

KRISHI VIGYAN KENDRA DATAGANJ (BADAUN-II)



PROGRESS REPORT

(JANUARY TO DECEMBER, 2020)

Directorate of Extension

Sardar Vallabhbhai Patel Univ. of Agri. & Tech.,

Meerut - 250110

PROFORMA FOR PREPARATION OF ANNUAL REPORT (Jan to December 2020)

APR SUMMARY

(Note: While preparing summary, please don't add or delete any row or columns)

1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	41	814	06	820
Rural youths	05	50	00	50
Extension functionaries	11	110	00	110
Sponsored Training	-	-	-	-
Vocational Training	-	-	-	-
Total	57	1074	06	1080

2. Frontline demonstrations

Enterprise	No. of Farmers	Area (ha)	Units/Animals
Oilseeds			
Pulses			
Cereals	30	12.00	-
Vegetables			
Other crops	10	4.00	
Hybrid crops			
Total	40	16.00	
Livestock & Fisheries	-	-	-
Other enterprises	-	-	-
Total	-	-	-
Grand Total	40	16.00	-

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	04	20	20
Livestock			
Various enterprises			
Total	04	20	20
Technology Refined			
Crops			
Livestock			
Various enterprises			
Total			
Grand Total	04	20	20

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	150	1506

Other extension activities	06	208
Total	156	1714

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	
	Text only	42	-	06	02	32	02	84
	Voice only							
	Voice & Text both							
	Total Messages	42	-	06	02	32	02	84
	Total farmers Benefitted	1890	-	270	90	1440	90	3780

6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)		
Planting material (No.)		
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
1	Workshops	
2	Conferences	
3	Meetings	04
4	Trainings for KVK officials	02
5	Visits of KVK officials	04
6	Book published	
7	Training Manual	
8	Book chapters	
9	Research papers	
10	Lead papers	
11	Seminar papers	
12	Extension folder	10
13	Proceedings	01
14	Award & recognition	
15	On going research projects	

Supporting ff									
------------------	--	--	--	--	--	--	--	--	--

1.6. Total land with KVK (in ha) :12.15 ha.

S. No.	Item	Area (ha)
1.	Under Buildings	Nil
2.	Under Demonstration Units	Nil
3.	Under Crops	Nil
4.	Orchard/Agro-forestry	Nil
5.	Others (specify)	Nil
6.	total	12.15

1.7. Infrastructural Development:

A) Buildings

Sl.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion date	Plinth area (sq.m)	Expenditure (lac)	Starting date	Plinth area (sq.m)	Status of construction
1.	Administrative building	ICAR	Nil	Nil	Nil	Nil	Nil	Under construction
2.	Farmers Hostel	ICAR	Nil	Nil	Nil	Nil	Nil	Nil
3.	Staff Quarters	ICAR	Nil	Nil	Nil	Nil	Nil	Nil
4.	Demo. unit.	ICAR	Nil	Nil	Nil	Nil	Nil	Nil
5.	Fencing	ICAR	Nil	Nil	Nil	Nil	Nil	Nil
6.	Rain water harvesting system	ICAR	Nil	Nil	Nil	Nil	Nil	Nil
7.	Threshing floor	ICAR	Nil	Nil	Nil	Nil	Nil	Nil
8.	Farm godown	ICAR	Nil	Nil	Nil	Nil	Nil	Nil

A) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Vehicle No. /Total kms. Run	Present status
Jeep	Nil	Nil	Nil	Nil
Motorcycle	Nil	Nil	Nil	Nil
Cycle	Nil	Nil	Nil	Nil

C) Equipments & Audio Visual Aids

Name of equipment	Year of purchase	Cost (Rs.)	Present status
Computer Hub system	Nil	Nil	Nil
Computer	Nil	Nil	Nil
Computer Printer	Nil	Nil	Nil
Computer Printer	Nil	Nil	Nil
Projector	Nil	Nil	Nil
Soil testing lab. equipment	Nil	Nil	Nil
Colour television & DVD player	Nil	Nil	Nil
LCD	Nil	Nil	Nil
Digital Camera	Nil	Nil	Nil
Laptop	Nil	Nil	Nil

1.8. A). Details of SAC meetings to be conducted in the year

Sl.No.	Date
1. Scientific Advisory Committee	09/11/2020

1. DETAILS OF DISTRICT

2.1 Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1.	Agriculture + Horticulture + Animal Husbandry
2.	Agriculture + Animal Husbandry + Horticulture
3.	Agriculture + Animal Husbandry + Poultry
4.	Agriculture + Horticulture + Animal Husbandry + Poultry

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

a) Soil Type

S. No	Agro ecological situation	Characteristics
1.	AES-I	It represents the Mid Western Plain Zone of the district having light soil with medium fertility, medium rainfall and most suited for paddy, wheat, potato, sugarcane, Bajra as well as guava cultivation. Out of 8 development blocks of Badaun district. It covers four blocks viz. Dataganj, Samrer, Meon and Usawan
2.	AES-II	It represents the Mid Western Plain Zone of the district with loamy soil having medium fertility, medium rain fall, suited for all type of crops viz. wheat, sugarcane, paddy, Bajra as well as vegetable crops due to proximity to the city. It covers five blocks viz. Jagat, Qadarchowk, Salarpur and Wajirganj.

b) Topography

S. No.	Agro ecological situation	Characteristics
1	AES-I	It represents the Mid Western Plain Zone of the district having light soil with medium fertility, medium rainfall and most suited for paddy, wheat, potato, sugarcane, Bajra as well as guava cultivation. Out of 8 development blocks of Badaun district. It covers four blocks viz. Dataganj, Samrer, Meon and Usawan
2	AES-II	It represents the Mid Western Plain Zone of the district with loamy soil having medium fertility, medium rain fall, suited for all type of crops viz. wheat, sugarcane, paddy, Bajra as well as vegetable crops due to proximity to the city. It covers five blocks viz. Jagat, Qadarchowk, Salarpur and Wajirganj.

2.3 Soil types

Sl. No	Soil type	Characteristics	Area (ha)
1	Clay Loam	It is more fertile than sandy and sandy loam	-
2	Sandy Soil	Sandy soil is dominated and having low status of NPK.	-
3	Sandy Loams	It is more fertile than sandy soil	-

2.8 Priority thrust areas

S.N.	Thrust area
1.	Low organic carbon & available Potassium in soil.
2.	Lack of knowledge about balance nutrition in agricultural crops.
3.	Need of diversification in agriculture.
4.	Lack of elite quality planting material of horticultural crops and lack of Bahar control in guava.
5.	Lack of knowledge about improved varieties and seed production of different crops.
6.	Lack of IPM and IDM in various crops
7.	Lack of management in animal and poultry production.
8.	Lack of improved breeds of animals.
9.	Lack of balance nutrition and good health in animals.

2.9 Intervention/ Programmes for the doubling the farmers income –(Jan 2020-Dec. 2020)
Demonstrations

Before Interventions	Main crop Yield(q/ha)	Inter crop Yield(q/ha)	Equivalent Yield(q/ha)	Cost of cultivation(Rs/ha)*	Net income(Rs/ha)	B.C: Ratio	Remark if any
Intercropping System(Kharif-Rabi-Zaid) -Livestock etc.							

Discussion: Irrigation, Fertilizers, Labour, Land Preparation, Seed, Plant protection (Weed, Pest, disease) *

After Interventions	Main crop Yield(q/ha)	Inter crop Yield(q/ha)	Equivalent yield(q/ha)	Cost of cultivation(Rs/ha)*	Net income(Rs/ha)	B.C: Ratio	Remark if any
Intercropping System(Kharif-Rabi-Zaid) -Livestock etc.							

Discussion: Irrigation, Fertilizers, Labour, Land Preparation, Seed, Plant protection (Weed, Pest, disease) *

Before Interventions	Main crop Yield(q/ha)	Inter crop Yield(q/ha)	Equivalent yield(q/ha)	Cost of cultivation(Rs/ha)*	Net income(Rs/ha)	B.C: Ratio	Remark if any
Mono Cropping System(Kharif-Rabi-Zaid) -Livestock etc.							

Discussion: Irrigation, Fertilizers, Labour, Land Preparation, Seed, Plant protection (Weed, Pest, disease) *

After Interventions	Main crop Yield(q/ha)	Inter crop Yield(q/ha)	Equivalent yield(q/ha)	Cost of cultivation(Rs/ha)*	Net income(Rs/ha)	B.C: Ratio	Remark if any
Mono Cropping System(Kharif-Rabi-Zaid) -Livestock etc.							

Discussion: Irrigation, Fertilizers, Labour, Land Preparation, Seed, Plant protection (Weed, Pest, disease) *

Before Interventions	Main crop Yield(q/ha)	Inter crop Yield(q/ha)	Equivalent yield(q/ha)	Cost of cultivation(Rs/ha)*	Net income(Rs/ha)	B.C: Ratio	Remark if any
Relay Cropping System(Kharif-Rabi-Zaid) -Livestock etc.							

Discussion: Irrigation, Fertilizers, Labour, Land Preparation, Seed, Plant protection (Weed, Pest, disease) *

After Interventions	Main crop Yield(q/ha)	Inter crop Yield(q/ha)	Equivalent yield(q/ha)	Cost of cultivation(Rs/ha)*	Net income(Rs/ha)	B.C: Ratio	Remark if any
Relay Cropping System(Kharif-Rabi-Zaid)-Livestock etc.							

Discussion: Irrigation, Fertilizers, Labour, Land Preparation, Seed, Plant protection (Weed, Pest, disease) *

Before Interventions	Main crop Yield(q/ha)	Inter crop Yield(q/ha)	Equivalent yield(q/ha)	Cost of cultivation(Rs/ha)*	Net income(Rs/ha)	B.C: Ratio	Remark if any
Mixed Farming System(Kharif-Rabi-Zaid)-Livestock etc.							

Discussion: Irrigation, Fertilizers, Labour, Land Preparation, Seed, Plant protection (Weed, Pest, disease) *

After Interventions	Main crop Yield(q/ha)	Inter crop Yield(q/ha)	Equivalent yield(q/ha)	Cost of cultivation(Rs/ha)*	Net income(Rs/ha)	B.C: Ratio	Remark if any
Mixed Farming System(Kharif-Rabi-Zaid) -Livestock etc.							

Discussion: Irrigation, Fertilizers, Labour, Land Preparation, Seed, Plant protection (Weed, Pest, disease) *

Before Interventions	Main crop Yield(q/ha)	Inter crop Yield(q/ha)	Equivalent yield(q/ha)	Cost of cultivation(Rs/ha)*	Net income(Rs/ha)	B.C: Ratio	Remark if any
IFS System(Kharif-Rabi-Zaid) - Livestock etc.							

Discussion: Irrigation, Fertilizers, Labour, Land Preparation, Seed, Plant protection (Weed, Pest, disease) *

After Interventions	Main crop Yield(q/ha)	Inter crop Yield(q/ha)	Equivalent yield(q/ha)	Cost of cultivation(Rs/ha)*	Net income(Rs/ha)	B.C: Ratio	Remark if any
IFS System(Kharif-Rabi-Zaid) - Livestock etc.							

Discussion: Irrigation, Fertilizers, Labour, Land Preparation, Seed, Plant protection (Weed, Pest, disease) *

Note- Same format may be used for OFT.

3. TECHNICAL ACHIEVEMENTS

3.A. Details of target and achievements of mandatory activities by KVK during 2020

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
04	03	20	15	16.00	16.00	40	40

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	55	41	1100	814	160	150	1600	1506
Rural youth	06	05	60	50				
Extn. Functionaries	12	11	120	110				

Seed Production (Qtl.)			Planting material (Nos.)		
5			6		
Target	Achievement	Distributed to no. of farmers	Target	Achievement	Distributed to no. of farmers

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				
	Paddy	INM in Paddy	01	05
Varietal Evaluation				
Integrated Pest Management	Paddy	IPM in Paddy	01	05
Integrated Crop Management				
Integrated Disease Management	Potato	IDM in Potato	01	05
Small Scale Income Generation Enterprises				
Weed Management				
Resource Conservation Technology				

Farm Machineries				
Integrated Farming System				
Seed / Plant production				
Post Harvest Technology / Value addition				
Drudgery Reduction				
Storage Technique				
Others (Pl. specify)				
Total			03	15

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
Disease Management				
Evaluation of Breeds				
Feed and Fodder management				
Nutrition Management				
Production and Management				
Others (Pl. specify)				
Total				

Summary of technologies assessed under various **enterprises** by KVKs

Thematic areas	Enterprise	Name of the technology assessed	No. of trials	No. of farmers

Note: Suppose **IPM in paddy** is the technology assessed by 50 KVKs in the Zone with 5 trials by each KVK, then IPM in paddy needs to be considered as a single technology, with $50 \times 5 = 250$ trials and No. of KVKs will be 50. In addition, please note that even if IPM in paddy is done with various combinations of Technology Options (treatments), it may be considered as a single technology only.

I.B. TECHNOLOGY REFINEMENT

Summary of technologies refined under various **CROPS** by KVKs

Thematic areas	Crop	Name of the technology refined	No. of trials	No. of farmers
Integrated Nutrient Management				
Varietal Evaluation				
Integrated Pest Management				
Integrated Crop Management				
Integrated Disease Management				
Small Scale Income Generation Enterprises				
Weed Management				
Resource Conservation Technology				
Farm Machineries				
Integrated Farming System				
Seed / Plant production				
Value addition				
Drudgery Reduction				
Storage Technique				
Others (Pl. specify)				
Total				

Summary of technologies refined under various **livestock** by KVKs

Thematic areas	Name of the livestock enterprise	Name of the technology refined	No. of trials	No. of farmers
Disease Management				
Evaluation of Breeds				
Feed and Fodder management				
Nutrition Management				
Production and Management				
Others (Pl. specify)				
Total				

Summary of technologies refined under various enterprises by KVKs

Thematic areas	Enterprise	Name of the technology assessed	No. of trials	No. of farmers

Note: Suppose **IPM in paddy** is the technology refined by 50 KVKs in the Zone with 5 trials by each KVK, then IPM in paddy needs to be considered as a single technology, with $50 \times 5 = 250$ trials and No. of KVKs will be 50. In addition, please note that even if IPM in paddy is done with various combinations of Technology Options (treatments), it may be considered as a single technology only.

I.C. TECHNOLOGY ASSESSMENT AND REFINEMENT IN DETAIL

(From each state please include the full details of three OFTs on technology assessment and or refinement under the broad thematic areas such as Integrated Crop Management, weed management, pest and disease management, nutrient management, resource conservation, livestock enterprises, Integrated Nutrient Management)

(The model for preparing the same is furnished below)

INTEGRATED CROP MANAGEMENT

Problem definition: Lower income from sugarcane monocrop cultivation

Technology Assessed or Refined (as the case may be) : Intercropping of French bean in paired row planted sugarcane

KVK, Shimoga in Karnataka conducted on-farm trial to **assess or refine (as the case may be)** effect of intercropping on net return in sugarcane. The intercrop system of planting of sugarcane as paired row at 5 ft spacing and growing french bean between two pairs had realized a net return of Rs. 1.87 lakh/ha as compared to the recommended practice with net returns of Rs. 1.41 lakh/ha (32.6% increase in net return per ha).

Table Performance French bean as inter crop in sugarcane

Technology Option	No. of trials	Yield (t/ha)	Net Returns (Rs. in lakh./ha)
Planting sugarcane at 3 ft row spacing (Farmers Practice)	10	168	1.56
Paired row planting at 5 ft spacing (Recommended Practice)		159	1.41
Paired row planting at 5 ft spacing + growing intercrop between two pairs (french bean)		163 (Sugarcane) 0.58 (French bean)	1.87

WEED MANAGEMENT

Problem definition: Heavy infestation of weed in cabbage

Technology Assessed or Refined (as the case may be): Weed control measures on cabbage yield in Karnataka

KVKs of Haveri, Hassan, Mysore and Mandya of Karnataka took up on-farm trial on chemical weed management in cabbage. The results indicated that the use of Oxyflurofen @ 1 kg. a i/ha gave 43.60 per cent increase in yield over hand weeding.

Table Effect of Alachlor and Oxyflurofen on weed control and yield at cabbage

Technology Option	No. of trials	Yield (qt./ha)	Increase in yield (%)	Net Return (Rs./ha)	B:C Ratio
Three times hand weeding (Farmers Practice)	18	110	--	42000	2.65
Alachlor @ 1.5 Kg. ai/ha as pre-emergent spray (Recommended Practice)		150	36.36	76800	6.34
Oxyflurofen @ 1 Kg ai/ha prior to transplanting with 1 inter cultivation and 1 hand weeding.		158	43.63	82720	7.38

PEST AND DISEASE MANAGEMENT

Problem definition: Heavy infestation of leaf curl in chilli effecting in a yield loss of 20% and income loss of Rs.10000/ha

Technology Assessed or Refined (as the case may be): Leaf Curl Management in Chilli

Chilli is an important commercial crop of Northern Karnataka. However, there is high incidence of leaf curl disease resulting in yield loss. Five KVKs namely Gadag, Haveri, Dharwad, Belgaum and Bagalkot conducted on-farm trial to assess or refine (as the case may be) the control measure. The refined technology of seed treatment with imidacloprid @ 5g/kg seeds + dipping seedlings with imidacloprid @ 0.25ml/lit along with spray with Dicofol @ 2.5 ml/lit reduced the percentage of disease incidence from 23 to 6 and yield was increased by 38.78 per cent.

Table Effect of imidacloprid in control of leaf curl in chilli

Technology Option	No. of trials	Incidence of leaf curl (%)	Yield (kg/ha)	% Increase in yield over farmer's practice
Spray of Dimethoale @ 2 ml/lit (Farmers Practice)	28	23	620	--
Spray of Dimethoale @ 1.7 ml/lit + Dicofol 2.5 ml/lit (Recommended Practice)		9	780	25.80
Seed treatment with imidacloprid @ 5g/Kg. seeds + dipping seedlings with imidacloprid @ 0.25ml/lit along with spray with Dicofol @ 2.5 ml/lit		6	860	38.78

NUTRIENT MANAGEMENT

Problem definition: Lower productivity and profitability in blackgram cultivation due to imbalance application of nutrients

Technology Assessed or Refined (as the case may be): Nutrient management in black gram

KVK, Karur in Tamil Nadu conducted on-farm trial to find out appropriate nutrient management practice to enhance the black gram productivity. The assessed or refined (as the case may be) practice of soaking seeds with manganese sulphate @ 8% solution for two hours was found to be better with 59.62 % increase in yield.

Table Effect of seed soaking of MnSo₄ in enhancing germination and yield in black gram

Technology Option	No. of trials	Germination (%)	Plant height at flowering stage	Yield (kg./ha)	Increase in Yield (%)	B:C Ratio
No seed treatment and foliar spray (Farmers Practice)	10	52	32	540	--	5.64
Foliar spray of DAP @ 2% and NAA @ 40ppm at 30 and 45 DAS (Recommended Practice)		62	38	742	37.40	9.42

Seed soaking with MnSO ₄ @ 8% for two hours + recommended practice		78	42	862	59.62	10.27
---	--	----	----	-----	-------	-------

RESOURCE CONSERVATION

Problem definition: Lower productivity and profitability in tomato cultivation

Technology Assessed or Refined (as the case may be): Enhancement of tomato yield through precision-farming in Tamil Nadu

The KVKs of Dindigul, Perambalur and Dharmapuri in Tamil Nadu conducted on-farm trial on fertigation in tomato. Combined application of water and fertilizers through drip system had enhanced the tomato yield by 22% in Tamil Nadu with the water saving of 35% alongwith net profit of Rs.25460 per hectare.

Table Effect of fertigation on yield and income of tomato

Technology Option	No. of trials	Yield (t/ha)	Net Returns (Rs./ha)	BC Ratio
Irrational fertilizer and water application with out considering stages (Farmers Practice)	18	15.77	11050	1.5
Irrigation at 7 to 10 days interval, FYM @ 25 Tons / ha, Fertilizers @ 150 : 100 : 50 NPK Kg / ha (Recommended Practice)		18.36	15280	1.7
Application of water and fertilizer through drip system at critical stages. Fertilizer dose was reduced to three fourth of recommended dose		22.43	25460	2.0

LIVE STOCK ENTERPRISES

Problem definition: High incidence of mastitis disease in dairy cows resulting in lower productivity and profitability of dairying

Technology Assessed or Refined (as the case may be): Management of mastitis in crossbreed cows in Karnataka

KVK, Gadag conducted trial to find out suitable control measure for mastitis in cross bred cows as the recommended practice could not stop recurrence of mastitis to the desired level. The technology recommended was fine tuned by including dry cow therapy fro the control of mastitis.

Table Effect of streptopenicillin in the control of mastitis

Technology Option	No. of trials	Per cent incidence of mastitis
Washing of udder is washed with fresh water and application of turmeric paste after milking (Farmers practice)	5	70
Use of "SAAF" kit (Iodine 0.71 % w/v) after milking. (Recommended practice)		60
Recommended practice + Dry cow therapy (Streptopenicillin administration by intra mammary infusion at once for each teat of udder at 7-8 months of pregnancy)		Nil

INTEGRATED NUTRIENT MANAGEMENT

Problem definition: Lower yield in nendran banana due to imbalance application of nutrients

Technology Assessed or Refined (as the case may be): Integrated Nutrient Management in Banana

KVK, Palakkad assess or refine (as the case may be) the technology of integrated nutrient management by the application of effect of application of Cattle Manure @ 10 kg. /plant, Azospirillum @ 60 gm/plant, urea 315 gm and Potash 500 gm/plant as balanced nutrition in Nendran variety of banana and found that the same had enhanced the yield by 19 per cent compared to farmers practice and 25 per cent saving on nitrogenous fertilizers.

Table Performance of banana to integrated nutrient management

Technology Option	No. of trials	Yield t./ha	B:C Ratio
Cowdung @ 10 kg./plant, Plant wood ash @ 5 kg./plant and green leaf manure @ 5 kg./plant	5	22.00	1.37
Cattle Manure @ 10 kg. /plant, Azospirillum @ 60 gm/plant, urea 315 gm and Potash 500 gm/plant.		26.25	1.68

(3.2) OFT of Kharif- 2020

(3.2.1) Result of OFT of Soil Science,crop- Paddy cultivar-Narender-359

Treet.	Yield (q/ha)			Cast of production(Rs./ha)			Grass income (Rs./ha)			Net Income (Rs./ha)			B:C Ratio		
	Max	Min.	Ave.	Max.	Min.	Ave.	Max.	Min.	Ave.	Max	Min.	Ave.	Max	Min.	Ave.
Demo*	43.8	38.8	41.4	28670	26054	27311	76650	68775	72508	49950	40200	45197	2.91	2.45	2.66
Local**	37.8	35.5	36.8	27635	25135	26545	67375	62125	64383	39740	34690	37838	2.52	2.26	2.43
% increase			12.6			2.9			12.6			19.5			9.5

* 2 spray (40 & 55 DAT) of 0.25% ZnSO₄ + 0.25% FeSO₄ + 0.20% Boron

** Farmers Practice (ZnSO₄ @ 15 kg/ha)

(3.2.2) Result of OFT of Plant Protection crop- Paddy cultivar-Narender-359

Technology	No. of Results	Yield (q/ha)	% increase in yield	Effect of stem borer	Net profit (Rs./ha)	B:C Ratio
T1 (Local)	01 (On 5 farmers field)	38.37	-	15-18	60988	2.52
T2		47.18	22.18	0-8	79732	2.87
T3		42.20	9.98	10-12	68880	2.66

Treatment 1 :Monocrotophos 36 SL @1 lit/ha

Treatment 2 : Fipronil 0.3 % @ 25 kg/ha

Treatment 3 : Cartap hydrochloride 4G@ 18 kg/ha

(3.4) FLD of Rabi- 2019 - 20

(3.4.1) Result of FLD of Soil Science crop- Wheat cultivar-PBW-17

** Seed treatment with Azotobacter +PSB

Treet.	Yield (q/ha)			Cast of production(Rs./ha)			Grass income (Rs./ha)			Net Income (Rs./ha)			B:C Ratio		
	Max	Min.	Ave.	Max.	Min.	Ave.	Max.	Min.	Ave.	Max	Min.	Ave.	Max	Min.	Ave.
Demo**	48.2	41.5	45.9	28500	26350	27425	88688	80040	84360	60188	41900	51044	3.25	2.97	3.11
Local*	41.5	38.2	41.5	28050	25550	26800	76360	70288	73324	53040	43338	48189	2.94	2.61	2.78
% increase			10.6			2.3			15.1			5.9			11.9

* Farmers practice (without seed treatment with Azotobacter +PSB)

II. FRONTLINE DEMONSTRATION

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

List of technologies demonstrated during previous year and popularized during 2016-17 and recommended for large scale adoption in the district

S. No	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

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

b. Details of FLDs implemented during **2020** (Information is to be furnished in the following **three tables** for each category i.e. cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.)

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	
2	

Farmers' reactions on specific technologies

S. No	Feed Back
1	
2	

Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organised	Date	Number of participants	Remarks
1	Field days				
2	Farmers Training				
3	Media coverage				
4	Training for extension functionaries				

Performance of Frontline demonstrations

Frontline demonstrations on oilseed crops

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Groundnut																		
Sesamum																		
Mustard																		
Toria																		
Linseed																		
Sunflower																		
Soybean																		

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

Frontline demonstration on pulse crops

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)				
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)	
						High	Low	Average											
Pigeonpea																			
Blackgram																			
Greengram																			
Chickpea																			
Fieldpea																			
Lentil																			
Horsegram																			

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** $BCR = \frac{GROSS\ RETURN}{GROSS\ COST}$

FLD on Demonstration details on crop hybrids *(Details of Hybrid FLDs implemented during 2020)*

Crop	technology demonstrated	Hybrid Variety	No. of Farmers	Area (ha)	Yield (q/ha)			Check	% Increase in yield	Economics of demonstration (Rs./ha)			
					Demo		Gross Cost			Gross Return	Net Return	BCR (R/C)	
					High	Low							Average
Oilseed crop													
Pulse crop													
Cereal crop													
Vegetable crop													
Fruit crop													
Other (specify)													

Note : Remove the Enterprises/crops which have not been shown

Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
Total										
GRAND TOTAL	41	738	-	738	82	-	82	820	-	820

Training for Rural Youths including sponsored training programmes (On campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs	02	16	-	16	04	-	04	20	-	20
Planting material production										
Vermi-culture	01	08	-	08	02	-	02	10	-	10
Mushroom Production	01	08	-	08	02	-	02	10	-	10
Bee-keeping	01	08	-	08	02	-	02	10	-	10
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	05	40	-	40	10	-	10	50	-	

IV. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	39	509	10	519
Diagnostic visits	08	38	04	42
Field Day	04	86	02	88
Group discussions	05	60	-	60
Kisan Ghosthi	06	185	10	195
Film Show				
Self -help groups				
Kisan Mela				
Exhibition				
Scientists' visit to farmers field	94	560	15	575
Plant/animal health camps				
Farm Science Club				
Ex-trainees Sammelan				
Farmers' seminar/workshop				
Method Demonstrations				
Celebration of important days	02	225	10	235
Special day celebration				
Exposure visits				
Others (pl. specify)				
Total	156		51	1714

Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	
Extension Literature	10,000(10)
News paper coverage	12
Popular articles	
Radio Talks	
TV Talks	
Animal health camps (Number of animals treated)	
Others (pl. specify)	
Total	10,012

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Marke-ting	Aware-ness	Other enterprise	
	Text only	42	-	06	02	32	02	84
	Voice only							
	Voice & Text both							
	Total Messages	42	-	06	02	32	02	84
	Total farmers Benefitted	1890		270	90	1440	90	3780

V. 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			
	Lectures organised			
	Exhibition			
	Film show			
	Fair			
	Farm Visit			
	Diagnostic Practicals			
	Distribution of Literature (No.)			
	Distribution of Seed (q)			
	Distribution of Planting materials (No.)			
	Bio Product distribution (Kg)			
	Bio Fertilizers (q)			
	Distribution of fingerlings			
	Distribution of Livestock specimen (No.)			
	Total number of farmers visited the technology week			

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						
Oilseeds						
Pulses						
Commercial crops						
Vegetables						
Flower crops						
Spices						
Fodder crop seeds						
Fiber crops						
Forest Species						

Others						
Total						

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
Commercial						
Vegetable seedlings						
Fruits						
Ornamental plants						
Medicinal and Aromatic						
Plantation						
Spices						
Tuber						
Fodder crop saplings						
Forest Species						
Others						
Total						

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity	Value (Rs.)	No. of Farmers
		Kg		
Bio Fertilisers				
Bio-pesticide				
Bio-fungicide				
Bio Agents				
Others				
Total				

Table: Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers
Dairy animals				
Cows				
Buffaloes				
Calves				
Others (Pl. specify)				
Poultry				
Broilers				
Layers				
Duals (broiler and layer)				
Japanese Quail				
Turkey				
Emu				
Ducks				
Others (Pl. specify)				
Piggery				
Piglet				
Others (Pl. specify)				
Fisheries				
Indian carp				
Exotic carp				
Others (Pl. specify)				
Total				

VII. DETAILS OF SOIL, WATER AND PLANT ANALYSIS

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)
Soil				
Water				
Plant				
Manure				
Others (pl.specify)				
Total				

VIII. SCIENTIFIC ADVISORY COMMITTEE

Name of KVK	Number of SACs conducted	Date of SAC
Dataganj, Badaun-II	01	9/11/2020

IX. NEWSLETTER/MAGAZINE

Name of News letter/Magazine	No. of Copies printed for distribution

X. PUBLICATIONS

Category	Number
Books	
Technical bulletins	
Research Paper	
Lead Papers	
Book Chapters	
Popular Articles	
Newsletters	
Technical reports	04
Others (pl. specify)	10,000

XI. DETAILS ON RAIN WATER HARVESTING STRUCTURE AND MICRO-IRRIGATION SYSTEM

Activities conducted				
No. of Training programmes	No. of Demonstration s	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)

Total												

XIII. DETAILS ON HRD ACTIVITIES

A. HRD activities organized in identified areas for KVK staff by the Directorate of Extension

Name of the SAU	Title of the training programmes	No of programmes	No. of Participants	No. of KVKs involved
Total				

B. HRD activities organized in identified areas for KVK staff by Zonal Project Directorate

Title of the training programmes	No of programmes	No. of Participants	No. of KVKs involved
Total			

XIV. CASE STUDIES (CASE STUDIES MAY BE GIVEN IN DETAIL AS PER THE FOLLOWING FORMAT)

Each Zone should propose a minimum of three case studies with good action photographs (with captions on the backside of the hard copy of the photos) on the following topics

- a) *Effective popularization on a larger scale of any one FLD technology and its role in transformation of district agriculture with respect to that particular crop or enterprise*
- b) *Performance of the end results of any one technology assessed, its refinement if any and its impact in district agriculture with respect to that crop or enterprise*
- c) *Effect of production and supply of seeds and planting material / animal breed / or bio-product and its impact on district agriculture with respect to that crop/ enterprise/ bio-product*

The general format for preparing the above case studies are furnished below

Name of the KVK

TITLE

Introduction

KVK intervention

Output

Outcome

Impact

Sample KVK Case study

NDR-8501 becoming popular in farmers' for their yielding trait: Ghazipur

Situation analysis/ Problem statements:- Mr. Sanjay Singh, village Khajurgaon, Post:Indore block:Mardah, district:Ghazipur, a farmer who was selected for this demonstration. He was earlier involved with local variety of mustard Pusa Bold or Varuna. These varieties were low in yield

Plan, Implement and Support:- KVK Ghazipur tries to make them aware regarding scientific cultivation of mustard. That starts from land preparation to harvesting. This KVK has encouraged the farmer for soil testing and on the basis of that farmer was advised for balanced dose of chemical fertilizer with high yielding varieties Pusa Tarak. That was sown on 01-11-2016 with line sowing and fertilizer application was done with basal application in which half dose of nitrogen full dose of SSP and full dose of MOP as recommended. Rest nitrogen used after first irrigation.

Output:- Mr. Sanjay Singh adopted the the balanced dose of chemical, fertilizer (N:P:K:S::150:40:40:30) kg/ha in mustard crop as per suggestion of KVK's scientist for his 0.25ha land. His local yield was 3.85 qt with recommended technology. His yield increased by 33.76% with yield 5.15 qt. The economical gain in terms of per unit expenditure gross income, net return and BCR are recorded. Rs 6975, Rs. 18857, Rs. 11882 and 2.70 correspondingly.

Outcome:- Mustard crop is the major oilseed crop of the district. KVK Ghazipur conducted 322 demonstrations in 87 villages during 2004-05 to 2016-17 in an area of 89 ha at farmers' field with using HYV NDR-8501, Pusa Tarak and balanced dose of chemical fertilizer (N:P:K:S::150:40:40:30) kg/ha. This variety has been disseminated in 170 villages of the district in area of approximately 900ha. The outcome of this demonstration motivated the farming communities to replace their old varieties, non-descriptive varieties. Mr. Sanjay Singh is very happy on improvement in their income, livelihood and set forth example for others.

Impact:- Mr. Sanjay Singh is becoming one of the progressive and learned farmers for others with regards to popularization of Pusa Tarak. This technology helps him for livelihood, empowerment and make him enthusiastic regards oilseed production. He is one of the progressive farmer after a becoming a part of KVK activities and get their effectiveness for his own development. Mr. Sanjay Singh is very happy with this improved production and management technology and set forth example for other farmers of the district.



A farmers with KVK's scientist



Mustard Crop Pusa Tarak

D.2 . Publications (Print & Electronic media)

S. No	Particulars	Number sold	Revenue generated in Rs.	Number of farmers benefited
01	Books			
02	Technical bulletins			
03	Technology Inventory			
04	CDs			
05	DVDs			
06	Video films			
07	Audio CDs			
08	Others if any (please specify)			

E. Technology Products provided

S. No	Particulars	Quantity	Unit of quantity	Value in Rs.	Number of farmers benefited
01	Seeds		Quintal		
02	Planting materials		Numbers		
03	Livestock		Numbers		
04	Poultry birds		Numbers		
05	Bio-products		Quintals		
06	Others pl. specify				

F. Technology services provided

S. No	Particulars	Number of farmers benefited
01	Soil and water testing	
02	Plant diagnostics	
03	Details about the services to line Departments	
04	Others if any (please specify)	

XV. TECHNOLOGICAL BACKSTOPPING BY DIRECTORATES OF EXTENSION

States covered:

Number of Directorates of Extension:

A. Details on Directors of Extension

S. No	Name of the SAU	Name of the Director of Extension	Number of KVKs for which technological backstopping is provided					
			SAU/CAU	DU	ICAR	NGO	SDA	Others (pl. specify)

B. Workshops / meetings organized

S. No.	Details of workshop/meeting conducted	No. of KVKs participated

C. Visits made by DE / Officials in the Directorate to KVKs

S. No.	Particulars	Number of visits
01	SAC meetings	
02	Field days	
03	Workshops / seminars	
04	Technology week	
05	Training programmes	
06	Others pl. specify	02

D. Overseeing of KVKs activities

S. No.	Particulars	Number of fields visited	Major observations / remarks	Major suggestions given
01	On Farm Trials			
02	Front Line Demonstration			
03	Others pl. specify			

E. Publication on Technology inventory

S. No.	Particulars	Number
01	Directorates published the technological inventory	
02	Directorates constantly updating the technological inventory	

F. Technological Products provided to KVKs

S. No.	Major technologies provided	Number of KVKs
01	Seeds	
02	Planting materials	
03	Bio-products	
04	Livestock breed	
05	Livestock products	
06	Poultry breed	
07	Poultry products	
08	Others pl. specify	

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

a) CRM Machinery procured by KVKs

S.No.	Name of the Machine/ Equipment	No. of machines procured
1	Happy Seeder	
2	Reversible M.B. Plough	
3	Paddy Straw Chopper/ Shredder / Mulcher	
4	Zero Till Drill	
5	Rotavator	
6	Tractor	
	Total	

b) IEC activities organized under CRM Project by KVKs

S. No.	Name of IEC activity	No. of activities	No. of Participants
	Kisan Melas organized		
1.	Awareness programmes conducted at Village Panchayat/ Block/ District Level		
2.	Mobilization of schools and colleges through essay completion, painting, debate etc.		
3.	Demonstration conducted (ha)		
4.	Training Programmes conducted		
5.	Exposure visits organized		
6.	Field /harvest days organized		
	Total		

4) Achievement of KSHAMTA (Knowledge Systems And Home Based Agricultural Management in Tribal Areas)

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

5) 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						

6) Achievement under IFS KVKs

Sl. No.	IFS (Component Name)	No. of IFS established	Area (ha)	Number of Activities		No. of farmers benefited	
				Demo	Training	Demo	Training
1							
2							
3							

7) Achievements under Mera Gaon Mera Gaurav (MGMG) project

No. of institutes/ universities involved	Total No of Groups/team formed	No. of Scientists Involved	No. of villages covered	No. of field activities conducted	No. of messages/ advisory sent	Farmers benefited (No.)

8) Achievements of Farmers FIRST programme

NRM Module		Crop Module		Horticulture Module		Livestock & Poultry			IFS Model		Extension Activities	
Demon.	No Farm Families	Demon.	No Farm Families	Demon.	No Farm Families	Demon.	No Farm Families	No of Animals	Demon.	No Farm Families	No. of prog	Farmers

9) Activities performed under NARI programme

Activities	Number of activity	No. of farmers/ beneficiaries
OFTs - Nutritional Garden (activity in no. of Unit)		
OFTs - Bio-fortified Crops (activity in no. of Unit)		
OFTs - Value addition (activity in no. of Unit/Enterprise)		
OFTs - Other Enterprises (activity in no. of Unit/Enterprise) (activity in no. of Unit/Enterprise)		
FLDs - Nutritional Garden (activity in no. of Unit)		
FLDs - Bio-fortified Crops (activity in no. of Unit)		
FLDs - Value addition (activity in no. of Unit/Enterprise)		
FLD- Other Enterprises (activity in no. of Unit/Enterprise) (activity in no. of Unit/Enterprise)		
Trainings		
Extension Activities		
Grand Total		

10) Achievements of Soil, water, plant and manure samples analyzed by KVKs and soil health cards issued

Sample	No. of Samples in lakh	No. of Farmers in lakh	No. of Villages in lakh	Amount realized (Rs. in lakhs)	No. of Soil Health Cards issued (lakhs)
Soil					
Water					
Plant					
Manure					
Total					

11) Achievements under NICRA Project

NRM		Crop production		Livestock & Fisheries			Capacity Building		Extension Activities	
Demo	Area (ha)	Demo	Area (ha)	Demo	Area (ha)	No. of animals	No of Courses	Farmers	No. of programmes	Farmers

12) Achievements under ARYA Project

Name of entrepreneurial units	No. of entrepreneurial units established	No. of Training programs organised	No. of rural youth trained		No. of youth established units	
			Male	Female	Male	Female
Mushroom production						
Fruits and vegetable processing units,						
Horticulture nursery						
Fish farming						
Poultry						
Goat farming						
Piggery						
Duck farming						

Bee keeping						
Others if any						

13) Achievements under Rainwater Harvesting Structures

Sr. No.	Activities	Number
1	Training programmes	
2	Demonstration	
3	Plant materials produced	
4	Visit by farmers	
5	Visit by officials	

14) Achievements under Pulses Seed Hub programme

Season/Crop	Name of Pulse crop	Variety	Production			Category of seed (F/S, C/S)
			Target (q)	Area sown (ha)	Actual Production (q)	
Kharif	Black gram					
	Green Gram					
	Pigeon pea					
Total (Kharif)						
Rabi	Chick pea					
	Field pea					
	Lentil					

Total (Rabi)						
Summer	Black gram					
Total (Summer)						
Grand Total						

15) NEMA (New Extension Methodologies and Approaches)

Name of Crop with variety	No. of districts	No. of Villages selected	No. of Blocks	No. of household selected	
				Adapter household	Non adapter household

16) Achievements under CSISA (Cereal System Initiative for South Asia) project

S.No.	Name of Programme	Number/quantity
1	Plantation by paddy uppulling	
2	DSR	
3	Laser leveler	
4	Training	
5	Kisan Mela	
6	Seminar	
7	Seed production (q)	

17) Achievements under NIFTD (National Initiatives for fodder technology demonstrations)

Name of fodder	Variety	Production (q)	Training courses	No. of farmers benefitted

18) Achievements under Swachhata Abhiyan Mission

S.No.	Items	No. of Programmes	No. of persons participated
1	Toilet maintenance		
2	Road, drain cleaning		
3	Garbage disposal		
4	Door to door awareness		
5	Awareness campaign		
6	Nookkad Drama		
7	School Drama		
8	School rally		
9	Writing painting slogans		
10	Composting		
11	Other		
12			
13			

19) Achievements under Aspirational District Scheme

Name of programme	Number
Training	
Session No.	
No. of farmers	

Officers/staff involved	
Seed & Plant Distribution	
Programme number	
Seed distribution in q	
No. of plant distributed	
Biological products distributed	
No. of programme organised	
No. of farmers	
Officers/staff involved	
Animal husbandra & fish distribution programme	
Vaccination	
Medicine for control of parasite	
Distribution of mineral mixure	
No. of farmers	
Officers/staff involved	

XVI Awards

S.No.	Name of Award received	Name of KVK/farmer	Year of Award	Date on which award received

Note: Please also mention name of farmer who received the award.

-----XXXXXXX-----