

Annual Progressive Report **(Jan – Dec 2023)**

KRISHI VIGYAN KENDRA
Bulandshahr-203001

Directorate of Extension
Sardar Vallabhbhai Patel University of Agriculture & Technology
Meerut-250110 (U.P.)

Annual Progressive Report

(Jan – Dec 2023)

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ANNUAL REPORT

APR SUMMARY

1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	82	1230	475	1705
Rural youths	04	30	10	40
Extension functionaries	16	185	174	359
Sponsored Training	05	150	40	190
Vocational Training				
Total	107	1595	699	2294

2. Frontline demonstrations

Enterprise	No. of Farmers	Area (ha)	Units/Animals
Oilseeds	82	30	
Pulses	182	60	
Cereals	55	22	
Vegetables	30	12	
Other crops	30	12	
Hybrid crops			
Total	379	136	
Livestock & Fisheries	69	-	69
Other enterprises	26	05	
Total	95	05	69
Grand Total	474	141	69

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	08	38	38
Livestock	02	21	21
Various enterprises	02	10	10
Total	12	69	69
Technology Refined			
Crops			
Livestock			
Various enterprises			
Total			
Grand Total	12	69	69

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	1151	20140
Other extension activities	50	Mass
Total	1098	20150

5.

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	
	Text only	105	20	128	5	22	25	305
	Voice only	12	5	10	0	5	5	37
	Voice & Text both	117	25	138	5	27	30	317
	Total Messages	117	25	138	5	27	30	317
	Total farmers Benefitted	117	25	8045	45	358	454	9044

6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)		
Planting material (No.)	22000	3750
Bio-Products (kg)		
Livestock Production (No.)		
Fishery production (No.)		

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil		
Water		
Plant		
Total		

8. HRD and Publications

Sr. No.	Category	Number	No. of participants
1	Workshops		
2	Conferences	01	02
3	Meetings		
4	Trainings for KVK officials		
5	Visits of KVK officials	12	
6	Book published	05	-
7	Training Manual		-
8	Book chapters	23	-
9	Research papers	02	-
10	Lead papers		-
11	Seminar papers		-
12	Extension folder	03	-
13	Proceedings	02	-
14	Award & recognition	03	-
15	On-going research projects	03	-

DETAIL REPORT OF APR-(Jan 23 to Dec 23)

1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail
Krishi Vigyan Kendra, Near Tehsil Sadar, GT Road, Bulandshahr	Office 05732-223103	FAX -	bulandshahrkvk@gmail.com

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

Address	Telephone		E mail
	Office	FAX	
SVPUA&T, Modipuram, Meerut (U.P.)	0121- 2411511		deesvpuat2014@gmail.com

1.3. Name of the Incharge with phone & mobile No

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr Reshu Singh	05732-223103	9412672253	reshu_258@rediffmail.com

1.4. Year of sanction: 2008

1.6. Total land with KVK (in ha) :10.00 ha

S. No.	Item	Area (ha)
1	Under Buildings	1.00
2.	Under Demonstration Units	0.02
3.	Under Crops	9.70
4.	Orchard/Agro-forestry	0.01
5.	Others (specify)	5.27

1.7. Infrastructural Development:**A) Buildings:**

S N	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sqm)	Expenditure (Rs.)	Starting Date	Plinth area (Sqm)	Status of construction
1	Administrative Building	ICAR	2023	550	1.39 Cr	2021	-	completed
2	Farmers Hostel	-	-	-	-	-	-	-
3	Staff Quarters	-	-	-	-	-	-	-
4	Demonstration Units	-	-	-	-	-	-	-
5	Fencing	-	-	-	-	-	-	-
6	Rain Water harvesting system	-	-	-	-	-	-	-
7	Threshing floor	-	-	-	-	-	-	-
8	Farm goddown & Tube well	Revolving Fund	April, 2014	2530	669000.00	Oct, 2011	-	Complete

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Bike (Motor cycle)	2010	50000.00	71646	Working
Tractor	2017	525000.00	192.5 Hour	Working
Bolero	2022			Working

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
01 Computer	2010		Not working
04 Computer	2017	197470.00	Working
02 Lab top	2017	108980.00	Working
Digital camera	2010	15000.00	Not working
01 Laser printer	2010	12000.00	Not working
02 Laser printer	2017	36400.00	Working
01 LED 42"	2017	55745.00	Working
Motrized Screen	2017	25569.00	Working

1.8. A). Details SAC meeting* conducted in the year

S.N.	Date	Name and Designation of Participants	Salient Recommendations	Action taken
1.	19.11.22	Dr. P. K. Singh, Director Extension SVPUAT, Meerut	<ol style="list-style-type: none"> 1. In natural farming soil treatment for microbial load should be take before and after treatment. 2. Include Geo-Tag Photograph in presentation. 3. Farmers practices should be clearly mention in plant protection 4. Mention the crops taken under intercropping demonstration. 5. Season wise crop for training should be taken in horticulture. 	The SAC took place on 07.11.2023 therefore all the given recommendation will be incorporated as per time.
2.		Dr. K.G. Yadav, Associate Professor, SVPUAT, Meerut	<ol style="list-style-type: none"> 1. No. of irrigations and weeding should be mentioned in the practices demonstrated. 2. Heading should be clear and self-explanatory in Agronomy presentation. 3. In the OFTs of Agronomy instead of using of term production weed reduction should be given. 4. Plant protection problem should be based on District level. 5. Fruit fly traps should be used according to recommendations 6. Do not mention total income in nutritional garden. 	
3		Dr. Atul Chandra, Ex- Head KVK Bikaner	<ol style="list-style-type: none"> 1. Fodder demonstration should be taken in Animal Husbandry. 2. Incorporate barely in the demonstration. 3. Trips and powdery mildew is burring issues. The programme should be introduced for its managements. 4. Recommendations packages of practices should introduced only. 5. Field days should be incorporated in every demonstration in trial, photo should also be presented in report. 6. Success story should be mentioned in by each scientist. 7. Emphasis should be laid on publication. The best success 	

			<p>story should be given in journal and magazine.</p> <p>8. Anganbadi worker should be included in home science activities.</p> <p>9. Demonstration on okra should be introduced.</p> <p>10. Included brocklee in nutri garden</p>	
4		Dr. Hariom Katiyar Asso. Prof, SVPUAT , meerut	Program of Animal Husbandry should be done along with the line department.	
5		Dr. D. K. Singh, Ex- Professor Veterinary Parasitology	Animal health camps should be done on priority basis	

2. DETAILS OF DISTRICT (31st March 2023)

2.1 Major farming systems/enterprises

S. No	Farming system/enterprise
01	Agriculture+ Horticulture + Animal Science

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

S.N.	Agro-climatic Zone	Agro-ecological situations based on soil & topography	Characteristics
01	Western plain	Soil and Irrigation	The soils are alluvial in nature and partially affected by salts. Average annual rain fall is 797 ml and the temperature ranges from 3° c to 44° c. The average related humidity ranges from 30 to 95 %. Cropping intensity of the zone is 155 %. Paddy, maize rice, sugarcane, rape seed and mustard are the major field crop of the zone. Potato, vegetable pea, tomato, Brinjal, garlic, onion and flowers are also cultivated.

2.3 Soil type/s

S.N.	Soil type	Characteristics	Area in ha
1.	Ganga khaddar	Light brown sandy loam to sandy, generally structure less, medium in water holding capacity and organic matter, moderately alkaline, restricted drainage, surface soils poor in lime contents but the middle layer is calcareous, medium in soluble salts, carbonates and sulphates practically absent	7625
2.	Ganga recent alluvium	Light gray to light brownish gray, sandy loam, average water holding capacity, neutral in reaction, slightly calcareous, low in organic matter content, impeded drainage and prone to salinity in the water logged areas, average in soluble salts but injurious carbonates are absent.	3419
3.	Ganga upland	Light gray to light brownish gray, sandy loam, average water holding capacity, neutral in reaction, slightly calcareous, low in organic matter content, impeded drainage and prone to salinity in the water logged areas, average in soluble salts but injurious carbonates are absent.	7846
4.	Ganga Flats	Brown at surface and lighter brown, sandy loam, medium water holding capacity, neutral non-calcareous, fair drainage, low in soluble salts mainly comprising of bicarbonates and chlorides of sodium.	27085
5.	Central low lands	The color varies from gray to grayish brown at the surface to slightly light at lower depths. Light texture at surface but becoming heavier below, medium water holding capacity, neutral in reaction but lower layers moderately calcareous. High soluble salts that increase with depth.	21936
6.	Yamuna Flats	Surface soil gray in color which darkens below, becoming gray again in the third horizon. Texture is clay loam at surface and heavier below, poor water holding capacity, neutral in reaction and medium water soluble salts comprising mainly bicarbonates and chlorides of sodium.	19916

2.4. Area, Production and Productivity of major crops cultivated in the district

S. N	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl/ha)
1	Wheat	202846	7557717	38.20
2	Sugarcane	69561	28527311	720.60
3	Paddy	87195	2082216	23.88
4	Maize	52631	1073672	20.40
5	Pigeon Pea	9555	66025	6.91
6	Rape seed & Mustard	8408	106781	12.70
7	Potato	7668	1557677	203.14

2.5. Weather data:

Month	Rainfall (mm)	Temperature °C (Average)		Relative Humidity (%) (Average)	
		Max	Min	Max	Min
January, 2022	38.0 (Avg. 1.52/day)	17.58	8.33	100.0	73.4
February, 2022	42.5 (Avg. 1.51/day)	22.8	9.83	100.00	47.32
March, 2022	00	32.51	16.53	99.28	31.03
April, 2022	00	40.3	21.52	67.33	10.93
May, 2022	44.5 (Avg. 1.43/day)	38.22	25.57	86.61	32.38
June, 2022	53.5 (Avg. 1.70/day)	39.0	26.66	82.23	33.33
July, 2022	237.5 (Avg. 7.6/day)	35.03	27.34	100.00	61.45
August, 2022	58.5 (Avg. 1.88/day)	34.52	26.46	100.00	60.9
September, 2022	182 (Avg. 6.06/day)	34.66	24.81	98.23	60.93
October, 2022	154 (Avg. 4.96/day)	31.63	19.04	100	46.8
November, 2022	00	28.52	13.89	100	32.5
December, 2022	00	22.57	8.99	99.58	40.43
January, 2023	20 (Avg. 0.66/day)	18.4	7.85	100	60.5
February, 2023	0	26.62	11.5	98.14	36.5
March, 2023	116 (Avg. 3.74/day)	28.99	15.93	100	38.3
April, 2023	10.5 (Avg. 0.35/day)	34.84	18.93	85	20.3
May, 2023	7.95 (Avg. 2.56/day)	35.76	22.65	88	30.2
June, 2023	-	-	-	-	-

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

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	67852	8236 mt.	
<i>Indigenous</i>	104142		
Buffalo	1225246	10562.6 mt	
Sheep			
<i>Crossbred</i>	2446		
<i>Indigenous</i>	5839		
Goats	196731		
Pigs			
<i>Crossbred</i>	9124		
<i>Indigenous</i>	31435		
Rabbits	178		
Poultry			
Hens	182178		
<i>Desi</i>			
<i>Improved</i>			

2.7 Details of Operational area / Villages (31ST march, 2023)

SN	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Bulandshahr	Bulandshahr	Gijhori, chawli. Devli, Jainpur. Kahira, Sehkari nagar, Naithla Hasnpur, Tajpur, Malagarh	Rice, wheat pigeon pea sugarcane, potato, vegetables, Mango, Animals poultry	Diseases (BLB) Weed problem, Termite, white grub, Sterility in animal	Low organic matter, More infestation of insect - pest , and diseases
2		Lakhaoti	Lakhaoti Pipala, Rahmapur shyavali, Seekari	Rice, wheat pigeon pea sugarcane, potato, Carrot, Mango, Animals, Floriculture	Diseases (BLB) Weed problem, Termite, white grub, Sterility in animal	Low organic matter, More infestation of insect - pest , and diseases
3		Gulaoti	Kota, Ginorashekh, Baral, Ulehra, Harchana Mohana, Gyastipur. Nai basti	Rice, wheat pigeon pea sugarcane, potato, Mango, Animals Agro-forestry	Diseases (BLB) Weed problem, Termite, white grub, Sterility in animal	Low organic matter, More infestation of insect - pest , and diseases
4		Jahangirabad	Surajpur Tilkri	Rice, wheat pigeon pea sugarcane, potato, Mango, Animals Bee keeping	Diseases (BLB) Weed problem, Termite, white grub, Sterility in animal	Low organic matter, More infestation of insect - pest , and diseases
5		Sikandrabad	Nithari, Shekhpur Gendpur, Mansukhgarhi	Rice, wheat pigeon pea sugarcane, potato, Mango, Animals Bee keeping, Vegetables	Diseases (BLB) Weed problem, Termite, white grub, Sterility in animal	Low organic matter, More infestation of insect - pest , and diseases

2.8 Priority/thrust areas

Crop	Thrust area
Rice	Weed Management
Rice	Integrated diseases Management/ varietal
Sugarcane	Integrated pest management/ Varietal
Wheat	Weed management
Agro-forestry- Poplar	Varietal demonstration / evaluation
Turmeric	Value addition
Maize	Drudgery reduction/ varietal
Mango	Rejuvenation of old orchard/ nutrient management
Animal Husbandry	Animal nutrition management
Vegetables	Varietal evaluation, Nutrient management

3. TECHNICAL ACHIEVEMENTS

3.A. Details of target and achievements of mandatory activities by KVK during 2022

OFT (Technology Assessment and Refinement)				FLD (Oilseeds, Pulses, Cotton, Other Crops/Enterprises)			
1				2			
Number of OFTs		Total no. of Trials		Area in ha		Number of Farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
12	12	60	69	100	141	300	474
				50	69 Animal	50	69

Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)					Extension Activities			
3					4			
Number of Courses			Number of Participants		Number of activities		Number of participants	
Clientele	Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
Farmers	80	82	1600	1705	1000	1151	4000	20140
Rural youth	06	04	60	40				
Extn. Functionaries	15	16	350	356				
Total	101	102	2010	2101	1000	1151	4000	20140

Seed Production (Qtl.)			Planting material (Nos.)		
5			6		
Target	Achievement	Distributed to no. of farmers	Target	Achievement	Distributed to no. of farmers
200	583.02	-	20000	22000	115

I.A TECHNOLOGY ASSESSMENT

Summary of technologies assessed under various crops by KVKs

Thematic areas	Crop	Name of the technology assessed	No. of trials	No. of farmers
Integrated Nutrient Management	Wheat	T1- Farmers Practice (DAP) T2- 3 spray NPK (0:52:34) @ 10 kg /ha	01	04
	Spinach	T₁ - Use of DAP + Urea as basal dose (Farmer practice) T₂ - spray of NPK (0:52:34) as a water soluble fertilizer @2.5kg/ha T₃ - spray of NPK (0:52:34)+ spray of Sagarika @ 250ml	01	05
Varietal Evaluation	Brinjal	T₁ - Local (Shyamla) T₂ -Kashi Sandesh	01	05
	Okra	T₁ - Local (Samrat) T₂ - Kashi Pragati	01	05
Post-Harvest Technology/ Value Addition	Millets	T1- Wheat flour T2- Multigrain flour with spices @ 200-250 gm/day	01	05
	Millets	T1- Wheat flour T2- Multigrain flour with spices @200-250 gm/day	01	05
	Soyabean and Millets	T1- Traditional Food T2- Soy-n-pro mixture @ 30gm/day	01	05
Integrated Pest Management (Fall army worm in Maize)	Maize	T₁ : Farmers practice- use of Chloropyriphos 50% + cypermethrin 5% EC @ 1000 ml/ha T₂ : Cyantraniliprol 19.8% + Thiomethoxam 19.8% @ 32 ml/6kg seed (seed treatment)	01	05
Integrated Pest Management (Fruit borer in Tomato)	Tomato	T₁ : Farmers practice- use of cypermethrin @ 1000 ml/ha T₂ : Emanectin Benzoate 1.5% + Fipronil 3.5% SC @ 750 ml/ha Folier spray	01	05
Integrated Disease Management (Downy mildew in cucumber)	Cucumber	T1- Farmers Practice use of mancozeb 75% WP @ 1000 gm/ha T2- Use of Potassium salt of active phosphorus (PSAP) @ 04 gm/lit water as foliar spray at initial stage of disease	01	05
Total			10	49

Summary of technologies assessed under livestock by KVKs

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Feed and Fodder management	Buffalo	T1:- Farmer practice (Common Salt). T2:- UMMB	01	08
Others (Pl. specify)	Cow	T1:- Farmer practice (Common Salt). T2:- Gonadotropin Hormone	01	13
Total			02	21

I.B. TECHNOLOGY ASSESSMENT IN DETAIL

NUTRIENT MANAGEMENT

Problem identification: Low yield of wheat (HD-2967) productivity through use of water soluble fertilizer

Technology Assessed: To validate the effect of recommended dose of water soluble fertilizer on wheat productivity.

Performance of water soluble fertilizers

Technology Option	No. of trials	Germination (%)	No of tillers/M ²	Yield (qt/ha)	Yield Increase (%)	B:C Ratio
T1- Farmers Practice(DAP)	04	89	388	45.2	-	2.47:1
T2- 3 spray NPK (0:52:34) @ 10 kg/ha		93	405	46.7	3.3	2.72:1

Spray Sechedule:- 1st spray at 30 DAS @ 2.5kg/ha
 2nd spray at 50 DAS @ 3.75kg/ha
 3rd spray at 70 DAS @ 3.75kg/ha
 Spray prepared in 200 ltr of water.

Net Saving in fertilizer/ha :- 5500.00

Farmer's field receiving foliar spray of water soluble fertilizer exhibited superior plant growth and yield.

Problem Identification: Increase of infestation of migratory weed (Chicken spike; Gooj Grass; *Sphenoclea zeylanica*) under Rice-Wheat cropping system.

Technology: Use of Fenoxaprop-p- Ethyl 69 EC @ 675 ml/ha to control of migratory weed (Chicken spike; Gooj Grass; *Sphenoclea zeylanica*)

Technology Option	No. of trials	Yield (q/ha)	Net Profit (Rs./ha)	B:C Ratio	No. of weed/m ²
T1- Farmers Practice (Enilophos @1.5 liter/ha)- Post Emergence	04	31.7	59290	2.40:1	76
T2- Fenoxaprop-p-Ethyl 69 EC @ 675 ml/ha)- Post Emergence		36.8	73990	2.69:1	34

NUTRIENT MANAGEMENT

Problem identification: Low biomass production in spinach (var. Pusa All Green).

Technology Assessed: To validate the effect of organic bio stimulant (sagarika) on growth and yield of spinach.

Performance of organic bio stimulant-sagarika

Technology Option	No. of trials	Yield component		Yield (q/ha)	Cost of cultivation (Rs/ha)	Gross return (Rs/ha)	Net return (Rs/ha)	B:C Ratio
		Leaf length (cm)	No. of cuttings					
T ₁ -Use of DAP + Urea as basal dose (Farmer practice)	05	24	05	90.0	41450	10800	66550	2.60:1
T ₂ -Spray of Sagarika @ 250ml/ha- 3 spray at interval of 25 days		28	05	112.0	43700	134400	90700	3.07:1

Spray Sechedule:- 1st spray of Sagarika @ 250ml/ha at 35 DAS
 2nd spray of Sagarika @ 250ml/ha at 60 DAS
 3rd spray of Sagarika @ 250ml/ha at 90 DAS
 Avg sale price of spinach at farm – Rs 12/kg

Results: It may be concluded that the spray of Sagarika @ 250ml/ha improved the biomass production of spinach.

VARIETAL EVALUATION

Problem identification: Heavy infestation of bacterial wilt leads to low yield of Brinjal variety (Shyamla)

Technology Assessed: Assessment of the Brinjal variety Kashi Sandesh instead of Shyamla

Performance of technology with performance indicator:

Technology Option	No. of trials	Yield component		Diseases, insect, pest incidence (%)	Yield (q/ha)	Cost of cultivation (Rs/ha)	Gross return (Rs/ha)	Net return (Rs/ha)	B:C Ratio
		Plant height (cm)	Av. No. of fruits / plant						
T ₁ -Local (Shyamla)	05	74.16	10.66	Bacterial wilt -26.4	224.6	68400	179680	111280	2.62:1
T ₂ -Kashi Sandesh		71.16	12.67	Bacterial wilt-12.06	302.8	72800	242240	169440	3.32:1

Constraints identified and feedback for research: Seeds should be made available in the market through seed production program.

Results: Brinjal variety Kashi sandesh exhibited higher yield than the farmer practice (Shyamla).

Farmer's participation and their reaction: Active participation of farmers from planning to the execution, as well as encouraging response from the farmers as they got higher price due to better quality.

Final recommendation: Brinjal variety "Kashi sandesh" is a high yielder and more tolerant to bacterial wilt disease. It can be cultivated profitably in Bulandshahr district as higher price in the market due to better quality.

VARIETAL EVALUATION

Title of on farm trial: Assessment of okra variety for yield potential and reaction to YVMV.

Problem identification: Low yield and heavy infestation of YVMV in locally available cultivar

Technology Assessed: Assessment of the Kashi pragati variety of okra instead of local Samrat variety

Technology Option	No. of trials	Yield component		Diseases, insect, pest incidence (%)	Yield (q/ha)	Cost of cultivation (Rs/ha)	Gross return (Rs/ha)	Net return (Rs/ha)	B:C Ratio
		Plant height (cm)	Av. No. of fruits / plant						
T ₁ -Local (Samrat)	05	112.33	16.24	YVMV -14.31 at 105 DAS	116.36	40200	93088	52888	2.31:1
T ₂ -Kashi pragati		126.63	21.48	YVMV- 3.40 at 105 DAS	148.64	42600	118912	76312	2.79:1

Results: From the result it is clear that the technology variety “Kashi pragati” exhibited higher yield than the farmers practice. It also fetch higher price in the market due to longer size.

Constraints identified and feedback for research: Seeds should be made available in the market through seed production programme.

Farmer’s participation and their reaction: Active participation of farmer from planning to the execution. Encouraging response from the farmers end as they got better price due to higher yield and better size.

Final recommendation: Okra variety “Kashi pragati” is a high yielder and resistance to YVMV disease. So, it can be cultivated profitably in Bulandshahr district.

Integrated Pest Management

Problem definition: Higher incidence of Tomato fruit borer insect in Tomato

Technology Assessed or Refined: Management of fruit borer insect in Tomato.

Tomato is an important vegetable crop of Northern India. Different disease and pest affect this crop. Fruit borer is one of the most important pests of tomato crop and causes up to 50% crop loss. KVK, Bulandshahr conducted On Farm Trials on assessment of the management technology. The assessed technology of two foliar spray with Emanectin benzoate 1.5% + Fipronil 3.5% SC @ 750 ml/ha decreased the percent of pest incidence by 49.40% and increase yield by 30.66% in comparison to the farmers practices of cypermethrin 25% EC @ 1000 ml/ha.

Table: Effect of Emanectin Benzoate 1.5% + Fipronil 3.5% SC @ 750 ml/ha 02 Foliar spray in the management of fruit borer insect in Tomato crop (Spring 2022)

Technology Option	No. of trials	Incidence of fruit borer (%)	Reduction in fruit borer incidence (%)	Yield (kg/ha)	% Increase in yield over farmer’s practice	BC Ratio
T ₁ : Farmers practice- cypermethrin 25% EC @ 1000 ml/ha foliar spray	05	21.80	-	540.00	-	7.6:1
T ₂ : Emanectin Benzoate 1.5% + Fipronil 3.5% SC @ 750 ml/ha 02 Foliar spray		8.50	61.00	722.00	33.70	12.0:1

Integrated Pest Management

Problem definition: Incidence of Fall Army worm (FAW) in Maize crop.

Technology Assessed or Refined: Management of Fall Army Worm in Maize crop.

Maize is an important cereal crop. Different disease and pest affect this crop. Fall army worm has emerged as a pest of serious concern due to its nature and quantum of damage to standing crop at different crop growth stages. KVK, Bulandshahr conducted On Farm Trials for assessment of the management technology. The assessed technology of Cyantraniliprol 19.8% + Thiomethoxam 19.8% @ 32 ml/6kg seed (seed treatment) resulted in significant decrease in yield loss due to FAW infestation.

Table: Effect of Cyantraniliprol 19.8% + Thiomethoxam 19.8% @ 32 ml/6kg seed (seed treatment) in the management of Fall Army Worm in Maize Crop.

Technology Option	No. of trials	Incidence of FAW (%)	Reduction in FAW (%)	Yield (kg/ha)	Increase in yield over farmer's practice (%)	BC Ratio
T ₁ : Farmers practice- use of Chloropyriphos + cypermethrin @ 1000 ml/ha	05	23.0	-	33.9	-	1.8:1
T ₂ : Cyantraniliprol 19.8% + Thiomethoxam 19.8% @ 32 ml/6kg seed (seed treatment)		8.0	65.21	44.3	30.67	3.0:1

Integrated Disease Management

Problem definition: Incidence of downy mildew disease in cucumber crop.

Technology assessed: Management of downy mildew in cucumber crop.

Downy mildew disease is caused by *Pseudoperonospora cubensis*. This fungus causes yellow angular spots on leaves which do not extend beyond major vein and having cottony growth on lower surface of leaves. This disease may cause yield loss upto 40-50% since cucumber is consumed raw and directly from field thus residue effects of pesticides can become a major health issue. Therefore Potassium salt of active phosphorus (PSAP) a combination of activated phosphorus and potassium was tested. It not only helps mediate molecular level defense system but also helps in strengthening of structural barriers such as primary cell wall. Due to such activated defense mechanism thus lesser pesticides are required in the cucumber crop.

Effect of Potassium salt of active phosphorus (PSAP) @4 gm/lit water as foliar spray against downy mildew of cucumber.

Technology option	No. of Trails	Incidence of downy mildew (%)	Reduction in disease incidence (%)	Yield qt/ha	% increase in yield	B:C Ratio
T ₁ - Farmers Practice use of mancozeb @ 1000 75% WP gm/ha	05	29.0	58.6	133.5	35.3	1.9:1
T ₂ - Use of PSAP @ 04 gm/lit water as foliar spray at initial stage of disease		12.0		98.6		2.9:1

Value Addition

Problem definition: Prevalence of malnutrition among pregnant women

Technology assessed: Assessment of soy-n-pro mixture among malnourished pregnant women.

Table. Performance of soy-n-pro mixture

Technology Option	No. of trials	Cost Rs/kg		Nutritional occupancies in diet (%)	Shelf life (%)	Wt (kg)	Hb (g/l)
		Demo	Market				
T1- Injudicious consumption of carbs and ghee	05	-	-	60	100	53.0	9.8
T2- Soy-n-pro mixture	10	150	450	30	100	56.5	10.6

Nutrients/100 gram					Other parameters
Energy	Protein	Carbs	Fats	Iron	
365	7	65	50	0.1	More tired and persistent weakness
385	21	46	20	4.6	Relatively lesser experience of above symptoms and more energetic

- Soy-n-pro mixture can be used to fulfill micro nutrient deficiency.
- It can be used during first 07 month of pregnancy to get effective results.
- Method of preparing mixture was elaborately explained.
- This is considered as high nutrient efficiency diet and can be consumed by every age group of both genders.
- This treatment was given without folic acid tablets.

Value Addition

Problem Definition: Gut related issues like bloating, flatulence and constipation in rural women

Technology Assessed: Assessment of multigrain flour with spices to combat gut issues faced by rural women.

Performance Table

Technology Option	No. of trials	Cost Rs/kg	Shelf life (%)	Nutrients						Medical expenses	Other parameters
				Energy	Protein	Carbs	Fat	Fiber	Iron		
T1- Wheat Flour	05	30	100	339	13.7	60.37	1.87	12.2	3.88	2000	More bloating after having food
T2-Multigrain flour with spices	05	65	100	368	19.24	53.48	1.97	19.02	6.24	500 Saving of Rs 1500	Gut is relieved with Fiber and Zinc contents

- Millets are important source of micro nutrients and thus should be included in diet
- Spices being rich in iron zinc and folate prevents from different disease.
- The beneficiaries got symptomatic relief in the gut related disorders like constipation, bloating and acidity. The bowel movement after consuming flour became swift due to high fiber content.
- The symptoms like bloating and acidity reduced significantly
- The flour is 100% palatable and acceptable in terms of taste and colour.

Value Addition

Problem Identification: Gut related issues like bloating, flatulence and constipation in rural women

Technology Assessed: Assessment of multigrain flour with spices to combat gut issues faced by rural women.

(2023)

Performance Table

Technology Option	No. of trials	Cost Rs/kg	Shelf life (%)	Nutrients						Medical expenses	Other parameters
				Energy	Protein	Carbs	Fats	Fiber	Iron		
T1:- Wheat Flour	05	30	100	339	13.7	60.37	1.87	12.2	3.88	2500	More bloating after having food
T2- Multigrain flour with spices	05	65	100	368	19.24	53.48	1.97	19.02	6.24	600 Saving of Rs 1900	Gut is relieved with Fiber and Zinc contents

- Millets are important source of micro nutrients and thus should be included in diet
- Spices being rich in iron zinc and folate prevents from different disease.
- The beneficiaries got symptomatic relief in the gut related disorders like constipation, bloating and acidity. The bowel movement after consuming flour became swift due to high fiber content.
- The symptoms like bloating and acidity reduced significantly
- The flour is 100% palatable and acceptable in terms of taste and colour.

LIVESTOCK ENTERPRISES

Problem Identification: High Incidence of Infertility problem in dairy animals resulting in lower productivity and profitability of dairying

Technology Assessed or Refined: Assessment of UMMB animal feed supplementation of control the infertility

Tab: Effect of UMMB in control of Infertility.

Technology Option	No. of trials	Percent Infertility
T1:- Farmer practice (Common Salt).	8	64
T2:- UMMB		36

Regular use of UMMB resulted in significant decrease in infertility problem in dairy animals.

Technology Assessed or Refined: Use of Gonadotropin Hormone to control the infertility problems in dairy animal

Tab: Effect of Gonadotropin Hormone in control of Infertility.

Technology Option	No. of trials	Percent Infertility
T1:- Farmer practice (Common Salt).	13	59
T2:- Gonadotropin Hormone		41

Regular use of Gonadotropin Hormone during AI resulted in significant decrease in infertility problem in dairy animals.

II. FRONTLINE DEMONSTRATION

a. Follow-up for results of FLDs implemented during previous years

List of technologies demonstrated during previous year and popularized during 2022-23 and recommended for large scale adoption in the district

S N	Crop/ Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
1	Mustard (2021-22)	ICM	Varietal and Basal Application of elemental sulphur @ 25 kg/ha	Variety and Basal Application of elemental sulphur @25 kg/ha	04	32	10
2	Mustard (2022-23)	ICM	Varietal and Basal Application of elemental sulphur @ 25 kg/ha	Variety and Basal Application of elemental sulphur @25 kg/ha	04	50	20
2	Wheat	Weed control	Chemical herbicide	Use of <i>Pinoxoxole</i> @ 1 liter/ha mixed with Metsulfuron methyl @ 20g/ha	56	188	277
3	Lentil	Varietal demonstratio n	L-4717	Use of variety L- 4717	09	102	88
4	Green Gram	Varietal demonstratio n	P-Virat	Use of variety P- Virat	11	87	156
5	Nutritional Garden	House hold food security	Chemical free vegetable	Use of neem oil, ashes, vermicompost and garlic + butter milk spray	25	126	2.4
6	Tomato	Value	Tomato	Acetic acid @5ml/1 kg Sodium benzoate @2ml/1 kg	4	38	-
7	Mineral Mixture	Infertility managemen t	Mineral Mixture	Mineral Mixture 50 g/day/animal	29	1645	-
8	Paddy (PS-5)	IDM (False smut)	Azoxystrobin 11% + Tebuconazole 18.3% @625 ml/ha (foliar spray at ear emergence and milk stage)	Azoxystrobin 11% + Tebuconazole 18.3% @625 ml/ha	25	1064	518
9	Potato (Kufri bahar)	IDM (Late blight)	Azoxystrobin 11.5% + Mancozeb 30% WP @ 750 gm/ha (foliar spray at below 10% disease incidence)	Azoxystrobin 11.5% + Mancozeb 30% WP @ 750gm/ha	21	1123	640

* Thematic areas as given in Table 3.1 (A1 and A2)

b. Details of FLDs implemented during 2022 (Information is to be furnished in the following three tables for each category i.e. cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.)

S N	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievem ent
					Proposed	Actual	SC/ST	Others	Total	
1	Mustard	ICM	Varietal and basal application of elemental sulphur @ 25 kg/ha	Rabi 2022-23	10	10	07	25	32	-
1	Mustard	ICM	Varietal and basal Application of elemental sulphur @ 25 kg/ha	Rabi 2023-24	20	20	09	41	50	-
2	Wheat	Weed control	Chemical herbicide	Rabi 2022-23	6.0	6.0	1	14	15	
3	Lentil	Varietal demonstration	L-4717	Rabi 2022-23	10.0	10.0	12	47	59	
3	Lentil	Varietal demonstration	L-4717	Rabi 2023-24	20.0	20.0	15	44	59	
4	Green Gram	Varietal demonstration	P-Virat	Zaid 2023	10.0	10.0	11	25	36	
	Green Gram	Varietal demonstration	Shikha	Kharif 2023	10.0	10.0	04	25	29	
	Urd	Varietal demonstration	Mukundra-02	Kharif 2023	10.0	10.0	03	27	30	
5	Nutritional Garden	House hold food security	Use of neem oil, ashes, vermicompost and garlic + butter milk spray	Rabi, kharif zaid	0.4	0.4	16	24	40	
	Sugarcane	Drudgery reduction	Sugarcane Bud cutter	Zaid 2023	-	-	0	4	4	
6	Tomato	Value addition	Acetic acid@5ml/1 kg Sodium benzoate@2 ml/1 kg	Rabi 2023	-	-	0	10	10	
7.	Carrot (Pusa Rudhira)	Bio-fortified Varietal evaluation	Scientific cultivation of Bio-fortified variety Pusa Rudhira	Rabi 2023-24	0.40	0.40	05	05	10	

8	Marigold	Nutrient use efficiency	Spray of Tricontanol TRIA@250ml	Zaid 2023	0.4	0.4	7	3	10	
9	Paddy (PS-5)	IDM (False smut)	Azoxystrobin 11% + Tebuconazole 18.3% @ 625 ml/ha (foliar spray at ear emergence and milk stage)	Kharif 2023	4.0	4.0	2	8	10	-
10	Potato (Kufri bahar)	IDM (Late blight)	Azoxystrobin 11.5%+ Mancozeb 30% WP @ 750 gm/ha (foliar spray at below 10% disease incidence)	Rabi 2023-24	4.0	4.0	2	8	10	-
11	Mushroom production (Pleurotus sp.)	Mushroom production	Mushroom spawn @ 3% wheat straw (Seasonal unit)	Spring 2023	10	10	08	02	10	

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	No. of rainy days
				N	P	K				
Mustard	Rabi 2022-23	Irrigated	Sandy Loam	M	L	M	Sorgham,	05-10-21 to 12-11-21	02-04-22 to 12-04-22	
Wheat	Rabi 2022-23	Irrigated	Sandy Loam	M	L	M	Paddy	05-11-21 to 29-11-21	12-04-22 to 20-04-22	
Lentil	Rabi 2022-23	Irrigated	Sandy Loam	M	L	M	Maize	1-11-21 to 25-11-21	20-3-22 to 05-04-22	
Green Gram	Zaid 2023	Irrigated	Sandy Loam	M	L	M	Potato	05-03-22 to 10-04-22	15-06-22 to 10-07-22	
Potato (Kufri Bahar)	Rabi 23-24	Irrigated	Sandy Loam	M	L	M	Paddy/ Urd/ moong	15-10-2022 to 05-11-2022	25-03-2023 to 05-04-2022	
Nutritional Garden	Rabi 2022-23	Irrigated	Sandy Loam	M	L	M	-	12-01-2022 to 18-01-2022	04-04-2022 to 10-04-2022	
Nutritional Garden	Kharif 2023	Irrigated	Sandy Loam	M	L	M	-	01.04.22 to 18-04-2022	04-09-2022 to 10-09-2022	
Nutritional Garden	Zaid 2023	Irrigated	Sandy Loam	M	L	M	-	01.03.2023 to 15-03-2023		
Carrot	Rabi 2023-24	Irrigated	Sandy Loam	M	L	M	-	11-09-2022 to 18-09-2022	02-12-2022 to 08-12-2022	
Marigold	Zaid 2023	Irrigated	Sandy Loam	M	L	M	-	02-02-23 to 08-02-23	15-05-23 to 23-05-23	

Technical Feedback on the demonstrated technologies

S. N.	Crop/ Technology	Feed Back
1	Wheat	Spray of pinodexone @ 1 liter/ha and metsulfuron @20g/ha is effective to control weeds
2	Lentil	Variety L-4717 is resistant to wilt disease.
3	Green Gram	P-Virat early maturing and more pod length
4	Nutritional Garden	The vegetable grown in nutritional garden are comparatively soft and more palatable test wise. The vegetable produced are chemical free.
5	Tomato Preservation as puree	The self-life of puree was 100% and due to scientific use of preservatives the taste did not vary
6	Paddy (PS-5)	Farmers appreciated the performance of demonstrated technology in terms of productivity and seed quality.
7	Paddy (Pusa - 1509)	Farmers appreciated the performance in terms of productivity, and satisfied with the fact that their rice can qualify for export since use of Tricyclazole is creating problems of residues above permeable levels

Farmers' reactions on specific technologies

S. N.	Crop/ Technology	Feed Back
1	Wheat	pinodexone + Metsulfuron is quite effective against <i>Phalaris minor</i> and other broad leaves weed.
2	Lentil	Farmers appreciated the performance in terms of productivity and quality
3	Green Gram	Farmers appreciated the performance in terms of productivity
4	Nutritional Garden	The vegetable grown in nutritional garden are comparatively soft and more palatable test wise.
5	Tomato	The puree made was very palatable and can be used throughout the year.
6	Paddy (PS-5)	Farmers appreciated the performance of demonstrated technology in terms of productivity and seed quality.
7	Paddy (Pusa-1509)	Farmers appreciated the performance in terms of productivity, and satisfied with the fact that their rice can qualify for export since use of Tricyclazole is creating problems of residues above permeable levels

Extension and Training activities under FLD

SN	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	08	Feb- March 2023and Aug 2023	122	
2	Farmers Training	09	Jan-March 2023 and June-Aug 2023	310	
3	Media coverage	08		Mass	
4	Training for extension functionaries	04		82	

Performance of Frontline demonstrations

Frontline demonstrations on oilseed crops

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Parameters name (No. of branches, No. of tillers, No. of pods or grains per plant, duration (days), No. of plants/sq mt.)	Result of main parameter					Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
							Demo plot			Check plot	% Advantage	Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
							High	Low	Average			High	Low	Average										
Rape seed and Mustard (2022-23)	ICM	Variety and Basal application of sulphur @25 Kg/Ha	RH-0749	32	10	32 branches	34	28	32	29	10.3	21.5	16.5	19.5	16.29	18.33	40854	97290	56236	2.28:1	37550	82265	44715	2.19:1
Rape seed and Mustard (2023-24)	ICM	Variety and Basal application of sulphur @25 Kg/Ha	RH-0749	50	20	33 braches	35	29	33	30	10.3	19.5	13.7	16.8	14.20	12.50	36200	84840	48640	2.34:1	33950	71710	37160	2.11:1

Farmer's reactions on the demonstrated technologies (by KVK Scientist who conducted the FLD)

Feed Back for researchers	Feedback for line department
Application of sulphur improves quality of the Oil and oil content	RH-0749 Variety is performing well in the district

Technical feedback on specific technologies demonstrated in FLDs

Feed Back
Variety RH-0749 has profoused capacity for secondary and tertiary branches that ultimate contributes towards.

Frontline demonstration on pulse crops

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Parameters name (No. of branches, No. of tillers, No. of pods or grains per plant, duration (days), No. of plants/sq mt.)	Result of main parameter					Yield (q/ha)					Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
							Demo plot			Check plot	% Advantage	Demo				% Increase in yield	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
							High	Low	Average			High	Low	Average	Check									
Blackgram (Kharif 2023)	Varietal Demonstration	Varietal Demonstration	Muken dra-02	25	10	22 pods	23	18	20	19	5.26	7.1	5.0	6.2	4.8	22.6	24725	40920	16195	1.63:1	23450	31680	8230	1.35:1
Green gram (Summer 2023)	Varietal Demonstration	P-Virat and Basel application of Sulphur @ 25 kg/ha	P-Virat	32	10	37 pods	27	24	26	25	5.26	8.4	5.0	7.1	5.6	21.12	24150	50055	24904	1.07:1	22715	39480	16765	1.73:1
Green gram (Kharif 2023)	Varietal Demonstration	Varietal Demos.	Shikha	25	10	41 pods	31	27	29	26	10.3	7.8	4.7	6.6	5.3	19.7	24550	51183	26633	2.08:1	123880	41100	17220	1.72:1

Lentil (2022-23)	Varietal Demonstration	Use of latest variety L-4717 and Basel applicatio n of Sulphur @ 25 kg/ha	L-4717	41	10.0	41 pods	35	31	33	31	6.45	11.4	6.1	8.4	5.2	35.40	23780	46200	22420	1.94:1	22150	34100	11950	1.53:1
Lentil (2023-24)	Varietal Demonstration	Use of latest variety L-4717 and Basel applicatio n of Sulphur @ 25 kg/ha	L-4717	59	20	38 pods	33	31	32	30	6.45	11.0	6.1	8.1	5.8	28.4	24450	48600	24150	1.99:1	23500	34800	11300	1.48:1

FLD on Other crops

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Parameters name (No. of branches, No. of tillers, No. of pods or grains per plant, duration (days), No. of plants/sq mt.)	Result of main parameter				% Advantage	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
							Demo plot			Check plot		Demo					Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
							High	Low	Average			High	Low	Average	Check									
Cereals																								
Paddy																								
Paddy (2023)	IDM (Bakane Disease)	Soil treatment with Trichoderma formulation @ 5 kg/ha + Seed Treatment with Tebuconazole 50% + Trifloxystrobin 25% @ 0.5 ml/lit	Pusa 1509	10	4.0	% disease incidence Yield q/ha	9.0	2.0	5.0	16.0	68.75	33.5	21.2	31.0	25.0	24.0	5.0	16.0	43000	105400	62400	2.4:1	51000	85000
Paddy (2023)	Weed management	Thiafanone (20%) + Ethoxysulfuron (10%) WG @ 90g/acre	Pusa 1509	15	6.0	78 weeds/sqm	74	69	66	64	3.12	35.5	18.7	28.9	23.2	19.72	6.0	13.0	38500	109820	71320	2.85:1	42500	88160
Wheat (2022-23)	Weed control	Chemical weed control by pyrodexone @ liter/ha+ Metsulphuron Mitha @20 gram/ha		15	6.0	129/sqm weeds	121	117	119	118	0.85	54.3	44.6	51.8	44.0	15.05	31 Weed count	75 Weed count	54716	125314	70598	2.29:1	53767	109960

Potato	IDM (Late blight disease)	Foliar spray of azoxystrobin 11.5% + Mancozeb 30% w.p. @750 gm/ha	Kufri Bahar	10	4.0	% disease incidence	16	7	10.6	14.5	76.70	336	270	303.25	185.0	38.9	10.6	45.5	98859	242600	145741	2.4:1	110000	148000
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Farmer's reactions on the demonstrated technologies (by KVK Scientist who conducted the FLD)

S. No	Feed Back for researchers	Feedback for line department
1	Mango- fruit fly traps @ 20 traps/ha proved to be effective in management fruit fly insect upto 50% reduction in insect incidence was recorded methyl euginol traps emerged as cheaper option of commercial available Q- Lure traps	Mango- fruit fly traps @ 20 traps/ha proved to be effective in management fruit fly insect upto 50% reduction in insect incidence was recorded methyl euginol traps emerged as cheaper option of commercial available Q- Lure traps
2	Paddy- Bakane disease is a seed borne disease and spreads through soils. Soil application of Trichoderma @ 5kg/ha+ seed treatment with Trifloxystrobin 25% + Tebucoma zole 50% @ 0.5 gm/liter significantly reduced disease incidence by 68.75%	Paddy- Bakane disease is a seed borne disease and spreads through soils. Soil application of Trichoderma @ 5kg/ha+ seed treatment with Trifloxystrobin 25% + Tebucoma zole 50% @ 0.5 gm/liter significantly reduced disease incidence by 68.75%
3	Potato- Late blight is evidently weather depended menace therefore on the basis of agro met advisory when conducive weather condition were approaching preventive spray of recommended at initial stage of disease. Azoxystrobin 11.5% + Mancozeb 30% w.p. @ 750 gm/ha effectively reduced disease incidence by 76.70%.	Potato- Late blight is evidently weather depended menace therefore on the basis of agro met advisory when conducive weather condition were approaching preventive spray of recommended at initial stage of disease. Azoxystrobin 11.5% + Mancozeb 30% w.p. @ 750 gm/ha effectively reduced disease incidence by 76.70%.
4	Carrot- Seed should be made available in the market through seed production program	Carrot- Seed should be made available in the market through seed production program
5	Marigold- INM treatment rendered significant effect on yield as well as yield attributing character but the result obtain needed to be further tested for 1-2 years to known the exact role of nutrient and identify the best treatment on promoting the yield and yield attributing parameters of marigold.	Marigold- INM treatment rendered significant effect on yield as well as yield attributing character but the result obtain needed to be further tested for 1-2 years to known the exact role of nutrient and identify the best treatment on promoting the yield and yield attributing parameters of marigold.

Technical feedback on specific technologies demonstrated in FLDs

S.No	Feed Back
1	Mango- fruit fly traps @ 20 traps/ha proved to be effective in management fruit fly insect upto 50% reduction in insect incidence was recorded methyl euginol traps emerged as cheaper option of commercial available Q- Lure traps
2	Paddy- Bakane disease is a seed borne disease and spreads through soils. Soil application of Trichoderma @ 5kg/ha+ seed treatment with Trifloxystrobin 25% + Tebucoma zole 50% @ 0.5 gm/liter significantly reduced disease incidence by 68.75%
	Potato- Late blight is evidently weather depended menace therefore on the basis of agro met advisory when conducive weather condition were approaching preventive spray of recommended at initial stage of disease. Azoxystrobin 11.5% + Mancozeb 30% w.p. @ 750 gm/ha effectively reduced disease incidence by 76.70%.
3	Carrot- Pusa Rudhira variety fetch more remunerative price due to its long red roots with self-color core quality as compared to others local grown varieties. No major insect pest and disease were observed during the crop season.
4	Marigold- INM treatment rendered significant effect on yield as well as yield attributing character and fetch more price in the market due to its morphological acceptable quality of customers.

FLD on Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units (Animal/ Poultry/ Birds, etc)	Major parameters		% change in major parameter	Yield (Kg/animal) or No. of eggs/bird		Economics of demonstration (Rs.)				Economics of check (Rs.)				
					Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)	
Dairy																		
UMMB	Milk Production	Impact of Urea treated wheat straw in milch animals	10	10	10	10	35.47	-	-	12700	32850	20150	2.5:1	12300	24450	12150	2.0:1	
Mineral Mixture	Infertility problem	Management of infertility through Mineral Mixture	29	29	29	29	26.00	-	-	14770	33250	19480	2.25:1	14380	28350	13970	1.97:1	

Farmer's reactions on the demonstrated technologies

S.N.	Feed Back for researchers	Feedback for line department
1	UMMB- UMMB feeding in milch animal proved to be effective in milk yield production as UMMB being a good source of energy, protein and minerals improved milk yield and health status of animal	UMMB- Feeding of UMMB improves milch animal reproductive cyclicality with mark display of estrus symptoms. Supplementation of Urea Molasses Mineral Block in dairy animal improves their Production potential.
2	Mineral Mixture- Mineral Mixture @50 gm/day/animal is very effective in dairy animal production and reproduction. Deficiency of minerals in the ration of animals impairs metabolic functions, which affects the growth in young calves and milk production and reproduction.	Mineral Mixture- Mineral Mixture @50 gm/day/animal is efficient in milk yield of dairy animal. Mineral supplements are essential in the ration of cattle and buffaloes for efficient productive and reproductive performance

Technical feedback on specific technologies demonstrated in FLDs

S.N.	Feed Back
1	UMMB- Feeding of UMMB improves milch animal reproductive cyclicality with mark display of estrus symptoms. Supplementation of Urea Molasses Mineral Block in dairy animal improves their Production potential.
2	Mineral Mixture- Mineral Mixture @50 gm/day/animal is efficient in milk yield of dairy animal. Mineral supplements are essential in the ration of cattle and buffaloes for efficient productive and reproductive performance

FLD on 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			
				Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Value Addition	Tomato Puree	10	1	Shelf life 100%	20%	133.33	Market Cost 130	500	160	500	340	2.35:1	140	360	220	1.81:1

FLD on Drudgery reducing

Name of the implement	Crop	Technology demonstrated	No. of Farmer	Area (ha)	Major parameters	Filed observation (output/man hour)		% change in major parameter	Labor reduction (man days)				Cost reduction (Rs./ha or Rs./Unit etc.)			
						Demo	Check		Land preparation	Bud cutting	Weeding	Total	Land preparation	Labour	Irrigation	Total
Sugarcane bud cutter	Sugarcane	Seed making through sugarcane bud cutter	14	-	Yield/time(kg/hr)	145	90	61.11	-	Check-8/ha/day Demo-4/ha/day	-	8 4	-	Check-3200.00 Demo-1600.00	-	3200.0 1600.0

Farmers reactions on the demonstrated technologies (by KVK Scientist who conducted the FLD)

S. No	Feed Back for researchers	Feedback for line department
1	Sugarcane bud cutter is efficient drudgery reduction tool which reduces the man force upto 60% . There is remarkable reduction in cardiac cost of women engaged in cutting the buds for sowing. It is effective tool for farmers who produce nursery of sugarcane	The tool should be popularized by line departments, as no such awareness in generated in drudgery reducing tools. Small tools should be introduced among farm women to reduce the hazards.
2	Market rate of tomato puree is very high. The color of puree is very deep red and towards brown when made at home with the purest of its form. This should be acknowledged that the color of puree remains the same when made at home, also, without chemical preservatives how puree can be preserved at home level.	Line departments should conduct demonstration of food processing among farm women. There very few such programs are being organized in the district. Tomato processing has hu8ge scope when it comes to income generation. Women should be mobilized for this.

Technical feedback on specific technologies demonstrated in FLDs

S. N	Feed Back
1	The cardiac cost of sugarcane bud cutting among farm women is significantly reduced to 37.0 from 43.50. The recovery heart rate was significantly covered up. The yield was calculated as kg/hr. In convention method it was 90 and the yield was increased upto 145. Single bud increased the overall yield of sugarcane in the field.
2	The tomato puree is very economical if made at home. It was well preserved at 10g/kg Sodium benzoate and 10ml/kg glacial acetic acid. The self-life was 100 percent and it assured the availability of tomato throughout year.

FLD on Other Enterprise: Kitchen Gardening

Category and Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units	Yield (Kg)		% 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 (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Different vegetables	Household food security	2	60	60	236.2	14.6	142.3	20.23	10.25	880	5787.43	4907.40	5.57:1	200	1027.05	827.05	4.21:1

Farmer's reactions on the demonstrated technologies (by KVK Scientist who conducted the FLD)

S. No	Feed Back for researchers	Feedback for line department
1	Nutrigarden combined with fruit plants assures the establishment of vegetable garden throughout the year. Neem oil and wood ashes reduced the incidences of pest and diseases in nutri garden.	Line departments can also generate awareness about nutri-garden. These programs are lacking in the district other than KVK

Technical feedback on specific technologies demonstrated in FLDs

S. No	Feed Back
1	Broccoli and red cabbage provide the antioxidants and phytates which in turn boost the immunity against diseases. Staking of tomato increases the fruit size and reduces the spoilage of tomato.

III. Natural Farming

1) Crop Harvesting Details

Name of KVK	Crop Details Under Demonstration										Date of Sowing	Date of Harvesting
	Natural farming					Farmer's Practice						
	Name of Crop	Variety	Area (ha)	Yield (Q/ha)	Total Cost of Cultivation (Rs./ha)	Name of crop	Variety	Area(ha)	Yield (Q/ha)	Total Cost of Cultivation (Rs./ha)		
KVK, Bulandshahr	Maize	Decalb 8181	0.13	21.6	30470	Maize	Decalb 8181	0.13	15.2	35215	11.08.2023	11.11.2023
KVK, Bulandshahr	Wheat	DBW 187	0.13	32.2	24000	Wheat	DBW 187	0.13	40.5	35247	30.11.2022	21.04.2023

2) Preliminary Soil Data of Natural Farming Field

Name of KVK	Soil data of Demonstrated/KVK Plot	Soil Analysis				Micronutrients				Microbial Analysis				
		N (Kg/ha)	P (Kg/ha)	K (Kg/ha)	Organic Carbon (%age)	Ca (Kg/ha)	Mg (Kg/ha)	Zn (Kg/ha)	Others	Bacterial count (Nos.)	Fungi (Nos.)	Actinomycetes (Nos.)	Phosphorus Solubilizer (Nos.)	N Fixers (Nos.)
Bulandshahr	Natural farming	13.6	18.2	128.2	0.26	-	-	-	-	-	-	-	-	-
Bulandshahr	Organic farming	15.1	20.7	128.2	0.29	-	-	-	-	-	-	-	-	-
Bulandshahr	Traditional farming	10.3	19.3	108.4	0.23	-	-	-	-	-	-	-	-	-

3) Details of Demonstrations Conducted under Natural Farming Project

SN	Name of KVK	Name of village	Name of farmer	Mobile no. of farmer	Area under demonstration on Natural Farming (ha)
1	KVK Bulandshahr	Baral	Chandarpal	9627298938	0.4
2		Mansukhgadi	Rajesh	7510481881	0.4
3		Mansukhgadi	Udayveer	8279934938	0.4
4		Mundakhera	Dinesh	9887785608	0.4
5		Mundakhera	Sukhveer	9837143868	0.4
6		Mundakhera	Pawan Gupta	9350148590	0.4
7		Moharsa	Upendar Nagar	9720664302	0.4
8		Moharsa	Rohil kumar	6396028565	0.4
9		Nisurkha	Sanjeev Kumar	9258572443	0.4
10		Aalamgeerpur Dhanaura	Vijay Kumar	9756128544	0.4

4) Information of Farmers already Practicing Natural Farming

Sl. No.	Name of the District	Name of the Farmers	No. of Desi (Indigenous) cows	Land holding (ha)	Crops Grown	No. of Years in Natural Farming	Area Covered under Natural Farming	Crops Grown under Natural Farming	Any significant achievements under natural farming
1	Bulandshahr	Sh. Sanjeev Kumar	02	1.65	Wheat, Sugarcane, Brinjal, Okra	05	1.6	Wheat, Sugarcane, Brinjal, Okra	-
2		Sh. Upendra Nagar	04	3.10	Wheat, Mustard, Bajara and Maize	04	1.2	Wheat, Mustard, Bajara and Maize	-
3		Sh. Rajendra Sharma	02	4.20	Mustard, Wheat, Maize, Bajra and Til	03	1.9	Mustard, Wheat, Maize, Bajra and Til	-
4		Sh. Vijay Pal	01	1.39	Brinjal, Okra, Wheat and Cucumber	04	1.39	Brinjal, Okra, Wheat and Cucumber	-

5) Natural Farming Nodal officer & Associate Name

SN	Name of KVK	Name of Head/SMS	Discipline/Subject	Mobile No.
1	KVK, Bulandshahr	Dr. Vivek raj	Nodal Officer (Crop Production)	9412890886
2	KVK, Bulandshahr	Dr. Reshu Singh	Associate Scientist (Plant Protection)	6396522314

6) Preliminary Soil Data of Natural Farming Field

Name of KVK	Soil data of Demonstrated/KVK Plot	Soil Analysis				Micronutrients				Microbial Analysis				
		N (Kg/ha)	P (Kg/ha)	K (Kg/ha)	Organic Carbon (%age)	Ca (Kg/ha)	Mg (Kg/ha)	Zn (Kg/ha)	Others	Bacterial count (Nos.)	Fungi (Nos.)	Actinomycetes (Nos.)	Phosphorus Solubilizer (Nos.)	N Fixers (Nos.)
Bulandshahr	Natural farming	13.6	18.2	128.2	0.26	-	-	-	-	-	-	-	-	-
	Organic farming	15.1	20.7	128.2	0.29	-	-	-	-	-	-	-	-	-
	Traditional farming	10.3	19.3	108.4	0.23	-	-	-	-	-	-	-	-	-



Natural farming demonstration



Natural farming at farmers field



Gosthis on Natural farming



Natural farming input preparation

IV. DAMU Project

Project Details

1. Name of DAMU, District, ATARI zone and Year

DAMU Name : Bulandshahr

Name of Blocks: 16 Blocks of District Bulandshahr

Year of start of AAS at DAMU: 2020

2. Name and address with landline and mobile numbers along with STD code (also provide e-mail address) of head of ATARI, Project Coordinator, Head of the Krishi Vigyan Kendra (KVK)

Designation	Name	Address	STD code Telephone no. & Fax	Email-id
Head of ATARI	-	-	-	-
Head of KVK	Dr. Laxmikant	KVK Bulandshahr	9354133274	bulandshahrkvk@gmail.com
Project Coordinator (PC)	-	-	-	-
SMS	Sh. Ramanand Patel	KVK Bulandshahr	8318044609 9956847347	ramanandpatel2006@gmail.com
Agromet Observer (AO)	Sh. Shiv Kumar Singh		7409139310	shivkumarsingh2935@gmail.com

5. **Date of start of Agromet Advisory Bulletins:** 03-04-2020

6. **Nearest Air, Tv And Railway Station (provide the road distance from DAMU)**

I) Air Station : Delhi IG Indra Gandhi International Airport New Delhi 95 Km away from DAMU

II) TV Station : Khel Gaon New Delhi 72 Km away from DAMU

III) Railway Station: Bulandshahr 3 Km away from DAMU

7. **Status of Agro-AWS 03 April 2020**

7.1 **Date of installation of AWS:** 18-08-2021

7.2 **List of instruments presently available in working condition:**

- I. Sun Shine Sensor
- II. Solar Panel
- III. GSM antenna
- IV. GPS antenna
- V. SMF Battery 12V
- VI. AT & RH Sensor
- VII. Rain Gauge Sensor
- VIII. Temperature Humidity Sensor
- IX. Ultrasonic Wind Sensor

7.3 **Instruments to be replaced/repared indicating type of defect:** Soil Sensor – Cable fault

7.4 **Please provide frequency of observation, exposure conditions of the site etc.** Every 15 minutes

7.6 **Number of years of data records available:** 2 years (Since 18th August 2021)-

7.8 Whether the observatory is periodically inspected, maintained and calibrated by IMD- No

7.9 Details of soil moisture observations taken- **No**

8. Details of Agromet Advisory Services

- i. How many times the weather forecasts were received during the year: **156**
 - ii. When do you receive the forecasts from MC/RMC? **Yes (Twice in a week)**
 - iii. How many AAS bulletins were prepared and disseminated to the farmers in the year- **156**
 - iv. How many AAS bulletins were prepared using Agromet-DSS in English and regional languages- **156**
 - v. List the modes of mass communication adopted for AAS dissemination: **Whats App, News Paper, Facebook**
 - vi. Details of broadcast on AIR and TV (name of station broadcast frequency, time slot provided etc.) (Audio tape of the recent broadcast): **No**
 - vii. Give list of farmers awareness programmes conducted like Krishi / Kishan Mela, training, participation in national day parades etc. and photograph of Farmer's Awareness Programme (no of Farmer attended)
 - viii. No of SMS sent through Kisan Portal and how many farmers were benefitted during the year- **10534 farmers**
 - ix. List of other organizations receiving Agromet advisories: **Yes (Agriculture Department, Block Development Office, Soil Conservation Dep, Revenue Department, Sugar Cane Department, Police Headquartor)**
9. Verification results of District and Block level weather forecast: **Yes**
10. Economic impact of Agromet advisory services: **Yes (Disease Management, Irrigation, Sowing and Harvesting)- Upto 2160/ Acre**
11. Mobile APP based Agromet advisory services for farmers:- **Yes (Meghdoot and Damini App.)**
12. Feedback from progressive farmers: Agromet advisory services are beneficial in-
- Agriculture Resource Management
 - Accidental injuries/death of animals and Human
 - In social matters

Kisan Mela Participated- 05, Training- 18, Other Extension Activities- 10
Nos. of Farmer's participated in Awareness Program- 908



VI. Training Programme

Farmers' Training including sponsored training programmes (on campus)

Thematic area (May be specific to any given KVK)	Actual Title of training conducted	No. of courses	Participants								
			Others			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
I Horticulture											
b) Fruits											
Rejuvenation of old orchards	Rejuvenation of old orchards	2	32	0	32	8	0	8	32	8	40
Total		2	32	0	32	8	0	8	32	8	40
II Livestock Production and Management											
Disease Management	Disease Management	1	16	1	17	3	0	3	20	0	20
Total		1	16	1	17	3	0	3	20	0	20
III Seed Production											
Seed Production	Seed Production	2	32	0	32	8	0	8	32	8	40
Total		2	32	0	32	8	0	8	32	8	40
IV Plant Protection											
Integrated Disease Management	Integrated Disease Management	2	32	0	32	8	0	8	32	8	40
Total		2	32	0	32	8	0	8	32	8	40
V Home Science											
Value addition	Value addition	1	0	16	16	0	4	4	0	20	20
Total		1	0	16	16	0	4	4	0	20	20
GRAND TOTAL		8	112	17	129	27	4	31	116	44	160

Farmers' Training including sponsored training programmes (off campus)

Thematic area (May be specific to any given KVK)	Actual Title of training conducted	No. of courses	Participants								
			Others			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production											
Weed Management		3	41	0	41	20	0	20	61	0	61
Resource Conservation Technologies		1	20	0	20	0	0	0	20	0	20
Cropping Systems											
Crop Diversification		4	63	0	63	19	0	19	82	0	82
Integrated Crop Management		3	41	0	41	20	0	20	61	0	61
Integrated nutrient management		2	32	0	32	9	0	9	41	0	41
Production of organic inputs		1	20	0	20	0	0	0	20	0	20
Total		14	217	0	217	68	0	68	285	0	285
II Horticulture											
a) Vegetable Crops											
Production of low value and high volume crops		4	63	0	63	19	0	19	82	0	82
Off-season vegetables		1	20	0	20	0	0	0	20	0	20
Nursery raising		2	5	14	19	4	17	21	9	31	40
Protective cultivation		1	0	0	0	9	11	20	9	11	20
Total (a)		8	88	14	102	32	28	60	120	42	162
b) Fruits											
Training and Pruning		1	2	13	15	0	5	5	2	18	20
Layout and Management of Orchards		1	2	13	15	0	5	5	2	18	20
Export potential fruits		1	13	0	13	7	0	7	20	0	20
Others (pl specify)		1	2	13	15	0	5	5	2	18	20
Total (b)		4	19	39	58	7	15	22	26	54	80
c) Ornamental Plants											
Nursery Management		1	0	0	0	20	0	20	0	20	20
Total (c)		1	0	0	0	20	0	20	0	20	20
GT (a-g)		13	107	53	160	59	43	102	146	116	262
IV Livestock Production and Management											
Dairy Management		2	32	0	32	8	0	8	40	0	40
Animal Nutrition		4	66	0	66	14	0	14	80	0	80

Management											
Disease Management		2	32	0	32	8	0	8	40	0	40
Feed & fodder technology		1	16	0	16	4	0	4	20	0	20
Total		9	146	0	146	34	0	34	180	0	180
V Home Science/Women empowerment											
Design and development of low/minimum cost diet		5		54	54		46	46		100	100
Designing and development for high nutrient efficiency diet		4		52	52		28	28		80	80
Gender mainstreaming through SHGs		4		56	56		24	24		80	80
Women empowerment		5		54	54		46	46		100	100
Others (pl specify)		5		84	84		16	16		100	100
Total		23		300	300		160	160		460	460
VI Plant Protection											
Integrated Pest Management		12	198	0	198	42	0	42	240	0	240
Integrated Disease Management		3	41	0	41	20	0	20	61	0	61
Total		15	239	0	239	62	0	62	301	0	301
GRAND TOTAL		74	709	353	1062	223	203	426	912	576	1488

Farmers' Training including sponsored training programmes – CONSOLIDATED (On + Off campus)

Thematic area (May be specific to any given KVK)	Actual Title of training conducted	No. of courses	Participants								
			Others			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production											
Weed Management		3	41	0	41	20	0	20	61	0	61
Resource Conservation Technologies		1	20	0	20	0	0	0	20	0	20
Cropping Systems											
Crop Diversification		4	63	0	63	19	0	19	82	0	82
Integrated Crop Management		3	41	0	41	20	0	20	61	0	61
Integrated nutrient management		2	32	0	32	9	0	9	41	0	41
Production of organic inputs		1	20	0	20	0	0	0	20	0	20
Total		14	217	0	217	68	0	68	285	0	285
II Horticulture											
a) Vegetable Crops											
Production of low value and high valume crops		4	63	0	63	19	0	19	82	0	82
Off-season vegetables		1	20	0	20	0	0	0	20	0	20
Nursery raising		2	5	14	19	4	17	21	9	31	40
Protective cultivation		1	0	0	0	9	11	20	9	11	20
Total (a)		8	88	14	102	32	28	60	120	42	162
b) Fruits											
Training and Pruning		1	2	13	15	0	5	5	2	18	20
Layout and Management of Orchards		3	34	13	47	0	13	13	34	26	60
Export potential fruits		1	13	0	13	7	0	7	20	0	20
Others (pl specify)		1	2	13	15	0	5	5	2	18	20
Total (b)		6	51	39	90	7	23	30	58	62	120
c) Ornamental Plants											
Nursery Management		1	0	0	0	20	0	20	0	20	20
Total (c)		1	0	0	0	20	0	20	0	20	20
GT (a-g)		15	139	53	192	59	51	110	178	124	302
III Plant Breeding											
Seed Production		2	32	0	32	8	0	8	40	0	40
Total		2	32	0	32	8	0	8	40	0	40
IV Livestock Production and Management											
Dairy Management		2	32	0	32	8	0	8	40	0	40
Animal Nutrition Management		4	66	0	66	14	0	14	80	0	80
Disease Management		3	48	1	49	11	0	11	60	0	60

Feed & fodder technology		1	16	0	16	4	0	4	20	0	20
Total		10	162	1	163	37	0	37	199	1	200
V Home Science/Women empowerment											
Design and development of low/minimum cost diet		5		54	54			46	46	100	100
Designing and development for high nutrient efficiency diet		4		52	52			28	28	80	80
Gender mainstreaming through SHGs		4		56	56			24	24	80	80
Women empowerment		5		54	54			46	46	100	100
Value addition		1	0	16	16	0	4	4	0	20	20
Others (pl specify)		5		84	84			16	16	100	100
Total		24		316	316			164	164	480	480
VI Plant Protection											
Integrated Pest Management		12	198	0	198	42	0	42	240	0	240
Integrated Disease Management		5	73	0	73	28	0	28	101	0	101
Total		17	271	0	271	70	0	70	341	0	341
GRAND TOTAL		82	821	370	1191	242	215	457	1043	605	1648

Training for Rural Youths including sponsored training programs (Off campus)

Thematic area (May be specific to any given KVK)	Actual Title of training conducted	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
Seed production		1	8	0	8	2	0	2	10	0	10
Production of organic inputs		1	8	0	8	2	0	2	10	0	10
Dairy farming		1	8	0	8	2	0	2	10	0	10
Rural Crafts		1	0	6	6	0	4	4	0	10	10
TOTAL		4	24	6	30	6	4	10	30	10	40

Training for Rural Youths including sponsored training programs – CONSOLIDATED (On + Off campus)

Thematic area (May be specific to any given KVK)	Actual Title of training conducted	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
Seed production		1	8	0	8	2	0	2	10	0	10
Production of organic inputs		1	8	0	8	2	0	2	10	0	10
Dairy farming		1	8	0	8	2	0	2	10	0	10
Rural Crafts		1	0	6	6	0	4	4	0	10	10
TOTAL		4	24	6	30	6	4	10	30	10	40

Training programmes for Extension Personnel including sponsored training programs (off campus)

Thematic area (May be specific to any given KVK)	Actual Title of training conducted	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops		2	30	0	0	10	0	0	40	0	40
Integrated Pest Management		5	90	10	100	0	0	0	90	10	100
Integrated Nutrient management		1	17	0	17	3	0	3	20	0	20
Protected cultivation technology		2	45	3	48	11	1	12	56	4	60
Dairy animal management		3	80	05	85	15	0	15	95	05	100

Production and use of organic inputs		1	12	0	12	3	0	3	15	0	15
Household food security		2	0	40	40	0	55	55	95	0	95
TOTAL		16	274	58	302	42	56	88	411	19	430

Training programmes for Extension Personnel including sponsored training programmes – CONSOLIDATED

(On + off campus)

Thematic area (May be specific to any given KVK)	Actual Title of training conducted	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops		2	30	0	0	10	0	0	40	0	40
Integrated Pest Management		5	90	10	100	0	0	0	90	10	100
Integrated Nutrient management		1	17	0	17	3	0	3	20	0	20
Protected cultivation technology		2	45	3	48	11	1	12	56	4	60
Dairy animal management		3	80	05	85	15	0	15	95	05	100
Production and use of organic inputs		1	12	0	12	3	0	3	15	0	15
Household food security		2	0	40	40	0	55	55	95	0	95
TOTAL		16	274	58	302	42	56	88	411	19	430

Sponsored training programmes

Thematic area (May be specific to any given KVK)	Actual Title of training conducted	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
Post-harvest technology and value addition											
Processing and value addition	Processing and value addition	2	0	17	17	0	23	23	0	40	40
Others (pl. specify)											
Total		2	0	17	17	0	23	23	0	40	40
Agricultural Extension											
Capacity Building and Group Dynamics	Others (FTT Multi-Disciplinary)	2	64	0	64	36	0	36	100	0	100
Others (pl. specify)	Farmers Training NEDA	1	40	0	40	10	0	10	50	0	50
Total		3	104	0	104	46	0	46	150	0	150
GRAND TOTAL		5	104	17	121	46	23	69	150	40	190

IV. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	256	698	51	1059
Diagnostic visits	82	372	38	492
Field Day	08	172	17	197
Group discussions	86	789	32	907
Kisan Ghosthi	12	1125	36	1173
Self -help groups	15	178	11	204
Kisan Mela	07	3920	101	5026
Exhibition	05	2675	53	2728
Scientists' visit to farmers field	86	389	39	514
Farmers' seminar/workshop	02	46	05	53
Method Demonstrations	10	205	13	228
Celebration of important days	17	1290	12	1315
Special day celebration	02	110	08	120
Exposure visits	12	318	27	357
Lecture delivered	40	3362	22	3408
Congress grass control prog.	04	35	03	42
Farmers visit to KVK	489	1721	56	1777
Kharif and Rabi Abhiyan	18	540	8	540
Total	1151	17945	532	20140

Details of other extension programmes

Particulars	Number
Extension Literature	05
News paper coverage	25
Popular articles	25
Radio Talks	02
TV Talks	16
Total	73

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Marke-ting	Aware-ness	Other enterprise	
Bulandshahr	Text only	105	20	128	5	22	25	305
	Voice only	12	5	10	0	5	5	37
	Voice & Text both	117	25	138	5	27	30	317
	Total Messages	117	25	138	5	27	30	317
	Total farmers Benefitted	117	25	8045	45	358	454	9044

Glimpse of Extension Activities



PFF Training



RY Training



EF Training



Scientist Visit to Farmer's Field



Kisan Mela



CRM Mela



Kisan Gosthi



International Year of Millet Awareness



Khareef Abhiyan



Exposure Visit



T.V. Talk



Other Training



Field Day



Plantation Program



Poshan Maah Abhiyan



Farmer's Tour

DETAILS OF TECHNOLOGY WEEK CELEBRATIONS

Number of KVKs organised Technology Week	Types of Activities	No. of Activities	Number of Participants	Related crop/livestock technology
	Gosthies	1	56	All crop and animals
	Lectures organised	1	56	All crop and animals
	Exhibition	1	56	All crop and animals
	Fair	1	83	
	Farm Visit	1	75	
	Distribution of Literature (No.)	1	1526	
	Total number of farmers visited the technology week		110	

VI. PRODUCTION OF SEED/PLANTING MATERIAL AND BIO-PRODUCTS

Production of seeds by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Quantity of seed (q)	Value (Rs)	Number of farmers
Cereals	Wheat	DBW-725		279.67	573847	Supplied to NSC, Modipuram Meerut
	Wheat	DBW-725		150.00	232500	
	Wheat straw	-		-	90000	
Oilseeds	Mustard	RH-0749		130.20	813750	
Pulses	Pigeon Pea with stick	Pant 2001		5.15	25647	
Total				583.02	1735744.00	

Production of planting materials by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Vegetable seedlings	Bringal	Kashi Sandesh	-	2000	250	18
	Cabbage	Pusa Drum Head		3000	400	15
	Cauliflower	Snow ball-16		3000	250	22
	Tomato	Pusa Sadabahara		2000	400	45
	Chilli	Pusa Jawala		2000	450	10
	Onion	Agri found red		10000	2000	05
Total				22000	3750	115

VIII. SCIENTIFIC ADVISORY COMMITTEE

Name of KVK	Number of SACs conducted
Bulandshahr	07.11.2023

IX. NEWSLETTER/MAGAZINE

Name of Newsletter/Magazine	No. of Copies printed for distribution
Fasal Avshesh Prabandhan	500

X. PUBLICATIONS

Category	Number
Research Paper	06
Technical bulletins	12
Technical reports	42
Others (Folders)	8

Success Story

Name: Smt Preeti Sharma
Husband's Name: Akshay Sharma
Age: 36 years
Educational Qulaification: Graduate
Village: Naithla Hasanpur
Block: Bulandshahr



Preeti is 36 year old very energetic and a enthusiast. She is full of ideas and leadership qualities. She is president of her SHG named Laxmi swayam shayata smoooh. This SHG is running for 5 years and formed in 2017. Previously they were doing internal banking among SHG. In 2020 (during lockdown), came in contact with Krishi Vigyan kendra, Bulandshahr. SHG was thriving for work and extra earnings. She with other group members started making masks and PPE kits and thus started gaining recognition. With conversations and technical support of KVK scientist they found the way that making masks in a different way and for different community, they can earn more and thus contacted by Designer Manish Tripathi and made 10 thousand designer masks. All the group members and other SHGs too involved in the activity. Thereafter getting trainings through KVK, they started making candles, rakhi and pooja samagri seasonally. She too stitches designer dresses and other outfits for village women on payment basis. She act as a leader and try to involve other women too with her.

Economic analysis of her SHG

Year	Name of activity	Estimated expenditure	Gross cost	Net Profit	B:C ratio	Women involved
2020	Stitching designer dresses	4500	14560	10060	2.23:1	4
2021	Stitching designer masks	5500	23000	17500	3.18:1	7
	Stitching PPE kits	7420	38000	30580	4.12:1	6
2022-23	Stitching designer masks	2100	8620	6520	3.01:1	4
	Rakhi making	1800	10120	8320	4.62:1	6
	Pooja samagri	1410	7520	6110	4.33:1	3
	Candle making	4231	14000	9769	3.30:1	7

Till now she trained 53 women of other groups too. Not only she, other groups also got inspired and emerging vividly. We wish her all success in life.



Designer Deity dresses



Dress Designing

Candle making

Stitching outfits

Gifting masks

XIX Achievement of Special programmes

1) Achievements under Crop Residue Management (CRM) Project by KVKs

a) CRM Machinery status of the CRM KVKs

Name of machine	Name of machine procured	No. of demo conducted	Area covered (ha)	No. of farmers covered	Result					
					Demo yield (q/ha)	Check yield (q/ha)	Increase in yield %	Cost of cultivation (Rs/ha)	Net return (demo plot)	B:C ratio
Super Seeder	Super Seeder	29	9.6	29	44.05	40.46	8.15	53875	76078	2.41:1
Zero Till Drill	Zero Till Drill	71	90.4	71	43.52	39.78	8.7	51625	76762	2.48:1
Total		100	100	100						

S N	Name of the Machine/ Equipment	No. of machines procured
1	Happy Seeder	01
2	Reversible M.B. Plough	01
3	Paddy Straw Chopper/ Shredder / Mulcher	02
4	Zero Till Drill	01
5	Cutter cum spreader	01
	Total	06

b) IEC activities organized under CRM Project by KVKs

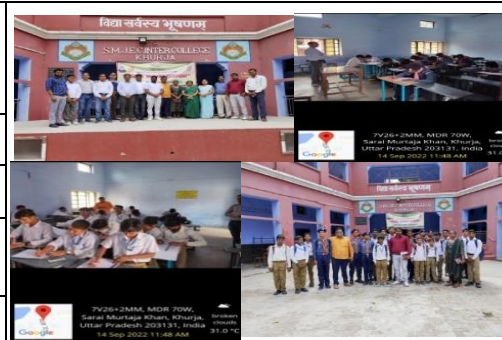
S. N.	Name of IEC activity	No. of activities	No. of Participants
1	Kisan Melas organized	02	548
2	Awareness programmes conducted at Village Panchayat/ Block/ District Level	08	1100
3	Mobilization of schools and colleges through essay completion, painting, debate etc.	05	900
4	Demonstration conducted (ha)	100 ha	143
5	Training Programmes conducted	03	75
6	Exposure visits organized	04	200
7	Field /harvest days organized	04	320
	Total	26/100 ha	3286



College Level Awareness Program and Kisan Mela under CRM Activities

Other IEC activities organized under CRM Project by KVKs

S.N.	Name of IEC activity	No. of activities
1.	Advertisement in Print media	27
2.	Column / Articles in newspaper and magazines etc.	29
3.	Hoarding fixed (at Mandi/ Road side/Market/ Schools/ Petrol pump/ Panchayat etc.)	0
4.	Poster/Banner placed	0
5.	Publicity material - leaflets/ pamphlets etc. distributed	8250
6.	TV programmes/ panel discussions Doordarshan/ DD-Kisan and other private channels	02
7.	Wall writing	180
	Total	8488



Achievements of SCSP KVKs

Farmer Training		Women Farmer Training		Rural Youths		Extension Personnel		Number of farmers involved			Participants in extension activities (No.)	Production of seed (q)	Production of Planting material (Number in lakh)	Production of Livestock strains (Number in lakh)	Production of fingerlings (Number in lakh)	Testing of Soil, water, plant, manures samples (Number)
No. of Trainings/Demos	No. of Farmers	No. of Trainings/Demos	No. of Women Farmers	No. of Trainings/Demos	No. of Youths	No. of Trainings/Demos	No. of Ext. Person	On-farm trials	Frontline demos	Mobile agro-advisory to farmers						
05	100	-	-	-	--	-	-	-	75	100	175	-	-	-	-	-

Activities performed under NARI programme

Nutritional Garden		Bio-fortified crops		Value addition		Training programmes		Extension activities	
No of Established	No. of farmers/beneficiaries	No of activity	No. of farmers/beneficiaries	No of activity	No. of farmers/beneficiaries	No of activity	No. of farmers/beneficiaries	No of activity	No. of farmers/beneficiaries
				03	15	08	160	03	154

Achievements under Swachhata Abhiyan Mission

S.No.	Items	No. of Programmes	No. of persons participated
1	Toilet maintenance	01	12
2	Road, drain cleaning	01	11
3	Garbage disposal	04	42
4	Awareness campaign	02	18
5	Composting	02	08

Awards

S.No.	Name of Award received	Name of KVK/farmer	Year of Award
01	Innovation farmers award	Sh. Brijesh Kumar	2023
02	Best Farmers Award	Sh. Pushpuraj	2023
03	Dayal Innovative Award	Sh. Kulwant Singh	2022
04	Dayal Innovative Award	Sh. Anant Poddar	2022

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