02/2023	PM Kisan Samman Nidhi	Hon'ble PM and AM	68	5	0	73
2.	18/03/2023	Millets Conference	Hon'ble PM and AM	55	10	0	65
3.	01/05/2023	PM Kisan SammanNidhi	Hon'ble PM and AM	51	03	0	54
4.	27/07/2023	PM Kisan SammanNidhi	Hon'ble PM and AM	107	11	1	119

3.5 a. Production and supply of Technological products

A. Seed production at seed village

Crop	Variety	Quantity of seed (q)	Value (Rs)	No. of farmers involved in village seed production	Number of farmers to whom seed provided			
					SC	ST	Other	Total
Total								

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)	Rajendra Mansuri – 1	364	Not received				DSP, RPCAU, Pusa
Cereals (Wheat)	DBW – 39	109	Not received				DSP, RPCAU, Pusa
Cereals (Ragi)	Rajendra Madua – 1 and Rajendra Madua – 8	4.0	Not received				DSP, RPCAU, Pusa
Oil seed (Mustard)	Rajendra Sufhalam – 1	16.2	Not received				DSP, RPCAU, Pusa
Oil seed (Linseed)	JLS-95 and JLS-66	1.17	Not received				DSP, RPCAU, Pusa
Pulses							
Green Manure (Dhaincha)	-	0.71	Not received				DSP, RPCAU, Pusa
Commercial crop (Sugarcane)	Rajendra Ganna – 1 and CoP – 9301	1099.6	368366				Sugarmill & Farmers
Fruits							
Forest crop							
Ornamental/flower							
Medicinal							

Grand Total		1594.68 qts					

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	Hybrid	1900	1900	71	0	3	74
Cabbage	Hybrid	650	650	5	0	3	8
Tomato	Hybrid	1910	1910	143	0	2	145
Brinjal	Hybrid	795	795	50	0	4	54
Chilli	Hybrid	1750	1750	140	0	2	142
Onion	*Mahalakshmi Nashik, Divyashakti, Ratnamali, N-53*	131130	16740	60	0	2	62
Others (Ridge gourd, Bottle gourd)	Hybrid, N-shivani	331	1986	123	1	3	127
Commercial seedlings							
Mulberry							
Sugarcane,							
Sweet Potato							
Turmeric							
Zinger							
Others							
Fruits seedlings							
Mango							
Guava							
Lime							
Papaya	Red Lady	171	5130	70	0	2	72
Banana							
Custard Apple		140	4200	70	0	0	70
Black Berry		70	2100	70	0	0	70
Ornamental plants							
Marigold							
Annual chrysanthemum							
Tuberose							
Others							
Medicinal and Aromatic							
Plantation							
Tuber Elephant yams							
Spices							
Grand Total	**-**	**138847**	**37161**	**802**	**1**	**21**	**824**

D. Forest species

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

E. Fodder crops saplings

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

F. Production of Bio-Products

Name of product	Quantity (Kg)	Value (Rs.)	No. of Farmers benefitted			
			SC	ST	Other	Total
Bio-fertilizers						
Bio-food (Spirulina etc)						
Bio-pesticide						
Bio-agents (Trichocard etc)						
Worms (earthworm, silk worms etc)						
Bio-fungicide						
Others, please specify (Mushroom spawn, Culture Mineral Mixture, Coir pith compost, Cow dung, Cow urine						
Total						

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							
Others (Pl. specify)							
Small ruminants							
Sheep							
Goat							
Other, please specify							
Poultry							

Broilers							
Layers							
Duals (broiler and layer)	Vanraja(Bird)	82.9kg	14093	1	0	13	14
	Vanraja (Egg)	455	3640	6	0	8	14
Japanese Quail							
Turkey							
Emu							
Ducks							
Others (Pl. specify)							
Piggery							
Piglet							
Hog							
Others (Pl. specify)							
Rabbitry							
Fisheries							
Indian carp	Rohu, Katla, Grass Carp	50kg	9000	1	0	5	6
Exotic carp							
Mixed carp							
Fish fingerlings							
Spawn							
Others (Pl. specify)							
Grand Total		132.9kg, 455 no	26733	8	0	26	34

H. SOIL & WATER TESTING

a. **Details of equipment available in Soil and Water Testing Laboratory**

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

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	2300	48	2300	Soil sample tested by HSM, Ramnagar
2.	Water				
3.	Plant				

4.	Fertilizers				
5.	Manures				
6.	Food				
7.	Others (if any)				

d. Details of World Soil Day Celebration

Sl. No.	No. of Activity conducted	Soil Health Cards distributed	No. of farmers benefitted	No. of VIPs Number of	Name (s) of VIP(s) involved if any	Total No. of Participants attended the program
1.	1	0	45	0	0	45

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.)

3.5. b. Seed Hub Programme - *"Creation of Seed Hubs for Increasing Indigenous Production of Pulses in India"*

1. Name of Seed Hub Centre:

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

2. Quality Seed Production of Pulses

Season	Crop	Variety	Production (q)			
			Target	Area sown (ha)	Production	Category of Seed (F/S, C/S)
Kharif 2023						
Rabi 2023						
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	Poudel, A., Singh, S. K., Jiménez-Ballesta, R., Jatav, S. S., **Patra, A.**, & Pandey, A. (2023). Effect of Nano-Phosphorus Formulation on Growth, Yield and Nutritional Quality of Wheat under Semi-Arid Climate. Agronomy, 13(3), 768.	9.70
2.		Pandey, A., Singh, S. K., Sharma, S., Mishra, A. K., Jatav, S. S., **Patra, A.**, ... & Pankaj, B. (2023). Effect of Different Arsenic and Biochar Levels on Soil Microbial Population and Enzymatic Activity. Int. J. Plant Soil Sci, 35(16), 443-451.	5.07
3.		Praharaj, S., Jha, R. K., Singh, A. K., Gangwar, S. K., Singh, R. P., Kundu, M. S., ... & **Patra, A.** (2023). Climate-Resilient Rice Establishment Practices: Findings and Lessons from Two Villages in Bihar, India. Sustainability, 15(14), 11082.	9.90
4.		Mukherjee, S., Singh, S. K., Jatav, S. S., **Patra, A.**, & Reddy, G. P. (2023). Effect of Biochar Application on Heavy Metal accumulation in Different Parts of Paddy Plant. International Journal of Environment and Climate Change, 13(11), 4491-4500.	5.16

5.		Sattar, A., Jha, R. K., Tiwari, R. K., Singh, A. K., Singh, A. K., Das, S.,… **Patra, A.**, … & Kundu, M. Managing climatic risks in rice-wheat cropping system for enhanced productivity in middle Gangetic plains of India. Frontiers in Sustainable Food Systems, 7, 1259528.	11.01
6.		**Malkani, P**., Mani, I., Sahoo, P. K., Ahmad, R., Parray, R. N. S., Alam, W., ... & Kumar, S. (2023). Design and fabrication of sensor-based herbicide applicator using FEM.	5.23
7.		**Malkani, P.,** Mani, I., Sahoo, P. K., Parray, R. A., Rathod, S. K., Chowdhury, M., & Kurmi, R. (2023). Design of laboratory setup for performance assessment of weed detection and herbicide application system. *Pharma Innov. J.*, *12*(7S), 123-132.	5.23
8.		Dharmender, I. M., Chopra, S., Roaf Ahmad Parray, A., Kumar, T. V., Rudra, S. G., Kumar, M., ... & **Malkani, P.** (2023). Extraction and characterization of sesame seed oil using microwave-assisted enzymatic extraction technology. *Extraction*, 16.	5.23
9.		Swain, S. S., Khura, T. K., Sahoo, P. K., Kushwaha, H. L., Parray, R. A., **Malkani, P**., & Lande, S. D. (2023). Determination of physical and engineering properties of urea super granules (USG) for design of USG applicator.	5.23
10.		Pankaj Malkani, Indra Mani, Pramod Kumar Sahoo, Roaf Ahmad Parray, **R.P. Singh,** Wasi Alam, Sidhartha Sekhar Swain, and Asha K.R (2022). Changing Trends in Weed Control and Adoption of Spraying Technology in the Kumaon Division of Uttarakhand. *Indian Journal of Extension Education.* 58(4): 69-76. **NAAS rating: 5.95**	5.95
11.		**R. P. Singh**, Abhik Patra, M. S. Kundu, Gagan Kumar, Pankaj Malkani and B. K. Singh (2022). Adoption of Integrated Plant Protection Practices by Sugarcane (*Saccharum Officinarum* L.) Growers in West Champaran, Bihar. *Indian Journal of Extension Education*, 58(4): 131-137 **NAAS rating: 5.95**	5.95
12.	Review paper	Suman, J., Rakshit, A., **Patra, A.**, Dutta, A., Tripathi, V. K., Mohapatra, K. K., ... & Krishnamoorthi, S. (2023). Enhanced Efficiency N Fertilizers: an Effective Strategy to Improve Use Efficiency and Ecological Sustainability. Journal of Soil Science and Plant Nutrition, 1-17.	9.90
13.		**Malkani, P**., Asha, K. R., & Rathod, S. K. (2023). Developments in Digital Image Processing Technologies for Weed Recognition and Herbicide Application. *Indian Journal of Ecology*, *50*(5), 1614-1618.	5.79

B. Details of Other Publications

S. No.	Particulars	Details of publication bibliographic form	No of copies published (if any)	No of copies distributed (if any)
	Seminar/conference/ symposia papers			
1.	Books	Ashutosh Singh, Anshuman Singh, Abhishek Kumar and Rajendra Pratap Singh(2023). Recent Trends of Production, Protection and Improvement in Agriculture. ISBN:978-1-80433-963-3 Page: 402		
2.		R.P. Singh(2023). Apiculture-Principles and Practices ISBN:978-81-958809-4-2. Page: 157. Gyanavi Publishers and Distributers, New Delhi		
1.	Book Chapter	Pankaj Malkani, Rohit Anand, Asha KR, Sunil Kumar Rathod and Sidhartha Sekhar Swain(2023).Advanced Fuel Blends and their usage in CI Engines in "Recent Innovative Updatesin Agricultural-Horticultural Sciences" Volume – 6. **ISBN:** 978-93-5570-686-7		
2.		Rohit Anand, Pankaj Malkani, Sunil Kumar Rathod, Dharmender Kumar Jha, Sidhartha (2023). Robotic Harvesters for Fruits and Vegetables in Advances in Agriculture Sciences. pg49-63 ISBN: 978-93-5570-815-1		
3.		RP Singh, Durga Prasad, Mamta Singh, Smita Puri (2023). Lucerne Diseases: A review on status, symptomatology and integrated management in Recent Trends of		

		Production, Protection and Improvement in Agriculture. Rubicon Publications London, England Page: 402. **ISBN:**978-1-80433-963-3		
4.		Rubicon Publications London, England. Page: 402. **ISBN:**978-1-80433-963-3		
5.		Smita Tiwari, RP Singh and Mamta Singh (2023). Molecular markers for Studying Genetic Diversity in Rice Blast Pathogen in Emerging Trends in Crop Improvement. Rubicon Publications London, England		
1.	Popular articles	Patra, A., Singh, R. P., Kundu, M. S., Kundu, A., and Mukherjee, S. (2023). Millet production in India: Challenges and opportunities. Biotica Research Today, 5 (3): 238–241.		
2.		Patra, A., Rai, A., Kumari, V., Das, S., and Choudhury, S. (2023). Conservation agriculture: A pathway to climate-resilient agriculture. Biotica Research Today, 5 (4): 302–304.		
3.		Patra, A., Singh, R.P., Malkani, P., Singh, B. K., and Kumar, G. (2023). Natural farming in India: Prospects and constraints. Biotica Research Today, 5 (5): 382–384.		
4.		डॉ. दुर्गा प्रसाद एवं डॉ. आर. पी. सिंह ममता सिंह (2023). सस्य क्रियाओं द्वारा दलहनी में रोग एवं कीट प्रबंधन, इंटीग्रल कृषि दर्पण, :(1)168-75		
5.		डॉ. दुर्गा प्रसाद एवं डॉ. आर. पी. सिंह(2023). दलहनी फसलों के मृदा जनित रोग एवं उनका समेकित प्रबंधन, कृषि कुम्भ, 3 (5): 41-42 e-ISSN:2582-9769		
6.		डॉ. दुर्गा प्रसाद एवं डॉ. आर. पी. सिंह (2023). मिर्च की फसल के प्रमुख रोग		

		एवं कीट तथा उनका समेकित प्रबंधन, कृषि कुम्भ, 3 (5): 32-34 e-ISSN:2582-9769		
7.		R. P. Singh, Durga Prasad, Abhik Patra, Gagan Kumar, B. K. Singh, Pankaj Malkani and M. S. Kundu (2023). Mycoinsecticide Fungi: A Sustainable Option for Insect-Pest Management. JUST AGRICULTURE-Multidisciplinary e-News Letter,4 (1): 347-361 , e-ISSN:2582-8223		
8.		डॉ. दुर्गा प्रसाद एवं डॉ. आर. पी. सिंह(2023). सोलानेसियस सब्जियों के प्रमुख रोग तथा उनका समेकित प्रबंधन, कृषि कुम्भ, 3 (4): 107-116, e-ISSN:2582-9769		
9.		डॉ. दुर्गा प्रसाद एवं डॉ. आर. पी. सिंह(2023). सोलानेसियस सब्जियों के प्रमुख कीट तथा उनका समेकित प्रबंधन ,कृषि कुम्भ, 3 (4): 117-123, e-ISSN:2582-9769		
10.		Durga Prasad and R.P. Singh(2023). Management of Insect-pests through Entomopathogenic Bacteria, Food and Scientific Reports, 4 (9): 35-39, e-ISSN 2582-5437		
11.		डॉ. दुर्गा प्रसाद एवं डॉ. आर. पी. सिंह(2023). टमाटर फसल में समेंकित रोग एवं कीट प्रबंधन , कृषि कुम्भ 3 ,)2 :(99103-, e-ISSN:2582-9769		
12.		डॉ. दुर्गा प्रसाद एवं डॉ. आर. पी. सिंह (2023). फफूंदनाशी: कार्यविधि, मात्रा एवं नियंत्रित होने वाले पादप रोग, कृषि कुम्भ) 3 ,2 :(66-,72 e-ISSN:2582-9769		
13.		डॉ. दुर्गा प्रसाद एवं डॉ. आर. पी. सिंह(2023). दलहनी फसलों में सस्य क्रियाओं द्वारा रोग एवं कीट प्रबंधन, कृषि कुम्भ) 3 ,2 :(7782-, e-ISSN:2582-9769		
14.		Durga Prasad, R. P. Singh and Ajay Tomar (2023).		

		Biological management of plant diseases through bacterial bioagents, Rashtriya Krishi, 18 (1&2): 15-22, ISSN-0974-0759		
15.		Durga Prasad, R. P. Singh and Ajay Tomar(2023). Biological management of plant diseases through *Trichoderma*. Rashtriya Krishi, 18 (1&2): 27-32 ISSN-0974-0759		
16.		R.P. Singh, Abhik Patra, Durga Prasad, Gagan Kumar and B. K. Singh(2023). Entomopathogenic Bacteria: A Potential Biological Weapon against Insect-Pests Management, JUST AGRICULTURE-Multidisciplinary e-News Letter, 3 (10): 190-199, e-ISSN:2582-8223		
17.		Abhik Patra, RP Singh, Pankaj Malkani, Bhushan Kumar Singh and Gagan Kumar(2023). Natural Farming in India: Prospects and Constraints, Biotica Research Today-An International E-Magazine, 5 (5): 382-384, e-ISSN: 2582-6654		
18.		डॉ. आर.पी. सिंह ,डॉ. भूषन कुमार सिंह, डॉ एम्.एस. कुंडू, डॉ. अभिक पात्रा ,डॉ. गगन कुमार, डॉ. पंकज मलकानी एवं डॉ. अनुपमा कुमारी (2023). प्राकृतिक कृषि में फसल सुरक्षा के उपाय, कृषि कुम्भ 2 ,(12): 75-79. e-ISSN:2582-9769		
19.		Abhik Patra, R.P. Singh, M. S. Kundu, Gagan Kumar, Pankaj Malkani, Bhushan Kumar Singh, Sourav Choudhury, Arnab Kundu, Sayon Mukherjee(2023). Green Manuring: A Sustainable Approach for Soil Health Improvement in Agriculture & Food : e-Newsletter ,5 (4): 198-201. ISSN: 2581-8317.		

20.		डॉ. भूषन कुमार सिंह ,डॉ. आर.पी. सिंह, डॉ. अभिक पात्रा ,डॉ. गगन कुमार, डॉ. पंकज मलकानी, डॉ एम्.एस. कुंडू, डॉ. अनुपमा कुमारी एवं डा. आर.पी. सिंह (2023). प्राकृतिक खेती में गौ पालन का महत्व, कृषि कुम्भ 2 ,(11): 78-81. e-ISSN:2582-9769		
21.		डॉ. दुर्गा प्रसाद एवं डॉ. आर. पी. सिंह(2023). फसल के रोगों एवं कीटों का जैविक नियंत्रण, कृषि कुम्भ 2 ,(11): 93-97, e-ISSN:2582-9769		
22.		डॉ. दुर्गा प्रसाद एवं डॉ. आर. पी. सिंह(2023). मसाला फसलों के प्रमुख रोग एवं प्रबंधन, कृषि कुम्भ 2 ,(11): 82-86, e-ISSN:2582-9769		
23.		Abhik Patra, R.P. Singh, M.S. Kundu, Arnab Kundu and Sayon Mukherjee(2023). Millet Production in India: Challenges and Opportunities, Biotica Research Today, 5 (3): 238-241. ISSN: 2582-6654		
24.		Durga Prasad and RP Singh(2023). Role of Mycorrhiza in Plant Health Management, Biotica Research Today-An International E-Magazine, 5 (3): 217-220. e-ISSN: 2582-6654		
25.		R.P. Singh, Durga Prasad, S.K. Gangwar, Abhik Patra and M. S. Kundu (2023). Entomopathogenic Nematode: A Potential Bio-Control Agent for Sustainable Crop Production. JUST AGRICULTURE-Multidisciplinary e-News Letter,3(6): 53-62, e-ISSN:2582-8223		
26.		Durga Prasad, Ummed Singh and RP Singh(2023).*Trichoderma*: Mode of action and application methods for crop disease management. Biotica Research Today-An International E-		

		Magazine, 5(2): 166-171, e-ISSN: 2582-6654		
27.		Durga Prasad and RP Singh(2023). Entomopathogenic fungi: Mode of action and application methods. Biotica Research Today-An International E-Magazine,5(2): 189-193, e-ISSN: 2582-6654		
28.		Durga Prasad and RP Singh(2023). Entomopathogenic nematodes: Mode of action and application methods, Biotica Research Today-An International E-Magazine,5(2): 199-203, e-ISSN: 2582-6654.		
29.	success story	Pankaj Malkani, R. P. Singh1, Abhik Patra, Sidhartha Sekhar Swain, Bhushan Kumar Singh, and M. S. Kundu(2023) *.Empowering Sugarcane Mechanization: A Success Story in Minimum Tillage Technology by an Innovative Farmer* Agriblossom, A monthly peer reviewed e-magazine for Agriculture & allied Sciences, 56-62, ISSN-2582-825.		
		Pankaj Malkani (2023). Sustainable Rice-Wheat Cropping with Super Seeder: A West Champaran Farmer's Success Story, AGriblossom a monthly peer reviewed E-Magazine, pg no-25-32, e-ISSN:-2582-8258		
	Bulletins			
	Agro-advisory bulletins	➢ खरीफ फसल ं में बीज पर्ार ➢ गन्ने का लाल धारी र ग प्रबंधन ➢ गन्ने की फसल में पेड़ी कुंठन र ग प्रबंधन ➢ गन्ने के उकठा र ग का प्रबंधन ➢ गन्ने के कंडुआ र ग का प्रबंधन ➢ गन्ने के समत्र कीट ं क बर्ाएं		

		➢ गन्ने के लाल सडन र ग का प्रबंधन ➢ गन्ने में अंकुर बेधक कीट की पहर्ान एवं प्रबंधन ➢ गन्ने में ऊनी माहूँ कीट का प्रबंधन ➢ गन्ने में काला सर्कटा कीट की पहर्ान एवं प्रबंधन ➢ गन्ने में गुरुदासपुर कीट की पहर्ान एवं प्रबंधन ➢ गन्ने में घासी प्रर ह र ग का प्रबंधन ➢ गन्ने में र् टी बेधक कीट की पहर्ान एवं प्रबंधन ➢ गन्ने में जड़ बेधक कीट की पहर्ान एवं प्रबंधन ➢ गन्ने में सटड्डी कीट की पहर्ान एवं प्रबंधन ➢ गन्ने में िना बेधक कीट की पहर्ान एवं प्रबंधन ➢ गन्ने में सिप्स कीट की पहर्ान एवं प्रबंधन ➢ गन्ने में दीमक कीट की पहर्ान एवं प्रबंधन ➢ गन्ने में पायररला कीट की पहर्ान एवं प्रबंधन ➢ गन्ने में प □हा ब ईंग र ग की र कथाम ➢ गन्ने में प री बेधक कीट की पहर्ान एवं प्रबंधन ➢ गन्ने में प्लासी ब रर कीट की पहर्ान एवं प्रबंधन ➢ गन्ने में माईट की पहर्ान एवं प्रबंधन ➢ गन्ने में शल्क कीट की पहर्ान एवं प्रबंधन ➢ गन्ने में सफेद सगडार कीट की पहर्ान एवं प्रबंधन ➢ गन्ने में सफेद मक्की कीट की पहर्ान एवं प्रबंधन ➢ गेहूँ की फसल में अनावृि कंडुआ एवं करनाल बंट र ग की पहर्ान एवं प्रबंधन ➢ गेहूँ की फसल में गेरुई र ग की पहर्ान एवं प्रबंधन ➢ गेहूँ की फसल में झुलसा र ग की पहर्न एवं प्रबंधन ➢ नें में फली भेदक कीट का सनयंत्रण		
	Extension Folders	KVK at a Glance		

	Technical reports	1. Annual Progress Report of KVK, Narkatiaganj for the year 2022 2. 7th EEC report 3. Action Plan of KVK, Narkatiaganj for the year 2023 – 2024 4. SAC meeting report of 2023		
	News letter			
	Electronic Publication (CD/DVD etc)			

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.	Dr. Abhik Patra,	Global Symposium on Soils and Water	2–5 Oct., 2023; 4 days	Food and Agriculture Organization of the United Nations
2.	Dr. Abhik Patra, Dr B. K Singh, Pankaj Malkani Dr. Gagan Kumar	Natural Farming Training	25–27 March, 2023; 3 days	Dr. Rajendra Prasad Central Agricultural University, Pusa
3.	Dr. Abhik Patra,	International Training cum Certificate Course on Precision Agriculture: Farming with new Perspectives	15th May to 13th June, 2023; 30 days	CSJMU Kanpur, ICAR-ATARI Kanpur and ICRISAT, Hyderabad
4.	Dr. Abhik Patra, Dr B. K Singh, Pankaj Malkani Dr. Gagan Kumar	Online training programme on "Value Chain Extension"	13–15 June, 2023; 3 days	Dr. Rajendra Prasad Central Agricultural University, Pusa in collaboration with MANAGE MANAGE, Hyderabad
5.	Dr B. K Singh	Dairy farming a profitable Venture	20-22June, 2023;3days	MANAGE,Hyderabad
6.	Dr B. K Singh	Managerial skills for extension professionals	26-28June, 2023;3days	MANAGE, Hyderabad
7.	Dr. Abhik Patra	Course on "Geospatial Technology for Climate-Smart Agriculture"	10–14 July, 2023; 5 days	Indian Institute of Remote Sensing and Indian Space Research Organisation, Dehradun

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

Type of attachment	No of student trained	No of days stayed

E. Awards/Recognition

Institutional Award received by KVK

Sl. No.	Name of the Award	Conferring Authority	Amount	Purpose
1.	Best Stall Demonstration in line department	DRPCAU, Pusa, Samastipur	Nil	Kisan Mela
2.	**Appreciation/Recognition** for best work in KVK, Narkatiaganj, West Champaran Bihar	**By Dr P. S.** Pandey Hon'ble Vice Chancellor, Dr Rajendra Prasad Central Agricultural University, Pusa, Bihar	Nil	Best performing KVK

Award received by KVK Scientists

Sl.	Name of the Award	Name of the Scientist	Value in Amount/	Purpose	Conferring Authority
1.	Certificate of excellence in Reviewing	Pankaj Malkani	Nil	Peer reviewing journal manuscript	International journal of Plant and soil Science
2.	Certificate of excellence in Reviewing	Pankaj Malkani	Nil	Peer reviewing journal manuscript	Asian journal of Agricultural and Horticultural Research
3.	Young Extension scientist Award	Dr. B. K.Singh	Nil	In the field of Extension Education	Climate change and its impact, AETDS
4.					

Award received by Farmers

Sl.	Name of the Award	Name of the Farmer	Address	Contact No.	Aadhar No.	Amount	Purpose	Conferring Authority
1.	Abhinav Kisan Purashkar	Mr. Sachin Singh	Katsikri, Ramnagar, West Champaran,Bihar	8969084117	68536778539	Rs. 5000	Sugarcane progressive farmer	RPCAU, Pusa

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

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

Give details of by the farmer (if Any)

Sl. No.	Crop / Enterprise	Area (ha)/ No. covered	Production	No. of farmers involved	Market available (Y/N)

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

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)
Sugarcane settling transplanting technique- Training, Demonstration and advisory services	50	45%	83,750	150,750

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)

Horizontal spread of technologies	
Technology	Horizontal spread
Sugarcane settling transplanting technique	915 ha

Give information in the same format as in case studies

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

4.4. Details of entrepreneurship development

Entrepreneurship development	
Name of the enterprise	
Name & complete address of the entrepreneur	
Role of KVK with quantitative data support:	
Timeline of the entrepreneurship development	

Technical Components of the Enterprise	
Status of entrepreneur before and after the enterprise	
Present working condition of enterprise in terms of raw materials availability, labour availability, consumer preference, marketing the product etc. (Economic viability of the enterprise):	
Horizontal spread of enterprise	

4.5. Success stories/Case studies, if any (two- or three-pages write-up on 1-2 best case(s) with suitable action photographs)

Name of farmer	Mr. Deepender Dubey
Address & Contact details (Phone, mobile, email Id)	Village :– Durwalia, Post :- Narkatia Block :- Narkatiyaganj, Dist :– West Champaran Pin :- 845455, Mobile No-9955819323
Assets (Landholding (in ha.)/Livestock)	10
Name and description of the farm/ enterprise	Conservation tillage using super seeder in wheat -paddy cropping pattern
Achievement of the farmers	Net income increased by 44% fro year 2022-23 from base period 2021-22
KVK intervention (planning & Implementation)	Deepender Dubey, a farmer from village- Deolia, post- Narkatiaganj, block- Narkatiaganj, tehsil- Narkatiyaganj, district- West Champaran, owns 10-hectare land. In addition to farming, he has 20 milk producing buffaloes. His family comprises 5 members, all dependent on him. West Champaran, a district of Bihar comes under the region of in which Paddy- wheat crops are important crops after sugarcane during the crop growing season. The Krishi Vigyan Kendra (KVK) initiated several training and awareness program aimed at advancing wheat -paddy crop sowing dates using conservation tillage machines. In 2021-22, KVK, Narkatiaganj, conducted field demonstrations on conservation tillage sowing for wheat and paddy in various district areas and has since placed a strong emphasis on conservation technology (CTT). KVK organized field tours, front-line demonstrations, and facilitated the development of private service providers to promote zero tillage. The results were remarkable, leading to input savings, early crop establishment, and increased crop yields. Additionally, early sowing and proper crop establishment reduced issues related to terminal heat and lodging. The promotion of conservation tillage for wheat and paddy was supported by different KVK projects, andthe Climate Resilient Agriculture (CRA)project. Mr. Dubey has attended training programs and gained substantial knowledge form KVK on conservation agriculture for paddy and wheat crop. Earlier, Mr. Dubey sowed wheat and paddy with the help of rotavator and cultivator by transplanting in paddy and broadcasting technique in wheat which was costlier to him. Every season, after burning the crop residue he used to be tense and thought of a machine which could turn over the crop residue or cut them into tiny pieces and mix them up in the field. With this thought, one day Mr. Dubey reached to the nearest KVK, Narkatiaganj, West Champaran and met Dr. Pankaj Malkani, Subject Matter Specialist and Dr. R.P Singh, Head, KVK and discussed thoroughly about the issue

	of crop residues. Dr. Malkani advised and trained him to use super seeder for choping paddy crop residue and for sowing the wheat and paddy during rice-wheat cropping season and to eradicate the hectic job of burning the crop residue which in turn will increase the production and fertility of soil. Scientists advised Mr. Dubey that he should accept services of KVK to enhance his agricultural income and productivity. After getting satisfied with advices, he decided to use Super seeder machine on 10 ha of land for rice and wheat crop and sown another 10 ha on his brother's land with traditional method on broadcasting method for wheat and transplanting method for paddy.
Impact (Economic/ Social/Environmental)	With the help of Super seeder, Mr. Dubey sowed paddy-wheat on 10 ha area during 2022-23 session at almost 76.1% and 83.2% of cost involved in traditional method for paddy and wheat and crop respectively. During the agricultural year 2022-23, he successfully harvested 470 quintal of paddy and 419.6 of wheat, encompassing the yield from his 10ha farmland. Notably, he achieved net returns of Rs. 568800 and Rs. 535000 from paddy and wheat, respectively, during the agricultural year 2022-23. These figures represent an impressive surge of 29.93 % and 61.71 % over the previous baseline period 2021-22. Mr. Dubey is presently generating a net annual income of approximately Rs. 11,03,800 from 10 ha farmland a significant increase of 43.61% compared to the previous baseline period 2021-22 where the income was Rs. 8,86113 during 2021-22. Mr. Dubey is delighted with sowed wheat and paddy and its final produce and gives credit to KVK for available techniques analogous to crop residue management project. Mr. Dubey also become the service provider and trained to other farmers for adaptation of super-seeder technology.

Table 1: Income generation before adoption of technological interventions

S.No	Names	Area (ha/no.)	Benchmark (Baseline period (2021-22)			
			Production (qt)	Gross Return (Rs)	Gross Cost (Rs)	Net Income (Rs)
1.	Paddy (Transplanting)	10	490	950600	512850	437750
2.	Wheat (Broadcasting)	10	356.5	704088	373263	330825
	Total			**1654688**	**886113**	**768575**

***MSp in paddy=1940, Msp in wheat=1975**

Table 2: Impact of adoption of Super Seeder

S.No	Names	Area (ha/no.)	For year 2022-23				Increment over Benchmark period	
			Production (qt)	Gross Return (Rs)	Gross Cost (Rs	Net Income (Rs)	Production (%)	Net Income (%)

1.	Paddy (DSR)	10	470	958800	390000	568800	-4.08	29.93
2.	Wheat (ZT)	10	419.6	845494	310494	535000	17.69	61.71
	Gross Total			1804294	700494	1103800		43.61

***MSP in paddy=2040, MSP in wheat=2015**

Outcome (Horizontal/ Vertical spread)

The adoption of Conservation Agriculture through the utilization of a super seeder in the rice-wheat cropping system has garnered strong support from both partner farmers and neighbouring agricultural practitioners. They have recognized the numerous advantages, including water and fertilizer savings, reduced input costs, increased active tillers in wheat and paddy crops, efficient timing of operations, elevated organic matter levels, enhanced production, decreased irrigation labor expenses, and improved insect and disease control. This approach is viewed as a pivotal cultural practice that enhances farmers' income, nutritional well-being, and livelihood security. At present, 40% of the wheat areas in the rice-wheat cropping system are sown using zero tillage, and there are 800 Private Service Providers available in the district to assist with this practice. This strategy effectively addresses the diverse needs of farmers and boosts their confidence through direct discussions and knowledge-sharing sessions with KVK scientists. The success of Conservation Agriculture employing the super-seeder has encouraged both partner and neighbouring farmers to pursue a more organized and targeted approach to their farming activities. Furthermore, this approach contributes to environmental protection by curbing straw burning.



RICE SOWING USING SUPER SEEDER


A view of paddy crop

Data collection in paddy

Wheat sowing

Sowing of Wheat using Super Seeder

Progrees inspection in wheat crop

Data collection in Wheat Crop

Name of farmer	**Mr. Vinay Kumar Pandey** 
Address	Village: Barnihar, Block: Narkatiaganj, W. Champaran
Contact details (Phone, mobile, email Id)	7488267391
Landholding (in ha.)	16
Name and description of the farm/ enterprise	Sugarcane cultivation through Zero/Minimum tillage technology + Dairy enterprises.
Methodology adopted by the farmers	He has modified/developed Zero/Minimum tillage sugarcane cutter planting machine with trench opener & sub-soiler, electric power sugarcane bud cutter, hand sugarcane bud cutter, sugarcane power take off weeder- tractor operated, power take off generator for irrigation-tractor operated-3-4 tube well at a time, sugarcane leaf destresser, modified boom sprayer-tractor operated, modified knapsack sprayer and modified tractor mounted aero tiller to use mixing of waste material for proper decomposition
Economic impact	He is using zero/minimum tillage (25%Tillage) sugarcane cutter planter with trench opener & sub-soiler machine in their sugarcane cultivation. He is reducing the total cost of sugarcane cultivation by 28-32% and reducing only sowing cost by 55%. Sub-soiler and rotary attachment help breaking the hard layer of soil and planting sugarcane at proper depth (20-25 cm) and width (45 cm). He is using electric power sugarcane bud cutter/occasionally hand operated bud cutter for cutting of buds from cane and reducing the cost of bud removal, labor and time saving. Tractor driven sugarcane power take off weeder is used for removal of weeds with roots in less time. PTO. (Power Take-off) - tractor driven generator is used to operate at a time 3-4 tube wells simultaneously for

	irrigation in the area of Gandak basin (within 1 kilometer radius). This technique saved fuel cost and time. They used sugarcane leaf destresser (Sugarcane Shredder - with 5 HP Engine) machine for leaf destresser from cane. It is suitable for sloping-straight and all types of sugarcane in easy and in a short time. Low cost tractor driven boom sprayer (30 liter/min) with drenching attachment machine is used for spraying of pesticides. Now, he is getting 29.80 % more net income over conventional practices from sugarcane crop and reduces the overall cultivation cost of sugarcane up to 28-32% and only sowing cost by 55%. By the use of minimum tillage technology and other modified equipments in sugarcane cultivation practices also reduces the cost of weedicides, irrigation charges, costs of labour charges, fuel charges, costs of pesticides, drudgery reduction and time saving also. He is also getting income from their implements/equipment when used as custom hiring and also sale to other farmer's.
Social impact	The partner farmers and neighboring farmers were fully convinced about zero/minimum tillage sugarcane cutter planter with trench opener & sub-soiler machine, electric power sugarcane bud cutter, hand sugarcane bud cutter, sugarcane power take off weeder- tractor operated, power take off generator for irrigation- tractor operated-3-4 tube well at a time, sugarcane leaf destresser, modified boom sprayer-tractor operated, modified knapsack sprayer and modified tractor mounted aero tiller to use mixing of waste material for proper decomposition. There modified implements are also used as custom hiring at lower charges in neighboring areas and also purchased by several farmers for their sugarcane cultivation practices. Farmer's confidence improved with KVK scientist and sugar mill officials to have face to face discussion and facilitated sharing of knowledge with experiences.
Environmental impact	The zero/minimum tillage sugarcane cutter planter with trench opener & sub-soiler works as conservation technology because it involve minimum soil disturbance, soil cover through previous crop residues, conserve the moisture, crop residues decomposed in the soil and improve soil health environment and also reduces weed flora, insect-pest and disease infestation These are helping for achieving higher productivity and quality produce. This technology is suitable for climate resilient agriculture. There are potential benefits of conservation agriculture across different agro-eco-regions of farmers groups. The advantage of this technology is easy adaptability in heterogeneous agro-ecological and socio-economic environment. These modified technologies are conserving the resources and enhancing productivity and profitability.
Horizontal/ Vertical spread	The rapid horizontal/vertical expansion of zero/minimum tillage sugarcane cutter planter with trench opener & sub-soiler attachment technologies for sugarcane planting are ensured. The outcome of these modified technologies are suitable for higher sugarcane production and conserving the resources and it also inspired the farming communities to replace their conventional method of transplanting of sugarcane. More than 100 acre area are being cultivated by this technologies.

Minimum tillage sugarcane cutter planter with rotary trench opener & sub-soiler based furrow opener

A view of sugarcane crop planted in minimum tillage with data acquisition by Scientist

Modified sugarcane leaf destresser machine, utilizing a 5 HP Engine for Efficiently Slicing Various Sugarcane Varieties at an Affordable Cost and Reduced Time"

4.6. Any other initiative taken by the KVK

5. LINKAGES

5.1. Functional linkage with different organizations

Name of organization	Nature of linkage
National Horticulture Mission	To establish model nursery, vegetable seed production, training of farmers, supply of planting materials
ATMA, West Champaran	Training of farmers, Infrastructure development, Assessment, refinement, validation and adaptation of trial
Directorate of Sugarcane, Bihar Govt.	Development of seed production programme of Sugarcane
DHO, W. Champaran	Training of farmers, Kisan goshthi
DAO, W. Champaran	Training of farmers, Kisan goshthi and Kisan Mela
DFO, W. Champaran	Training of farmers, Kisan goshthi
DAHO, W. Champaran	Training of farmers, Kisan goshthi
NGO Super Kisan Clubs, Fakirana Sister Society KisanJagaranSamittee, Bagaha	Training of farmers, Kisan goshthi
NABARD	Formation of Kisan club, Training of Farmers, Krishan goshthi.
CISA	Training of farmers, gosthi, field visit

Jeevika	Training of farmers

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.)

6. PERFORMANCE INDICATORS

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

Sl. No.	Name of demo Unit	Year of estt.	Area (Sq. mt)	Details of production			Amount (Rs.)		Remarks
				Variety/bred	Produce	Qty.	Cost of inputs	Gross income	
1.									
2.									
3.									
4.									
5.									
6.									
7.									
	Total								

6.2. Performance of Instructional Farm (Crops)

Name Of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.(q)	Cost of inputs	Gross income	
Paddy	15.07.2023	05.12.2023	7.0	Rajendra Mansuri – 1	F/S	364			Kharif – 2023
Wheat	07.12.2022	17.04.2023	6.0	DBW – 39	F/S and C/S	109			Rabi, 2022 – 2023
Ragi	03.08.2023	15.11.2023	0.4	Rajendra Madua – 1	T/L	2.82			Kharif – 2023
Ragi	03.08.2023	15.11.2023	0.4	Rajendra Madua – 8	T/L	1.18			Kharif – 2023
Mustard	13.11.2022	17.03.2023	1.0	Rajendra Sufhalam – 1	T/L	16.2			Rabi, 2022

									– 2023
Linseed	05.12.2022	10.04.2023	0.3	JLS-95 and JLS-66	T/L	1.17			Rabi, 2022 – 2023
Dhaincha	24.07.2023	04.11.2023	0.4	-	T/L	0.71			Kharif – 2023
Sugarcane	Ratton	01.12.2023	3.0	Rajendra Ganna – 1 and CoP – 9301	T/L	1099.6			Spring – 2023

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.					

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.	Poultry	Vanraja, Sonali	Egg, Bird	455pc, 82.9kg	12500	17733	Started in May 2023 with 150 birds, Egg laying from October 2023
2.	Fisheries	Rohu, Katla, Grass Carp	Fish	50 kg	3000	9000	Only one harvesting
3.							

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
20/09/2023	Others- RPCAU,Pusa	Working

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)
Total:			

(For whole of the year)

6.7 Utilization of staff quarters

- Whether staff quarters have been completed:
- No. of staff quarters:
- Date of completion:
- Occupancy details:

Months	Q I	QII	Q III	QIV	Q V	QVI

7. FINANCIAL PERFORMANCE

7.1. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
Main A/c	Punjab National Bank	Shivganj Chowk, Narkatiyaganj, West Champaran, Bihar	0859002100006775
Revolving A/c	Punjab National Bank	Shivganj Chowk, Narkatiyaganj, West Champaran, Bihar	0859000100346611
CFLD Pulse	State Bank of India	Main road Narkatiyaganj, West Champaran, Bihar	42514566550
CFLD Oilseed	State Bank of India	Main road Narkatiyaganj, West Champaran, Bihar	42514660440

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

Item	Released by ICAR		Expenditure		Unspent balance as on -
	Kharif	Rabi	Kharif	Rabi	
2022-2023					
i) Critical input		2.202		2.112	Nil
ii) TA/DA/POL etc. for monitoring				0.05	Nil
iii) Extension Activities (Field Day)				0.04	Nil
iv) Publication of literature				0	Nil
Total		2.202		2.202	Nil

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

Item	Released by ICAR		Expenditure		Unspent balance as on 1st April 2022
	Kharif	Rabi	Kharif	Rabi	
2022-2023					
i) Critical input		0.792		3.291	-2.499
ii) TA/DA/POL etc. for monitoring		0		0.08	-0.08
iii) Extension Activities (Field Day)		0		0.05	-0.05
iv) Publication of literature		0		0	0
Total		0.792		3.421	-2.629
2023-2024					
i) Critical input		0.804		1.19	-0.386

ii) TA/DA/POL etc. for monitoring		0		0.08	-0.08
iii) Extension Activities (Field Day)		0		0.04	-0.04
iv) Publication of literature		0		0	0
Total		0.804		1.31	-0.506

7.4. Utilization of KVK funds during the year 2022 (Not audited)

Sl. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	102.767	82.22	81.81
2	Traveling allowances	0.9	0.9	0.7
3	Contingencies			
A	Stationary, Telephone, Postage, Electric bill and others.	4.0	4.0	3.4
B	Training of Farmers			
C	Training materials (posters, charts, demonstration…etc)			
D	Training of extension functionaries			
E	Training of Rural Youth			
F	FLD other than Oilseeds & Pulses			
G	OFT			
H	Soil & Water Testing Lab			
I	Maintenance of building			
J	Estension activities, Kisan Mela etc			
K	Swachhta Expenditure	8.56	8.4184	7.17977
TOTAL (A)		12.56	12.4184	10.57977
B. Non-Recurring Contingencies				
1	Works	-	-	-
2	Vehicle	-	-	-
3	Furniture & Fixture	-	-	-
4	Equipments	-	-	-
TOTAL (B)		-	-	-
C. REVOLVING FUND		-	18.49468	12.57903
GRAND TOTAL (A+B+C)		116.227	114.033	105.6688

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	-	2.09235	1.20983	0.88252
2022	2.74805	10.13560	12.88365	12.10558
2023	0.77301	17.72167	12.57903	5.91565

7.6. (i) Number of SHGs formed by KVKs
(ii) Association of KVKs with SHGs formed by other organizations indicating the area of SHG activities
(iii) Details of marketing channels created for the SHGs

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

7.8 Revenue generation

Sl.No.	Name of Head	Income (Rs.)	Sponsoring agency
1.			
2.			
3.			

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)
Alternaria blight	Mustard	1st week of December	50	8-10%	Same as in affected area by spraying of Azoxystrobin 23% SC @ 1 ml/Liter of water
Blast	Paddy	2nd week of September	100	10-12%	Same as in affected area by spraying of Hexaconazole 5% EC @ 1 ml/Liter of water
Brown spot	Paddy	2nd week of September	100	12-15%	Same as in affected area by spraying of Propiconazole 25% EC @ 1 ml/Liter of water
False smut	Paddy	3rd week of September	125	10-15%	Same as in affected area by spraying of Propiconazole 25% EC @ 1 ml/Liter of water
Blight	Wheat	2nd week of December	75	8-10%	Same as in affected area by spraying of Propiconazole 25% EC @ 1 ml/Liter of water
Pokkah boeing	Sugarcane	1st week of July	250	15-18%	Same as in affected area by spraying of Copper Oxychloride 50% WP @ 2-2.5gram/liter of water
Red rot	Sugarcane	1st week of July	>250	25-30%	Same as in affected area by spraying of Thiophanate Methyl 70%WP @ 1 gram/liter of water
Wilt	Sugarcane	Last week of September	>250	30-40%; in some plots 100% loss (about 50 ha)	There is no preventive measure adopted by farmers

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)
LSD	Cattle	Mid April	Under 100	-	Vaccination for LSD
FMD	Cattle	May	10 %	-	Vaccination
PPR	Goat	February	21%	-	Vaccination

8.3. Nehru Yuva Kendra (NYK) Training

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

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: Website Not Develop yet

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 : Website Not Develop yet

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+ videos)	Total messages	No. of Farmers
1.	Crop	25	25	25	3725
2.	Livestock	11	11	11	1640
3.	Weather	40	40	40	5960
4.	Marketing	0	0	0	0
5.	Awareness	7	7	7	1050
6.	Enterprises	0	0	0	0
7.	Others	4	4	4	633
	Total	**87**	**87**	**87**	**13008**

8.5 Kisan Sarathi

Name of KVK	No. of Farmers Registered on Portal
KVK- Narkatiaganj	7365

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
2nd – 31st October	6	90	120	0	210

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
16-31 December	11	195	1659	6	1854

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		
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 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.	44	44	7498	88

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

9. Information on Visit of Ministers to KVKs, if any: No

Date of Visit	Name of Hon'ble Minister	Name of Ministry	Salient points in his/ her observation (2-3 bulleted points)

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

Date	Name of the person	Purpose of visit
10.03.2023	Shree K. Ranjit, DIG-SSB	For combined activities with SSB
21.03.2023	Dr. D. K. Roy, DoS, RPCAU	Visit of seed farm of KVK, Narkatiaganj
27.07.2023	Smt. Rashmi Verma, MLA-Narkatiaganj	PM Kisan Samman Nidhi programme
14.08.2023	Dr.P.K.Gupta, Add. Director, NHRDF, New Delhi	Visit of KVK, Narkatiaganj
09.09.2023	Dr. P. S. Pandey, V.C., RPCAU, Pusa	Farmers Scientist interaction programme
09.10.2023	Dr. A. K. Singh, DoR, RPCAU, Pusa	Visit of KVK, Narkatiaganj
28.10.2023	Dr. R. Vishwanathan, Director-IISR, Lucknow	Visit of KVK, Narkatiaganj
28.12.2023	Shree Ram Singh, MLA-Bagaha	Visit of KVK, Narkatiaganj

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		
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.)		
g.	Asset creation (Number; Sprayer, ridge maker, pump set, weeder etc.)		
h.	No. of other programmes (Swachha Bharat Abhiyaan, Agriculture knowledge in rural school, Planting material distribution, Vaccination camp etc.)		

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

c. Achievements of physical outcome under TSP during 2023

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

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

11.3. Details of Scheduled Caste Sub Plan (SCSP)

Sl.	Activities	Physical Achievement	
1)	Trainings	No. of Trainings/Demos	No. of beneficiaries
a.	Farmer	15	491
b.	Women		
c.	Rural Youths		
d.	Extension Personnel		
2)	OFT	No. of OFTs	No. of beneficiaries
3)	FLD	No. of FLDs	No. of beneficiaries
		03	116
4)	Mobile agro- advisory to farmers	No. of advisory	No. of beneficiaries
		5	60
5)	Other activities		
a.	Participants in extension activities (No.)	491	
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	

b. Crop Management / Production

Name of intervention undertaken	Area (ha)	No of farmers covered / benefitted									Remarks
		SC		ST		Other		Total			
		M	F	M	F	M	F	M	F	T	

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	

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	

e. Capacity building

Thematic area	No of Courses	No of beneficiaries								
		SC		ST		Other		Total		
		M	F	M	F	M	F	M	F	T

f. Extension activities

Thematic area	No of activities	No of beneficiaries								
		SC		ST		Other		Total		
		M	F	M	F	M	F	M	F	T

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

S.No		No. of blocks allocated	Name 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

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.No	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

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

b. Details of OFT/FLD

OFT		
Nutritional Garden		
Bio-fortified Crops		
Value addition (in no. of Unit or no. of Enterprise)		
Other Enterprises (in no. of Unit or no. of Enterprise)		
	Area (ha/ no. of Unit/Enterprise)	**No. of farmers/ beneficiaries**
FLD		
Nutritional Garden		
Bio-fortified Crops		
Value addition (in no. of Unit or no. of Enterprise)		
Other Enterprises (in no. of Unit or no. of Enterprise)		

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.		Backyard/Kitchen Garden			
2.		Community level			
3.		Terrace Garden			
4.		Vertical Garden			
TOTAL					

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

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

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

f. Training programmes in Nutri-Smart village

Name of Nutri Smart Village	Area of Training	No of courses	No. of beneficiaries

g. Extension activities under NARI Project

Name of Nutri-Smart Village	Title of Activity	No. of activities	No. of beneficiaries

h. Details of recipe contest (if applicable)

No of events organised	Name of location/village	No. of participants

1		
2		
3		

11.7Attracting 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		

11.8 Out-scaling of Natural Farming

a. Overall achievements

S.No	Name of Activity	No. of activities	No. of beneficiaries
1.	Awareness programme		
2.	Training programme		
3.	Demonstrations		

b. Details of Training programmes

S.No	Name of training programme	Date	Location/Venue	No. of beneficiaries

c. Details of Awareness programmes

S.No	Name of Activity	Date	Location/Venue	No. of beneficiaries

e. Details of Demonstrations

S.No	Name of Crop	Location of Demo.	Area of Demo.

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

11.10 KSHAMTA

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

11.11 Agri-Drone

S.No	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

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)	No. of farmer adopted practicing IFS	% Change in adoption during the year

b. Activities under IFS

Sl. No.	Component Name	No. of KVKs under the Component	No. of Components established	Area (ha)	No. of Activities		No. of farmers benefited	
					Demo	Training	Demo	Training
1.								
2.								
3.								

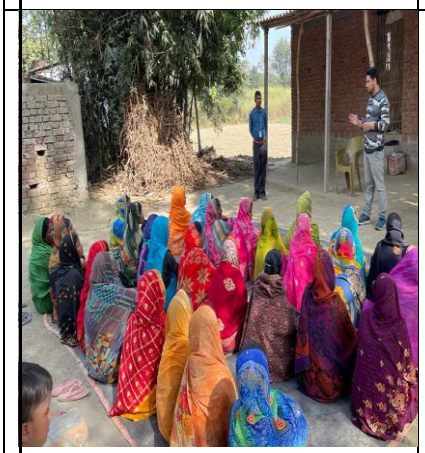
11.13 Report on Digital Farming Initiatives in Agriculture/ Digital Ag. Extension Service

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)



OFF CAMPUS TRAINING



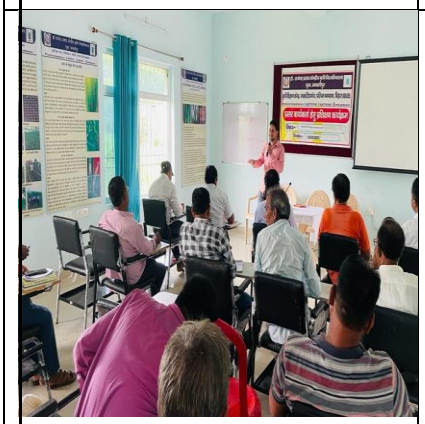


ON CAMPUS TRAINING





INPUT DISTRIBUTION UNDER SCSP PROGRAM



VOCATIONAL TRAINING FOR FARMERS

TRAINING FOR EXTENSION FUNCTIONARIES