

CLUSTER FRONT LINE DEMONSTRATION OF SUMMER PULSE (2017-18)

1. **Name of KVK:** Rathindra Krishi Vigyan Kendra
2. **Year of establishment:** 1994
3. **Host Institution:** Visva-Bharati University, Santiniketan, Dist. – Birbhum, Pin. – 731235, West Bengal.
4. **Address of KVK:** Rathindra Krishi Vigyan Kendra, Palli Siksha Bhavana, Visva-Bharati, Sriniketan, P. O. – Sriniketan, Dist. – Birbhum, Pin. – 731236, West Bengal. Phone: 03463-264771, email: rathindrakvk@gmail.com, rathindrakvk@rediffmail.com

Performance of the demonstration:

A. Technical Parameters:

Sl. No.	Crop demonstrated	Existing (Farmer's) variety name	Existing yield (q/ha)	Yield gap (Kg/ha) w.r.to			Name of Variety + Technology demonstrated	Number of farmers	Area in ha	Yield obtained (q/ha)			Yield gap minimized (%)		
				District yield (D)	State yield (S)	Potential yield (P)				Max.	Min.	Av.	D	S	P
1	Crop: - Summer-2017-18, Green gram	Panna	8.8	170	+69	620	HUM-16 + Herbicides, Micronutrient spray	93	10	13.85	9.20	13.15	241	304	70

Seeds of Improved Variety HUM-16 @ 30 kg/, Method of seed sowing: - Broadcasting, Application of herbicides; Pendimethalin @ 3 lit. / ha at 1- 3 DAS, Foliar Spray of Micro- Nutrients: - B- 20 @ 2 gm. / lit. of water at 25 and 45 DAS.

B. Economic parameters

Sl. No.	Variety demonstrated & Technology demonstrated	Farmers' Existing plot				Demonstration plot				Farmers' feedback
		Gross Cost (Rs./ha)	Gross return (Rs./ha)	Net Return (Rs./ha)	B:C ratio	Gross Cost (Rs./ha)	Gross return (Rs./ha)	Net Return (Rs./ha)	B:C ratio	
1	Var HUM-16 Herbicides, Micronutrient spray	18810	52800	33990	2.81	20020	78900	58880	3.94	Additional net return is Rs.24890/ha

C. Socio-economic impact parameters

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained	Produce sold (Kg./household)	Selling Rate (Rs. /Kg.)	Produce used for own sowing (Kg.)	Produce distributed to other farmers	Purpose for which income gained was utilized	Employment Generated (Man days / house hold)
1.	Green Gram HUM-16 + Herbicides, Micronutrient spray	13150 kg	100	60.00	Rest is kept for Dal processing and sowing seeds in the next season.	-	Payment for Labour bill, payment for irrigation, fertilizer and pesticide expenditures.	11

D. Pulse Farmer's perception of the intervention demonstrated

Sl. No.	Technologies demonstrated (with name)	Farmers' Perception parameters					
		Suitability to their farming system	Likings (Preference)	Affordability	Any negative effect	Is Technology acceptable to all in the group/village	Suggestions, for change/improvement, if any
1.	Crop:- Green Gram Var- HUM-16 + Herbicides, Micronutrient spray	Suitable to a large extent.	Farmers prefer medium size of seeds and luxurious shiny colour of the seeds of the variety.	New improved variety seeds are affordable. However other components of package of practices like herbicides, plant protection chemicals, micro-nutrients, chemical fertilizers, irrigations etc. are not at all affordable except a very few from the beneficiaries when the programme support would be withdrawn.	None	No, the improved variety and the technological supportive package of practices are acceptable to the partner farmers of the Cluster FLD; but other farmers are still apprehensive about the availability of seeds of the improved varieties and the market acceptance of these new improved varieties. The farmers are greatly concerned about the rising prices of inputs like herbicides, micro-nutrients, plant protection chemicals, irrigation water, labour etc.	Availability of seeds should be ensured in time. Appropriate good quality <i>Rhizobium</i> culture should be ensured for supply among the farmers. Low cost quality herbicides and micro-nutrients should be encouraged for dissemination among the farming community. Proper irrigation facilities should be created by the Governmental agencies.

E) Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
1. Duration	Shorter	New variety: 75 days Local check: 90 days	49 % increase in yield was obtained through the new technology than local check. The new variety fetched more benefit in shorter duration i.e. additional net return Rs. 24890/ha than local check which is very much encouraging for summer green gram cultivation instead of summer rice.
2. No. of branches/ plant	Highly branched	New technology: 16 Local check: 10	
3. No. of pods /plant	Higher	New technology: 37 Local check: 21	

F) Extension activities under FLD conducted till dates:

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
1.	Broadcasting of Live phone in pulses cultivation in summer season through All India Radio.	20.02.2018	-
2.	Training Programme on Sowing & Fertilizer management of summer green gram.	16.03.2018 Rathindra KVK	19
3.	Training Programme on Seed production technologies and crop diversification of summer green gram.	23.03.2018 to 27.03.2018 Rathindra KVK	34
4.	Training Programme on Spraying of micro-nutrients production technology in crop diversification of summer green gram.	03.04.2018 Rathindra KVK	08

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

Rathindra KVK Scientists at the Off-Campus Training Programme on the Cluster FLD Programme on Summer Pulse



Photographs of Seed Distribution



Collecting Data at the Vegetative Stage of Green Gram



Rathindra KVK Technology Agent collecting Data at the Flowering Stage of Green Gram



Rathindra KVK Scientist collecting Data at the Maturity Stage of Green Gram



Rathindra KVK Scientist collecting Data at the Harvesting Stage of Green Gram



H. Details of budget utilization

Crop (provide crop wise information)	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Summer, 2017-18,(Green Gram)	i) Critical input	NIL	64490.00	-64490.00
	ii) TA/DA/POL etc. for monitoring			
	iii) Extension Activities (Field day, training etc)			
	iv)Publication of literature etc.			
Total		NIL	64490.00	-64490.00

I. List of Farmer under FLD (Crop wise)

Crop :- Green Gram

Name of farmer	Father's name	Village	Block	Mobile No.	Email ID	GPS Coordinates (DDMMSS format)	Soil testing done (Yes/No)	Reco mme ndati ons based on soil test value	Brief techno logy interv ention	Variety	Seed quan tity used	Are a sow n (ha.)	Demo. Yield (q/ha)	Y i e l d o f l o c a l c h e c k	% inc rea se

	SI															
SUDEB MOND AL	LATE NARUG OPAL DEBANG SI	DIGHA	SAIN THIA	9933615 462									0.14	1.93		
ADYA NATH GHOSH	GBINDA CHANN DRA GHOSH	DIGHA	SAIN THIA	9647509 443									0.2	2.75		
AKSHO Y DAS	FALGUN I DAS	DIGHA	SAIN THIA	8641060 401									0.09	1.25		
MALA Y GHOSH	DIBAKA R GHOSH	DIGHA	SAIN THIA	9641679 395									0.09	1.23		
BIMAL GHOSH	LATE RENUKA R GHOSH	DIGHA	SAIN THIA	7797448 678									0.14	1.93		
RAJES H GHOSH	LT UJJWAL GHOSH	DIGHA	SAIN THIA	8001404 405									0.14	1.89		
SUJAN PATUA	NIYAMA T PATUA	DIGHA	SAIN THIA	8762721 836									0.07	0.96		
SWAR UP GHOSH	JA HAR GHOSH	DIGHA	SAIN THIA	9083219 135									0.14	1.92		
BHABA SINDH U GHOSH	SUKUM AR GHOSH	NARAYA NPUR	SAIN THIA	9564958 412									0.14	1.92		
SUBHE NDU BANER JEE	PARADA KINKAR BANERJ EE	NARAYA NPUR	SAIN THIA	9593538 350									0.09	1.24		
HARA DHAN	LT NABAK	BALARPU R	SAIN THIA	8327811 634									0.07	0.95		

GHOSH	UMAR GHOSH																
NIROD BARAN DEBAN GSI	LATE KAMAL A DEBANG SI	DEBANA NDAPUR	BOLP UR SRINI KETA N	9679896 570									0.14	1.93			
SUBOD H PAL	BHUDH AR PAL	DEBANA NDAPUR	BOLP UR SRINI KETA N	9932313 954									0.14	1.89			
SAMES H PAL	ISHTAP ADA PAL	DEBANA NDAPUR	BOLP UR SRINI KETA N	9641857 798									0.14	1.87			
GOUTA M PAL	LAKSHI KANTA PAL	DEBANA NDAPUR	BOLP UR SRINI KETA N	9547311 881									0.09	1.21			
CHHOT TU GHOSH	SANAT GHOSH	DEBANA NDAPUR	BOLP UR SRINI KETA N	9775729 496									0.09	1.20			
SUKUL MARDI	LATE BADAL MARDI	USHAHA R	ILLA MBA ZER	8159853 319									0.14	1.88			
MRITA NJOY MATE	LATE SHIBKA R MATE	SENKAPU R	BOLP UR SRINI KETA N	8967468 545									0.14	1.85			
DHANE SWAR BARM	LATE KRISHN A	DEULI	BOLP UR SRINI	8926536 411									0.14	1.80			

AN	BARMA N		KETA N													
SUMAT I TUDU	SOMAI TUDU	HATPUKU RDANGA	BOLP UR SRINI KETA N	8167712 174									0.07	0.90		
RADHI KA TUDU	MADHA B TUTU	HATPUKU RDANGA	BOLP UR SRINI KETA N	8167712 174									0.07	0.90		
SUMI TUDU	RABAI TUDU	HATPUKU RDANGA	BOLP UR SRINI KETA N	8926536 411									0.07	0.90		
RASM ANI KISKU	PARIMA L TUDU	HATPUKU RDANGA	BOLP UR SRINI KETA N	8759007 237									0.07	0.88		
PAKU MURM U	TARAPA DA MURMU	HATPUKU RDANGA	BOLP UR SRINI KETA N	8759007 237									0.07	0.79		
CHAN DI HEMB RAM	SAHAN HEMBR AM	HATPUKU RDANGA	BOLP UR SRINI KETA N	8926056 411									0.07	0.91		
SABI SOREN	SAHAN SOREN	HATPUKU RDANGA	BOLP UR SRINI KETA N	8779007 237									0.07	0.88		
UPEN	LATE	SRIHARP	ILLA	8926536									0.14	1.75		

BISWAS	ADYANTH BISWAS	UR	MBA ZER	411												
RAMDASTUDU	MATAL TUDU	USHAHA R	ILLA MBA ZER	8759007 237									0.09	0.828		
TARAMANITUDU	KHOLA TUDU	USHAHA R	ILLA MBA ZER	8759007 237									0.14	1.72		
CHHABIRANITUDU	ANIL TUDU	FARIDPU R	BOLP UR SRINI KETA N	9609646 189									0.07	0.95		
RASHIKISKU	SADAWAN KISKU	FARIDPU R	BOLP UR SRINI KETA N	7319074 754									0.14	1.90		
MAKHAN TUDU	SHIBU TUDU	FARIDPU R	BOLP UR SRINI KETA N	9609646 411									0.07	0.92		
HIRAMANI TUDU	SANAT TUDU	FARIDPU R	BOLP UR SRINI KETA N	9609646 411									0.09	1.21		
MONIHANSDA	MOHAN HANSDA	FARIDPU R	ILLA MBA ZER	7319074 754									0.09	1.19		
BURITUDU	BADAL TUDU	FARIDPU R	BOLP UR SRINI KETA N	9609646 671									0.07	0.90		
KAMB	LAKASH	FARIDPU	BOLP	7319074									0.14	1.90		

O KISKU	MIRAM KISKU	R	UR SRINI KETA N	754												
BUDIN TUDU	JAGAI TUDU	FARIDPU R	BOLP UR SRINI KETA N	7319074 754									0.09	1.24		
LAXMI MURMU U	RAM MURMU	FARIDPU R	BOLP UR SRINI KETA N	7319074 754									0.14	1.92		
LAKS HMI MARD I	MONGO L MARDI	FARIDPU R	BOLP UR SRINI KETA N	894290 2797									0.14	1.94		
MUNG LI TUDU	MOHAN TUDU	FARIDPU R	BOLP UR SRINI KETA N	8597054 298									0.09	1.22		
MUNG ALI TUDU	KUMAR ESH TUDU	FARIDPU R	BOLP UR SRINI KETA N	8597054 298									0.07	0.95		
SADE MURMU U	DURGA MURMU	FARIDPU R	BOLP UR SRINI KETA N	8759007 237									0.07	0.93		
CHURK I HEMR AM	BABULA L HEMRA M	FARIDPU R	BOLP UR SRINI KETA	8926536 411									0.14	1.91		

			N													
MALATI SOREN	SUNO SOREN	FARIDPUR	BOLPUR SRINIKETAN	8597054 298									0.07	0.95		
SHUKARMANI TUDU	LAXMAN TUDU	FARIDPUR	BOLPUR SRINIKETAN	9609646 189									0.09	1.20		
SUNDARI MURMU	GANGADHAR MURMU	FARIDPUR	BOLPUR SRINIKETAN	7319074 754									0.14	1.90		
SUKHI MURMU	MALAY MURMU	FARIDPUR	BOLPUR SRINIKETAN	7319074 754									0.07	0.95		
MALATI MURMU	KALOMURMU	FARIDPUR	BOLPUR SRINIKETAN	9609646 189									0.09	1.21		
MUNITUDU	SOM TUDU	FARIDPUR	BOLPUR SRINIKETAN	8926536 411									0.14	1.90		
MALATI HANSDA	KHANDA HANSDA	FARIDPUR	BOLPUR SRINIKETAN	8759007 237									0.07	0.92		
SUMIHEMR	KALOHEMRA	FARIDPUR	BOLPUR	9609646 189									0.14	1.92		

AM	M		SRINI KETA N														
MOHIN ITUDU	MANGA LA MURMU	FARIDPU R	BOLP UR SRINI KETA N	8926536 411									0.14	1.90			
CHAIT ALI TUDU	BADAN MARDI	FARIDPU R	BOLP UR SRINI KETA N	9609646 189									0.07	0.94			
SUKHI MURMU U	SUKAL MURMU	FARIDPU R	BOLP UR SRINI KETA N	9609646 189									0.14	1.90			
UTTA M CHAKR ABORT Y		DEOLI	BOLP UR SRINI KETA N	8926536 411									0.09	1.22			
DHAN AKRIS HNA BARM AN		DEOLI	BOLP UR SRINI KETA N	8926536 411									0.11	1.42			
LAXMI NARA YAN SEN		SENKAPU R	BOLP UR SRINI KETA N	8926536 411									0.09	1.20			
SRIKA NTA PANDI T	LT TARAPA DA PANDIT	KAMALA KANTAPU R	BOLP UR SRINI KETA N	9732953 208									0.14	1.841			

PABIT RA PANDI T	LT TARAPA DA PANDIT	KAMALA KANTAPU R	BOLP UR SRINI KETA N	8101516 478									0.14	1.72		
HARA DHAN KONR A	BHUTNA TH KONRA	KAMALA KANTAPU R	BOLP UR SRINI KETA N										0.07	0.91		
BHOLA NATH KONR A	SHIBU KONRA	KAMALA KANTAPU R	BOLP UR SRINI KETA N										0.09	1.22		
SOMN ATH KONR A	SUSHIL KONRA	KAMALA KANTAPU R	BOLP UR SRINI KETA N	8159982 230									0.14	1.88		
ASHIS H KONR A	LT RAINOH AN KONRA	KAMALA KANTAPU R	BOLP UR SRINI KETA N	9731714 575									0.09	1.20		
HEMA NTA KONR A	DILIP KONRA	KAMALA KANTAPU R	BOLP UR SRINI KETA N	8371072 831									0.07	0.761		
PRASH ANTA KONR A	BINAY KONRA	KAMALA KANTAPU R	BOLP UR SRINI KETA N	9647502 470									0.09	1.18		
NESHA PATI KONR	BALOK KONRA	KAMALA KANTAPU R	BOLP UR SRINI										0.09	1.16		

A			KETA N													
SASTHI KONR A	BASUDE B KONRA	KAMALA KANTAPU R	BOLP UR SRINI KETA N	7797278 159									0.14	1.88		
JOYDE B KONR A	LT SANNYA SI KONRA	KAMALA KANTAPU R	BOLP UR SRINI KETA N	7407437 260									0.09	1.17		
PARTH A KONR A	GOPINA TH KONRA	KAMALA KANTAPU R	BOLP UR SRINI KETA N	9083419 156									0.14	1.92		
GANES H KONR A	GOPAL KONRA	KAMALA KANTAPU R	BOLP UR SRINI KETA N	9775996 387									0.07	0.90		
LT KIRTIB AS MOND AL		KAMALA KANTAPU R	BOLP UR SRINI KETA N										0.09	1.18		
DULAL KONR A		KAMALA KANTAPU R	BOLP UR SRINI KETA N										0.07	0.93		
TARAP ADA PANDI T		KAMALA KANTAPU R	BOLP UR SRINI KETA N										0.14	1.91		
SUMA	RAMCH	ALIBAD	BOLP	8348768									0.07	0.92		

NTA KONR A	ANDRA KONRA		UR SRINI KETA N	823											
KUSHA L KONR A	ASHISH KONRA	ALIABAD	BOLP UR SRINI KETA N	9647784 576									0.09	1.20	
JAGAN NATH KONR A	NESHAP ATI KONRA	ALIABAD	BOLP UR SRINI KETA N	7478403 374									0.09	1.19	
SUKCH AND KONR A	NEPAL KONRA	ALIABAD	BOLP UR SRINI KETA N	9733182 457									0.14	1.87	
MADH AB KONR A	SATYAP ADA KONRA	KAMALA KANTAPU R	BOLP UR SRINI KETA N	7076007 357									0.09	1.15	
SUNIL KONR A	PRALAK AR KONRA	KAMALA KANTAPU R	BOLP UR SRINI KETA N	7718749 734									0.07	0.88	
PRABH AKAR KONR A	SIBU KONRA	KAMALA KANTAPU R	BOLP UR SRINI KETA N										0.09	0.85	
BUDD HADEB KONR A	BISWAN ATH KONRA	KAMALA KANTAPU R	BOLP UR SRINI KETA										0.2	1.84	

			N													
JOYDE B KONR A	LT SANNYA SI KONRA	KAMALA KANTAPU R	BOLP UR SRINI KETA N	9734314 077									0.07	0.90		
RAJES H KONR A	LAXMIR AM KONRA	KAMALA KANTAPU R	BOLP UR SRINI KETA N										0.14	1.80		
ANAN DA KONR A	BANAM ALI KONRA	KAMALA KANTAPU R	BOLP UR SRINI KETA N										0.09	0.90		
PARTH A KONR A	GOPINA TH KONRA	KAMALA KANTAPU R	BOLP UR SRINI KETA N	9083419 156									0.07	0.92		
GANES H KONR A	GOPAL KONRA	KAMALA KANTAPU R	BOLP UR SRINI KETA N	9775990 387									0.14	1.86		
PATHI K KONR A	DULAL KONRA	KAMALA KANTAPU R	BOLP UR SRINI KETA N	9063228 363									0.09	1.20		

Signature of Programme Co-coordinator