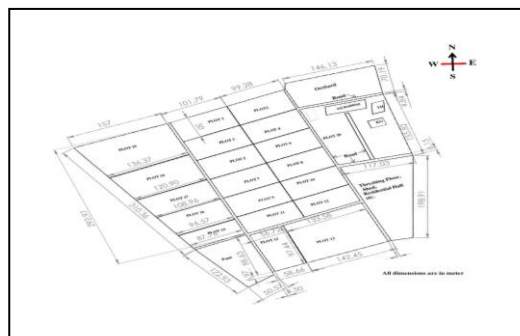


# Dr. Rajendra Prasad Central Agricultural University, Pusa

## *6<sup>th</sup> Extension Education Council Report (April, 2021 to March, 2022)*

### A. Profile of KVK

<b>KVK, Name</b>	-	Gopalganj
<b>Latitude</b>	-	26° 57' 69''
<b>Longitude</b>	-	84° 37' 62''
<b>Farm Area (ha)</b>	-	20.0
<b>District</b>	-	Gopalganj



### B. Staff Strength

Sl. No.	Post	Group	Grade Pay	Sanctioned	Filled	Vacant
1.	Head	A	9000	01	<b>1</b>	<b>0</b>
2.	SMS-6	A	5400	06	<b>5</b>	<b>1</b>
3.	Farm Manager	B	4200	01	<b>1</b>	<b>0</b>
4.	Programme Asst. (Computer)	B	4200	01	<b>0</b>	<b>1</b>
5.	Programme Asst. (Lab Tech.)	B	4200	01	<b>0</b>	<b>1</b>
6.	Assistant	B	4200	01	<b>1</b>	<b>0</b>
7.	Stenographer	C	4200	01	<b>1</b>	<b>0</b>
8.	Supporting Staff -1&2	D	2000	02	<b>1</b>	<b>1</b>
9.	Jeep Driver	C	2000	01	<b>1</b>	<b>0</b>
10.	Tractor Driver	C	2000	01	<b>1</b>	<b>0</b>

### C. Soil Samples Analyzed:

Number of Soil Samples Collected	Number of Soil Samples Analyzed	Soil Health Card Distributed
110	10	10

**D. Status of revolving fund as on 31.03.2022                      Rs. 13,65,647.80**

### E. Achievements of Training Programmes (Give only numbers):

#### (i) Practicing Farmers/Farm Women.

Sl. No.	Discipline	Target	Achievement	No. of Beneficiaries				Total
				Male		Female		
				Others	SC/S T	Others	SC/S T	
1.	Crop production (Agro/ Plant Breeding/ Soil Sci/ Extn.)	0	3	32	0	18	0	50
2.	Horticulture	24	19	422	34	38	3	497
3.	Plant Protection	24	12	308	28	48	7	391
4.	Home Science	24	10	7	0	162	109	278
5.	Vet. /Fisheries	12	2	176	14	15	2	207
6.	Agricultural Engineering	24	19	434	54	47	8	543

**(ii) Rural Youth:**

SI. No.	Discipline	Target	Achievement	No. of Beneficiaries				Total
				Male		Female		
				Others	SC/ST	Others	SC/ST	
1.	Crop production (Agro/ Plant Breeding/ Soil Sci/ Extn.)	0	0	0	0	0	0	0
2.	Horticulture	6	1	21	2	4	0	27
3.	Plant Protection	6	5	132	18	23	2	175
4.	Home Science	6	4	36	0	132	46	214
5.	Vet. /Fisheries	3	6	205	22	3	0	230
6.	Agricultural Engineering	4	3	57	1	0	0	58

**(iii) Extension Functionaries:**

SI. No.	Discipline	Target	Achievement	No. of Beneficiaries				Total
				Male		Female		
				Others	SC/ST	Others	SC/ST	
1.	Crop production (Agro/ Plant Breeding/Soil Sci/ Extn.)	0	0	0	0	0	0	0
2.	Horticulture	4	2	50	7	2	2	61
3.	Plant Protection	4	0	0	0	0	0	0
4.	Home Science	6	2	3	0	44	14	61
5.	Vet. /Fisheries	1	0	0	0	0	0	0
6.	Agricultural Engineering	4	4	138	21	25	2	186

**(iv) Other Sponsored Training Programme:**

SI. No.	Discipline	Achievement	No. of Beneficiaries				Total
			Male		Female		
			Others	SC/ST	Others	SC/ST	

**(v) Vocational Training:**

SI. No.	Discipline	Achievement	No. of Beneficiaries				Total
			Male		Female		
			Others	SC/ST	Others	SC/ST	
1.	Plant Protection	5	132	18	23	2	175
2.	Animal Science	6	205	22	3	0	230
3.	Horticulture	1	21	2	4	0	27
4.	Agriculture Engineering	3	57	1	0	0	58
5.	Home Science	4	36	0	132	46	214

**F. i) Seed Produced:**

Sl. No.	Crop	Variety	Area (ha)	Type of Seed	Seed Production			
					Quantity Produced (Q)	Sold to		
						University	Farmers	Non Seed
1.	Pea	HUDP-15	0.5	F/S	2.50	University		
2.	Wheat	HD 2967	7.5	F/S	187.0	University		
3.	Paddy	R. Sarawati	6.0	F/S	132.0	University		
4.	Rapeseed	R. Suflam	1.0	T/L	0.80	University		

**ii) Planting Material/Spawn/Vermicompost/Bio-Pesticide/Fingerlings/Chicks Production**

Sl. No.	Crop	Variety/Species	Quantity Produced	Sold to	
				Govt.	Farmers
1.	Cauliflower	Hybrid	2872		Farmers
2.	Tomato	Hybrid	1060		Farmers
3.	Cucurbits	Hybrid	1300		Farmers
4.	Guava	L-49	7		Farmers
5.	Papaya	Red Lady	540		Farmers
6.	Litchi	Shahi, Rose Sented	206		Farmers
7.	Cucumber	Kamini	2601		Farmers
8.	Bitter gourd	Pali	450		Farmers
9.	Bottle gourd	Vijeta, Rajendra Chamatkar	778		Farmers
10.	Sponge gourd	Century, Rajendra Nenua-1	659		Farmers
11.	Ridge gourd	Prity	60		Farmers

**G. FLD:**

Crop	Variety/ Tech demo.	Season Kharif/ Rabi	Area (ha)	No. of Farmers	Production q/ha			Local check (q/ha)	Increase in yield %	BC ratio
					H	L	A			
ZT Wheat sowing	RCT	Rabi	4.0	10	48.3	30	42	32	31	2.47
Oats	UPO 212	Rabi	2.0	15	700	550	610	460	32	1.74
Berseem	JB I	Rabi	2.0	22	850	790	820	740	11	1.88
Okra	Kashi Pragati	Kharif	0.75	50	135	128	130	110	18	2.9
Mushroom	Button	Rabi	-	10	20 kg/comp ost	17 kg/comp ost	18 kg/q comp ost	10 kg/q compost	40	2.97
Mushroom	Oyster	Kharif	-	20	65 kg/10 kg spawn	60 kg/10 kg spawn	63 kg/10 kg spawn	30.75 kg/10 kg spawn	61	2.19

**H. CFLD on Pulses:**

Crop	Variety/ Tech demo.	Season Kharif/ Rabi	Area (ha)	No. of Farm ers	Production q/ha			Local check (q/ha)	Incre ase in yield %	BC ratio
					H	L	A			
Pigeon Pea	Seed (Rajendra Arhar-1) Micronutrients pesticides, line sowing, PSB, Rhizobium. Carbendazim	Kharif	10.0	25	21.6	11.5	16.1	10.5	53.33	4.10
Lentil	IPL-316, micronutrients, seed treatment, biofertilizers, pesticides	Rabi	10.0	25	16	7.5	11.9	8.5	40.0	2.76
Green Gram	IPM-02-14, Herbicides, Seed treatment, Micronutrients, Insecticide	Kharif	10.0	25	11	4.9	7.8	7.0	11.40	2.29

**I. CFLD on Oilseed:**

Crop	Variety/ Tech demo.	Season Kharif/ Rabi	Area (ha)	No. of Farm ers	Production q/ha			Local check (q/ha)	Incre ase in yield %	BC ratio
					H	L	A			
Rapeseed and Mustard	RH 0749, Seed treatment, Herbicides, Micronutrie nt, Insecticide	Rabi	100.0	250	19.4	8.5	14.3	11.59	23.38	2.48

**J. CRA Project:**

Crop	Variety/ Tech demo.	Season Kharif/ Rabi	Area (ha)	No. of Farmers	Production q/ha			Local check (q/ha)	Increase in yield %	BC ratio
					H	L	A			
Wheat	HD 2967, Zero Tillage	Rabi	168.0	420	48.6	30	42	32	31.25	2.27
Lentil	IPL-316, Zero Tillage	Rabi	20.0	70	16.1	9.7	12	8.5	41.17	1.78
Mustard	Raised bed Planting	Rabi	20.0	50	18.1	8.4	14	11.6	20.68	2.42
Maize	Shaktiman (Shankar), Raised bed Planting	Rabi	28.0	102	110.5	88	102	54	88.88	3.71
Wheat	Community Irrigation	Rabi	6.0	15	38.7	35.3	37	32	15.62	1.89
Potato	Potato based farming system	Rabi	1.2	10	210.5	200.2	205	180	13.9	2.15
Paddy	DSR	Kharif	19.0	48	41.5	35	39	28	39.28	2.2
Paddy	Transplanting	Kharif	101.0	252	44.6	38.2	42	40	5	1.69
Paddy	Alternate wetting/Dr ying irrigation	Kharif	24.0	60	47.6	42.2	45	38	18.42	1.65
Paddy	Nutrients expert/Green Seeker based nutrient management	Kharif	10.0	25	45.8	39.9	42	39	7.69	1.7
Paddy	Community irrigation	Kharif	6.0	15	42.1	34.2	38	35	8.57	1.77
Maize	Raised bed planting	Kharif	16.4	52	69.3	53.2	62	45	37.77	1.6
Maize+ Arhar	Inter- cropping	Kharif	14.0	65	65.7	37.9	59	42	40.47	1.7
Crop (Arhar) in field										

**K. ARYA Project:**

SI. No.	Number of KVK	Number of Activities	No. of Beneficiaries				Total
			Male		Female		
			Others	SC/ST	Others	SC/ST	
1.							

**L. NARI Project/Poshan Vatika**

SI. No.	Number of KVK	Number of Activities	No. of Beneficiaries				Total
			Male		Female		
			Others	SC/ST	Others	SC/ST	
1.	Gopalganj	5	25	9	13	0	47

**M. NICRA Project:**

SI. No.	Number of KVK	Number of Activities	No. of Beneficiaries				Total
			Male		Female		
			Others	SC/ST	Others	SC/ST	
1.							

**N. SCSP Programme:**

SI. No.	Number of KVK	Number of Activities	No. of Beneficiaries				Total
			Male		Female		
			Others	SC/ST	Others	SC/ST	
1.	Gopalganj	2	0	82	0	48	130

**O. On Farm Trial: 1**

**Discipline** : Horticulture  
**Title** : Assessment of integrated nutrient management on yield of banana  
**Crop** : Banana  
**No. of Trials** : 8  
**Area** :

Treatment	Technology					
F.P	100 % RDF (200:100:300 g/plant)					
T <sub>1</sub>	100 % RDF + vermicompost 5 kg +PSB 20 g+ Azospirillum 20 g/plant					
T <sub>2</sub>	100 % RDF +FYM 20 kg +PSB 20 g +Azospirillum 20 g/plant					
Result	T.O.-II viz 100 % RDF +FYM 20 kg +PSB 20 g +Azospirillum 20 g/plant performed better than all other options but the cost of vermicompost decreased the B:C ratio					
Treatments	Yield q/ha	Increase in yield (kg)	Cost of cultivation (Rs)	Gross return (Rs./ha)	Net Return (Rs./ha)	BC Ratio
F.P	536.58 <sup>a</sup>	0.0	184238	965844	781606	4.24
T <sub>1</sub>	602.38 <sup>b</sup>	65.8	240384	1084284	843900	3.51
T <sub>2</sub>	632.49 <sup>c</sup>	95.91	287136	1138482	851346	2.96



### On Farm Trial: 2

**Discipline** : Horticulture  
**Title** : Control of fruit cracking in litchi by bagging of fruit branches (non-woven polypropylene bags)  
**Crop** : Litchi  
**No. of Trials** : 8  
**Area** :

Treatment	Technology					
F.P	No Preventive measures					
T <sub>1</sub>	Covering fruit bunches by pink colour non woven polypropylene bags clove stage					
T <sub>2</sub>	Covering fruit bunches by white colour non woven polypropylene bags clove stage					
<b>Result</b>	Significant difference in fruit weight, sun burn, borer infestation, fruit cracking, fruit yield was observed among treatments viz. Farmer Practice and technical options i.e. covering fruit bunches with non woven polypropylene bags at clove stage irrespective of the colour of the non woven polypropylene bags					
Treatments	Yield kg/Tree	Increase in yield (kg)	Cost of cultivation (Rs)	Gross return (Rs./ha)	Net Return (Rs./ha)	BC Ratio
F.P	41.89 <sup>a</sup>	0.0	42,000	146,615	104,615	3.49
T <sub>1</sub>	60.03 <sup>b</sup>	18.14	52,000	210,105	158,105	4.04
T <sub>2</sub>	59.14 <sup>b</sup>	17.25	52,000	206,990	154,990	3.98



### On Farm Trial: 3

**Discipline** : Horticulture  
**Title** : Foliar application of B to control fruit cracking in litchi  
**Crop** : Litchi  
**No. of Trials** : 8  
**Area** :

Treatment	Technology					
F.P	No spraying					
T <sub>1</sub>	02 spray of Boron (0.1%) at 15 and 30 days after fruit set					
T <sub>2</sub>	03 spraying of Boron (0.1%) at 15, 30 and 45 days after fruit set					
<b>Result</b>	spraying of Boron (0.1%) at 15, 30 and 45 days after fruit set significantly reduced fruit cracking and increased fruit weight and yield					
Treatments	Yield kg/Tree	Increase in yield (kg)	Cost of cultivation (Rs)	Gross return (Rs./ha)	Net Return (Rs./ha)	BC Ratio
F.P	46.12 <sup>a</sup>	0.0	43,000	161,420	118,420	3.75
T <sub>1</sub>	56.86 <sup>b</sup>	10.74	50,000	199,010	149,010	3.98
T <sub>2</sub>	58.35 <sup>b</sup>	12.23	53,500	204,225	150,725	3.82



### On Farm Trial: 4

**Discipline** : Agriculture Engineering  
**Title** : Assessment of improved weeding implements for weeding in gram  
**Crop** : Gram  
**No. of Trials** : 8  
**Area** :

Treatment	Technology
F.P	Khurpi
T <sub>1</sub>	Three tyne Grubber
T <sub>2</sub>	Three tyne wheel hand hoe
<b>Result</b>	A twin wheel hoe or three tyne is preferable to the khurpi

Treatments	Heart rate at work (beats/min)	Weeding efficiency (%)	Field capacity (ha/h)	Weeding cost
F.P	112.7±0.66	93.7±0.25	0.002	Rs15675 (57 mandays* /ha)
T <sub>1</sub>	135.9±0.79	70.6±1.07	0.003	Rs. 6050(22 mandays /ha
T <sub>2</sub>	121.9±1.34	74.9±1.06	0.007	Rs.5225 (19 mandays)

- A manday costs Rs.275



#### On Farm Trial: 5

**Discipline** : Agriculture Engineering  
**Title** : Assessment of Sugarcane single node bud cutter/sugarcane bud chipper for drudgery reduction  
**Crop** : Sugarcane  
**No. of Trials** : 10  
**Area** :

Treatment	Technology			
F.P	Sugarcane sett cutting by axe			
T <sub>1</sub>	Sugarcane bud cutter			
T <sub>2</sub>	Sugarcane bud chipper.			
<b>Result</b>	Sugarcane bud chipping is economic in terms of savings in sugarcane.			
Treatments	Bud chipping capacity (bud/h)	Heart rate at work (beats/min)	Saving in sugarcane (%)	Sugarcane germination (%)
F.P	-	127±2.67	0	63
T <sub>1</sub>	451 ±37.65	110±1.56	65.28	82
T <sub>2</sub>	393±17.54	113±1.89	74.47	92



## On Farm Trial: 6

**Discipline** : Home Science  
**Title** : Assessment of preparation methods of carrot paste for more shelf life, enhancement of nutrition & Income  
**Crop** :  
**No. of Trials** : 10  
**Area** :

Treatment	Technology
<b>F.P</b>	Local people consume fresh carrot as such as vegetables or juice.
<b>T<sub>1</sub></b>	Preparation of carrot paste Formulation-ingredients Carrot-1kg, sugar-250g, Salt-50g, Glacial Ascetic acid-5.0 ml, Sodium Benzoate-1.5g
<b>T<sub>2</sub></b>	Preparation of carrot paste with spices. Formulation-Ingredients Carrot-1kg, sugar-250g, Salt-50g, Glacial Ascetic acid-2.0 ml, Red chili powder-3.0g, dried Ginger powder-5.0g, dried black pepper powder-2.0g, Cinnamon and Cardamom powder-5.0 g, Sodium Benzoate-1.5g
<b>T<sub>3</sub></b>	Preparation of carrot paste blended with tomatoes. Formulation-Ingredients Carrot-500g, Tomatoes-500g, sugar-250g, Salt-50g, Glacial Ascetic acid-2.0 ml, Red chili powder-3.0g, dried Ginger powder-5.0g, dried black pepper powder-2.0g, Cinnamon and Cardamom powder-5.0 g, Sodium Benzoate-1.5g
<b>Result</b>	A combination of spices, preservatives and packaging materials improves the overall acceptability and shelf life of the product. Shelf life of T.O. 2 is more than T.O.1 and T.O.3

### Treatments

#### Organoleptic evaluation (n=10). F\*=Fair, G\*\*=Good, E\*\*\*=Excellent

	Colour			Appearance			Texture			Taste			Overall acceptability		
	F*	G**	E***	F*	G**	E***	F*	G**	E***	F*	G**	E***	F*	G**	E***
<b>T<sub>1</sub></b>	3	6	1	3	5	2	4	4	2	3	5	2	4	3	3
<b>T<sub>2</sub></b>	2	4	4	1	5	4	2	4	4	3	2	5	1	5	4
<b>T<sub>3</sub></b>	1	4	5	1	3	6	2	4	4	1	3	7	1	2	7

#### Shelf life of carrot paste in Pet jar, (n=10),

	F*	G**	E***	
<b>T<sub>1</sub></b>	3	5	2	Shelf life: Fair= 0-25 days, Good 26-50 days, Excellent ≥51 days
<b>T<sub>2</sub></b>	1	4	5	
<b>T<sub>3</sub></b>	2	5	3	



**On Farm Trial: 7**

**Discipline** :Home Science  
**Title** : Assessment of preparation methods of potato flakes for more shelf life & enhancement income.  
**Crop** :  
**No. of Trials** : 10  
**Area** :

Treatment	Technology														
<b>F.P</b>	Local people consume fresh potatoes as such as vegetables														
<b>T<sub>1</sub></b>	Preparation of Potato Flakes Formulation-ingredients Sliced potatoes (3-5mm)-5.0 kg, Salt-50g, Water-7.5 liter, KMS-6.0g														
<b>T<sub>2</sub></b>	Preparation of Potato Flakes with sour taste. Formulation-Ingredients Sliced potatoes (3-5mm)-5.0 kg, Salt-50g, Water-7.5 liter, KMS-6.0g, Glacial Acetic acid-50.0 ml.														
<b>Result</b>	A combination of KMS and Glacial acetic acid improve the overall acceptability and shelf life of T.O. 2														
<b>Treatments</b>															
<b>Organoleptic evaluation (n=10). F*=Fair, G**=Good, E***=Excellent</b>															
	Colour			Appearance			Texture			Taste			Overall acceptability		
	F*	G**	E***	F*	G**	E***	F*	G**	E***	F*	G**	E***	F*	G**	E***
<b>T<sub>1</sub></b>	1	7	2	2	6	2	2	5	3	3	5	2	2	4	4
<b>T<sub>2</sub></b>	1	4	5	2	5	3	2	5	3	1	4	5	1	4	5
Shelf life of potato flakes in pet jar (n=10),															
	F*	G**	E***												
<b>T<sub>1</sub></b>	1	6	3	Shelf life: Fair= 0-25 days, Good 26-50 days, Excellent ≥51 days											
<b>T<sub>2</sub></b>	1	5	4												



**On Farm Trial: 8**

**Discipline** : Animal Science  
**Title** : Evaluation of area specific mineral mixture in cattle  
**Animal** : Cattle  
**No. of Trials** : 10  
**Area** :

Treatment	Technology					
F.P	Inadequate mineral supplementation					
T <sub>1</sub>	Area specific mineral mixture* (ICAR-RCER, Patna)					
T <sub>2</sub>	Commercial mixture**					
Result: Both Area specific mineral mixture and commercial mineral mixture performed better than Inadequate supplementation						
Treatments	Milk Yield (L/day)	Increase in yield	Cost (Rs./animal/day)	Gross return (Rs./ha)	Net Return (Rs./ha)	BC Ratio
F.P	6.846	-	101	171	70	1.7
T <sub>1</sub>	8.96	30 %	102	224	122	2.19
T <sub>2</sub>	9.0	31.4 %	108	225	117	2.0

**P. TV Talk/Radio Talk:**

Sl. No.	Topic of the talk	Name of Scientist	TV/Radio talk station	Date of Recoding
1.				
2.				
3.				
4.				
5.				

**Q. Other Special programme/ salient achievement/activities conducted at KVK:**

Sl. No.	Particulars	Date	No. of Participants
1.	World Bee day	20.05.2021	12
2.	World Milk Day	01.06.2021	96
3.	Balance use of fertilizer	18.06.2021	30
4.	ICAR foundation day	16.07.2021	55
5.	National Campaign on food and nutrition for farmers	26.08.2021	125
6.	Poshan Vatika and tree Plantation	17.09.2021	261
7.	Climate Resilient Agriculture and farmer scientist interface	28.09.2021	209
8.	Special Swacchata Campaign	06.10.2021	113
9.	Mahila Kisan Diwas	15.10.2021	38
10.	World Food Day	16.10.2021	35
11.	Agriculture and Environment: The Citizen Face	26.11.2021	115
12.	Natural Farming	30.11.2021	26
13.	World Soil Day	05.12.2021	70
14.	Live telecast natural farming	16.12.2021	311
15.	Swacchata Pakhwad celebration	16 <sup>th</sup> to 31 <sup>st</sup> Dec, 2021	46

16.	Kisan Diwas	23.12.2021	30
17.	PM Samman Nidhi Programme live telecast	01.01.2022	30
18.	World Pulsed Day	10.02.2022	25
19.	International Women Day	08.03.2022	60

**R. SAC conducted at KVK:**

SI. No.	Particulars	Date	No. of Participants
1.	12 <sup>th</sup> SAC meeting	14 <sup>th</sup> Dec, 2021	26

**S. List of visitor at KVK:**

Date	Name & Designation	Purpose of visit
09.06.2021	Dr. Ravindra Kumar, Director Research, BASU, Patna	Visit
16.07.2021	Shri Harendra Sah, Ex. Zila Parshad	Plantation training
25.08.2021	Dr. Rajkumar Jat, Scientist, In-charge, BISA	CRA Project
31.08.2021	Dr. Pankaj Kumar, Sr. Scientist, DLFM, ICAR-RCER, Patna	Animal Health Camp
	Dr. Manoj Kumar Tripathi, Scientist, DLFM, ICAR-RCER, Patna	
28.09.2021	Shri Sambhunath Tiwari, Superintendent (Retd.) GST & Central Excise	Climate Resilient Agriculture
26.11.2021	Shri Shakti Kumar Paswan, Teacher, Middle School, Rupchap	Constitution Day
	Shri Surendra Kumar Rai, Teacher, Middle School, Kala Matihiniya	
05.12.2021	Shri Abhishek Ranjan, DDC, Gopalganj	World Soil Day
	Dr. Ved Narayan Singh, DAO, Gopalganj	
	Dr. Md. Reyaz Ali, TVO, Gopalganj	
	Er. Gautam Kumar, ADE, Gopalganj	
	Shri Vikash Kumar, PD, ATMA, Gopalganj	
16.12.2021	Shri Sunil Shukla, Chairman Pacs	Natural Farming, Live telecast
	Shri Shashikant Shukla, Ex-Mukhiya, Baliwan Sagar	
27.12.21	Kisan shree Hareram Pandey, Dumraon, Buxar	KVK visit
	Kisan Shree Vinod Kumar Singh, Simri, Buxar	
12.01.22	Shri Gaurav Kumar Mishra, Mahatma Gandhi National Fellow, Ministry of skill development	KVK Visit
22.02.22	Dr. Man Singh, Director, Directorate of Rice development, Govt of India, Ministry of Ag & Farmers welfare, Patna	Monitoring of CFLD (oilseed)
01.03.22	Shri Deendayal Pandey, Sugar Mill, Gopalganj	Training Plan and visit
02.03.22	Shri Chandrabhan Pandey, Programme offier, Kuchaikote	Plan under “Jal Jeevan Hariyali” for check dam, soil filling etc. at KVK
	Shri Sahab Yadav, District Programme Officer, MGNREGA, DRDA, Gopalganj	
17.03.22	Dr. N. Saravana Kumar, Secretary, Agriculture, GoB, Bihar	CRA programme visit
29.03.22	Shri Mankeshwar Kumar, Sr. Deputy Collector, Gopalganj	Thawe Festival

**T. Participation in National Conference, Sumer/Winter School, Workshop, Training Programme etc.**

<b>Name of Programme</b>	<b>Nature of Programme Attended</b>	<b>Date</b>
National Conference	Web conference on “Management of water logged and flood prone areas in Bihar”	5 <sup>th</sup> June, 2021
	International conference (online) on “Agriculture, Biological and Life science (ICABLS-2021)	25 <sup>th</sup> to 26 <sup>th</sup> Sep, 2021
	IFFCO National Conference	25 <sup>th</sup> Sep, 2021
Summer/Winter School	National Training course on “Advances in Veterinary Research for sustainable development of livestock sector” organized by ICAR-IVRI, Regional station, Palampur, (HP) and National Agriculture Development Cooperative Ltd. (NADCL), Baramulla, J&K	1 <sup>st</sup> to 21 <sup>st</sup> September, 2021
Workshop	OFT workshop on Horticulture	25 <sup>th</sup> -26 <sup>th</sup> March, 2021
	Pre-meeting zonal workshop	3 <sup>rd</sup> July, 2021
	Pre-presentation of zonal workshop	12 <sup>th</sup> July, 2021
	Presentation at zonal workshop	14 <sup>th</sup> -15 <sup>th</sup> July, 2021
	Zonal Workshop	9 <sup>th</sup> Sep, 2021
	Vetting workshio on DACP	1 <sup>st</sup> Nov, 2021
Training Programme	Task Force meeting	21 <sup>st</sup> April, 2021
	Custom Hiring	26 <sup>th</sup> April, 2021
	Statistical data analysis using SPSS	21 <sup>st</sup> to 27 <sup>th</sup> May, 2021
	ATARI, Patna	7 <sup>th</sup> June, 2021
	CRA Programme	10 <sup>th</sup> June, 2021
	Monthly Review meeting of KVK	16 <sup>th</sup> June, 2021
	Review of KVKs	23 <sup>rd</sup> June, 2021
	EDNF recipes under SNP of ICDS	17 <sup>th</sup> and 19 <sup>th</sup> June, 2021
	One District One Product porgramme	6 <sup>th</sup> July, 2021
	Programming on web application using low code platforms”	7 <sup>th</sup> to 12 <sup>th</sup> July, 2021
	Kisan Sarthi	23 <sup>rd</sup> July, 2021
	Technological intervention for rural entrepreneurship	27 <sup>th</sup> to 30 <sup>th</sup> July, 2021
	Review of work	4 <sup>th</sup> Aug, 2021
	Orientation cum training programme on use of statistical tools in agriculture and allied	16 <sup>th</sup> to 19 <sup>th</sup> August, 2021

	field	
	Roadmap for KVKs to enhance mushroom production and consumption	9 <sup>th</sup> to 11 <sup>th</sup> Aug, 2021
	Kisan Sarthi	12 <sup>th</sup> Aug, 2021
	Integrated Parthenium Management	19 <sup>th</sup> Aug, 2021
	Digital training programme on fruit science research progress and prospects	01 <sup>st</sup> to 08 <sup>th</sup> Sep, 2021
	Pre-EEC and EEC meeting	3 <sup>rd</sup> -4 <sup>th</sup> Sep, 2021
	21 days National training course on “Advances in veterinary Research for sustainable development of livestock sector”	01 <sup>st</sup> -21 <sup>st</sup> Sep, 2021
	Zila Bagwani Vikash Samiti	22 <sup>nd</sup> Sep, 2021
	IFPRI	11 <sup>th</sup> Oct, 2021
	Kisan Sarthi	22 <sup>nd</sup> Oct, 2021
	ATARI, Patna	27 <sup>th</sup> Sep, 2021
	Kisan Sarathi	25 <sup>th</sup> Oct, 2021
	Navchari meeting	5 <sup>th</sup> Nov, 2021
	Health and Nutrition aspect	9 <sup>th</sup> Nov, 2021
	Virtual	16 <sup>th</sup> Nov, 2021
	Inauguration of ATARI, Patna building	23 <sup>rd</sup> Nov, 2021
	PM formalization of micro food processing enterprised (PMFME)	23 <sup>rd</sup> Nov, 2021
	Review meeting of CRA	27 <sup>th</sup> Nov, 2021
	Kisan mela meeting	4 <sup>th</sup> Jan, 2022
	ATARI Patna (Virtual)	11 <sup>th</sup> Jan, 2022
	Capacity building programme on horticulture commercialization and entrepreneurship development in horticulture sector	10 <sup>th</sup> to 12 <sup>th</sup> Jan, 2022
	ATARI Patna (Virtual)	13 <sup>th</sup> Jan, 2022
	Expenditure meeting (Virtual)	17 <sup>th</sup> Jan, 2022
	CRA meeting	4 <sup>th</sup> Feb, 2022
	Capacity Development programme	26 <sup>th</sup> to 28 <sup>th</sup> Feb, 2022
	Annual progress of CFLD oilseed and pulses	7 <sup>th</sup> -8 <sup>th</sup> March, 2022
	Review meeting (Virtual)	11 <sup>th</sup> March, 2022
Seminar/Symposium	National Seminar on “Advances in sustainable management of National Resource for food and National security	26 <sup>th</sup> -27 <sup>th</sup> Aug, 2021
	National Seminar on “Rice fallow management in Eastern India	26 <sup>th</sup> Aug, 2021
	Bihar Entrepreneurship Summit	21 <sup>st</sup> March, 2022

Others (Webinar)	Webinar on “Rodent Management”	01 <sup>st</sup> July, 2021
	National Webinar on “Microbial biopesticides next generation”	2 <sup>nd</sup> July, 2021
	Webinar on “Role of microbial organisms in resilient agriculture”	5 <sup>th</sup> July, 2021
	Webinar on “Agricultural Residues conversion to biofuels through solar powered pyrolysis”	27 <sup>th</sup> Aug, 2021
	National webinar on “scientific Goat farming from livelihood to financial security”	18 <sup>th</sup> Sep, 2021
	Webinar on “Important animal diseases and their control program in India”	23 <sup>rd</sup> Oct, 2021
	Utilization of fruit waste for economic and nutritional security	11 <sup>th</sup> Feb, 2022
	Budget announcement 2022	24 <sup>th</sup> Feb, 2022

#### U. Other Extension activities

Sl. No.	Name of Ext. Activities	No. of Activities	Beneficiaries		
			Male	Female	Total
1.	Kisan Mela	3	879	302	1181
2.	Kisan Gosthi	2	188	22	210
3.	Field Day	5	184	7	191
4.	Farmers Visit to KVK	12	699	18	717
5.	Scientist Visit of farmers field	12	317	19	336
6.	Animal Health Camp	1	23	1	24
7.	Exposure Visit	10	679	177	856
8.	Lecture Delivered as Resource Person	16	775	162	937
9.	Number of Agro Advisories (By Phone)	12	1700	49	1749
10.	Number of SMS Advisories sent				
11.	Number of Agro Metrological Advisories				
12.	Any other (Diagnostic visit)	14	16	3	19
13.	Any other (E-Chaupal)	3	120	7	127
14.	Any other (Krishak Seminar)	4	810	70	880

## V. PUBLICATION:

### (i) Research papers published (01.04.21 to 31.03.22)

Name of the author (s)	Year	Title	Name of the Journal & NAAS Rating	Vol. No. & Page No.
Sanjeev Kumar, <b>Naveen Kumar</b> , Ritesh Kumar, K.P. Pandey	2020	An instrumentation system for monitoring field performance of agricultural tractor under ballasting and non-ballasting condition.		Agricultural Engineering Today. 44:2:32-40
Kaushal Kusum, <b>Ramakrishna Roy</b> , Vijay B., Sharma, Raghavendra Prasad Mishra, Neha Singh	2021	Cryoprotective activity of Glycerol and Ethylene Glycol: Dynamics with Canine Sperm Integrity.	6.44	Accepted for publication by Indian Journal of Animal Research
<b>Amit Visen</b> , Pramodh Narayan Singh, Binayak Chakraborty, Anand Singh, Tejpal Singh Bisht	2021	Scanning electron microscopy indicates Pseudomonas strains facilitate AMF mycorrhization in litchi (Litchi chinensis Sonn.) air-layers and improving survivability, growth and leaf nutrient status.	13.934	Current Research in Microbial Sciences 2 (2021) 10063
Pankaj Kumar, Prabhas Kumar, <b>Ramakrishna Roy</b> , Rashmi Rekha Kumari, Abhay Kumar, Kamal Sharma, Manish Kumar	2021	Mixed infection of Tick-borne Haemo-parasites in Water Buffalo and Associated pathological Responses and treatment.	6.44	Ind. J. Animal Research. (D01:10.18905/IJAR. B-4450)

### (ii) Book Chapters (01.04.21 to 31.03.22)

Name of the author (s)	Year	Chapter	Name of Books & its ISBN No.	Pages	Name of Publisher

### (iii) Technical bulletins published (01.04.21 to 31.03.22)

Name of the Author (s)	Year	Title	Name of Publisher	No. of Pages	No. of Copies Printed	Price

**(iv) Popular articles published (01.04.21 to 31.03.22)**

Name of the Author (s)	Year	Title	Name of the Magazine	Vol. No. & Page Numbers
Ravikant Kumar, Ramakrishna Roy, Sanjay Kumar, Naveen Kumar and Amit Visen	2022	Jaivik Khad apnayen utpadan ki Gunwatta Badhayen	Adhunik Kisan	117-120



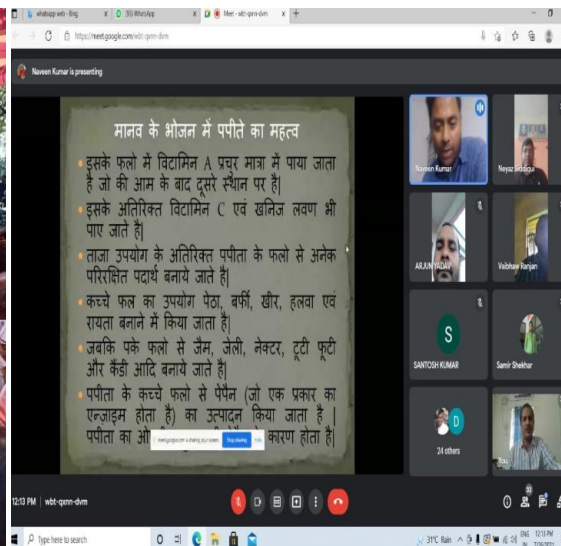
Cattle Production



Goat Production



World Soil Day



Online training Papaya



Planting Materials (JSA)



Animal Health Camp

**ACTION PLAN**  
**2022-23**

**A. Training Programme**

**(i) Practicing Farmers/Farm Women.**

SI. No.	Discipline	Target	No. of Beneficiaries		Total
			Male	Female	
1.	Crop production (Agro/ Plant Breeding/ Soil Sci/ Extn.)	24	480	120	600
2.	Horticulture	24	534	66	600
3.	Plant Protection	24	515	85	600
4.	Home Science	24	0	600	600
5.	Vet. /Fisheries	12	247	53	300
6.	Agricultural Engineering	24	464	136	600

**(ii) Rural Youth:**

SI. No.	Discipline	Target	No. of Beneficiaries		Total
			Male	Female	
1.	Crop production (Agro/ Plant Breeding/ Soil Sci/ Extn.)	6	120	30	150
2.	Horticulture	6	140	10	150
3.	Plant Protection	6	127	24	151
4.	Home Science	6	0	150	150
5.	Vet. /Fisheries	3	75	0	75
6.	Agricultural Engineering	4	79	21	100

**(iii) Extension Functionaries:**

SI. No.	Discipline	Target	No. of Beneficiaries		Total
			Male	Female	
1.	Crop production (Agro/ Plant Breeding/ Soil Sci/ Extn.)	4	80	20	100
2.	Horticulture	4	80	20	100
3.	Plant Protection	4	103	11	114
4.	Home Science	6	0	150	150
5.	Vet. /Fisheries	1	25	0	25
6.	Agricultural Engineering	4	86	14	100

**(iv) Vocational Training:**

SI. No.	Discipline	Target	No. of Beneficiaries		Total
			Male	Female	
1.					
2.					
3.					
4.					
5.					

**B. Seed Produced/Planting Material/Spawn/Varmicompost/Bio-Pesticide/ Fingerlings/ Chicks Production.**

Sl. No.	Crop	Variety/Species	Area (ha)/ Number	Expected Yield/Number
1.	Paddy	R. Saraswati	7.0	210 q
2	Pigeonpea	Rajendra Arhar 1	1.0	4.0 q
3.	Wheat	DBW 252/187	7.0	210 q
4.	Pea	HUDP 15	0.5	4.0 q
5	Chick pea	GNG 2299	1.0	8.0 q
6.	Rai	R. Suflam	2.0	20 q
7	Green Gram	Virat	1.0	4.0 q
8.	Chillis	Kashi ratna	5,000	10 q
9	Tomato	Kashi Adarsh	5,000	50 q
10	Cauliflower	Pusa Synthetic	5,000	30 q
11	Cabbage	Pusa Ageti	5,000	25 q
12.	Papaya	Red Lady	3,000	400 q
13.	Vemicompost			10 q

**C. FLD:**

Season	Variety/ Tech demo.	Area (ha)/No.	No. of Demonstration
<b>FLD</b>			
<b>Kharif</b>			
Mushroom	Oyster	20	20
Sorghum	CSV-32	2.0	15
<b>Summer</b>			
Okra	Kashi Kranti	1.0	50
Mushroom	Button	10	10
Berseem	Mescavi	2.0	20
Oats	IPO 212	2.0	20
Wheat	Reaper cum Binder	4.0	10
<b>CFLD (Oilseed)</b>			
Oilseed & Rapeseed	RH 0749/ RH 0725/ R. Suflam	60	150
<b>CFLD (Pulses)</b>			
Pigeonpea	R. Arhar 1	10	25
Lentil	HUL 57	10	25
Greengram	Virat	20	50
<b>CRA Programme</b>			
<b>Kharif</b>			
Paddy	Direct seeded rice	120	300
Paddy	Alternate wetting/drying irrigation in rice	36	90
Paddy	Water harvesting and field bunding in rice	16	40
Paddy	Nutrient expert/green based nutrient management/INM	10	25

Paddy	Community irrigation/ Subsurface irrigation systems	8	20
Arhar	Raised bed planting	18	45
Maize and Arhar	Intercropping	16	40
Maize	Raised bed planting	12	30
Finger millet	Conventional	2	5
<b>Rabi</b>			
Maize and Potato	Intercropping	12	30
Maize	Raised bed planting	28	70
Wheat	Zero tillage	120	300
Wheat	Raised bed planting	30	75
Lentil	Zero tillage	20	50
Mustard	Raised bed	20	50
Wheat	Nutrient expert/green based nutrient management/INM	10	25
Wheat	Community irrigation/ Subsurface irrigation systems	8	20
Potato	Potato based farming system	3	3
<b>Summer</b>			
Green Gram	Zero Tillage	100	250
Land Levelling	Land Levelling	40	100

**(D) Other Extension activities**

Sl. No.	Name of Ext. Activities	No. of Activities	Participants
1.	Kisan Mela	5	1000
2.	Kisan Gosthi	10	200
3.	Field Day	10	500
4.	Farmers Visit to KVK	-	1000
5.	Scientist Visit of Farmers Field	50	200
6.	Mobile Services	-	800
7.	Animal Health Camp	3	200
8.	Exposure Visit	4	200
9.	Lecture Delivered as Resource Person	12	300
10.	Any other (Celebration of important days)	5	250

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