ANNUAL REPORT OF KVK, BAGHPAT
(January-2019-December-2019)

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	60	980	228	1208
Rural youths	02	00	20	20
Extension functionaries	10	95	60	155
Total	**72**	**1075**	**308**	**1383**
Sponsored Training	01	138	32	200
Vocational Training	00	00	00	00

2. Frontline demonstrations

Enterprise	No. of Farmers	Area (ha)	Units/Animals
Oilseeds	00	0.0	-
Pulses	107	30.0	-
Cereals	15	2.64	-
Vegetables	25	0.55	-
Other crops	20	1.6	-
Hybrid crops	00	0.0	-
Total	**167**	**34.79**	-
Livestock & Fisheries	-	-	-
Other enterprises	-	-	-
Total	-	-	-
Grand Total	**167**	**34.79**	-

3. Technology Assessment :

Category	No. of Technology Assessed	No. of Trials	No. of Farmers
Crops	6	18	18
Livestock	-	-	-
Various enterprises	-	-	-
Total	6	18	18

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	1204	11659
Other extension activities	-	-
Total	**1204**	**11659**

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marke-ting	Aware-ness	Other enterprise	Total
	Text only	10	-	-	-	-	-	10
	Voice only	-	-	-	-	-	-	-
	Voice & Text both	-	-	-	-	-	-	-
	Total Messages	**10**	-	-	-	-	-	**10**
	Total farmers Benefitted	**2500**	-	-	-	-	-	**2500**

6. Seed & Planting Material Production

	Quintal/Number	Value Rs.	Distributed to No. of farmers
Seed (q)	252.00	515568.00	Supply to NSC, Meerut
Planting material (No.)	1806	0.00	200
Bio-Products (kg)	20000.00	0.00	At KVK farm
Livestock Production (No.)	-	-	-
Fishery production (No.)	-	-	-

7. Soil, water & plant Analysis

Type of Samples	No. of samples analysised	No. of Beneficiaries	Value Rs.
Soil	576	642	23795.00
Water	-	-	-
Plant	-	-	-
Total	**576**	**642**	**23795.00**

8. HRD and Publications

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

DETAIL REPORT OF APR (Jan.2019 to Dec. 2019)

1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail	Website
	Office	FAX		
Krishi Vigyan Kendra, Baghpat – 250 609	-	-	kvkbaghpat1@gmail.com	www.baghpat.kvk4.in

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

Address	Telephone		E mail	Website
	Office	FAX		
Sardar Vallabhbhai Patel University of Agriculture, Meerut	0121-2888522, 2888511	0121-2888505, 2888540	deesvpuat2014@gmail.com	www.svbpmeerut.ac.in

1.3. Name of the Sr. Scientist & Head with phone & mobile no.

Name	Telephone / Contact		
	Office	Mobile	Email
Dr. Gajendra Pal	-	09456449671	gajendrapal1960@gmail.com

1.4. Year of sanction (as per MOU) : 2004 (27–10-2004)

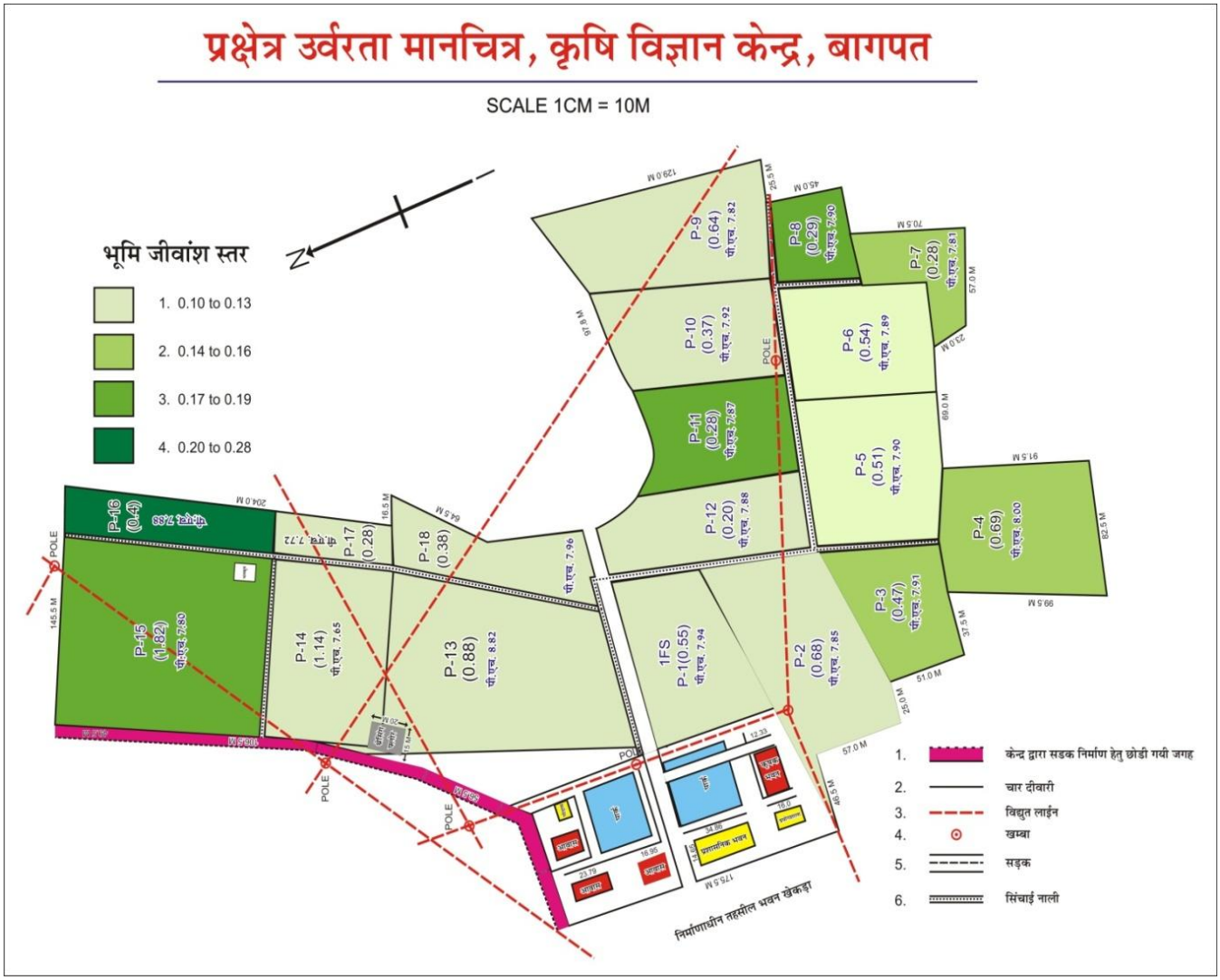
1.5. Staff Position (as on 30 Sept. 2018)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale (Rs.)	Grade Pay	Present basic (Rs.)	Date of joining	Permanent /Temporary	Category (SC/ST/OBC/ Others)	Mobile No.	Email id	Please attach recent photograph
1	Programme Coordinator	Dr. Gajendra Pal	Professor & Head	Agronomy	37400-67000	10000	76610	27.06.87	Permanent	OBC	9456449671	gajendrapal1960@gmail.com	
2	Subject Matter Specialist	Dr. Sarita Joshi	Professor	Home Science	37400-67000	9000	66040	26.08.95	Permanent	Others	9871134441	sarita joshi156@yahoo.com	

3	Subject Matter Specialist	Dr. Sundeep Chaudhary	Professo	gronomy	37400-67000	9000	58830	01.01.1996	Permanent	OBC	9412311502	sundeep.barau t@gmail.com	
4	Subject Matter Specialist	Sh. Amit Chaudhary	SMS/Asstt. Professor	Horticulture	15600-39100	6000	33740	09.12.03	Permanent	OBC	9897060189	amitchaudhary1368@gmail.com	
5	Computer Programmer	Sh. U.S. Rathi	Programme Assi	Computer	9300-34800	4600	50500	30.07.07	Permanent	OBC	9012347688	uttam.svp@gmail.com	
6	Programme Assistant	Dr. Ravindar Kumar	Farm manage	Soil Science	9300-34800	4600	50500	14.07.14	Permanent	OBC	8923482015	malikrk007@gmail.com	
7	Programme Assistant	Dr. Bhupendra Kumar	Programme Asstt. Farm Manager	Plant Breeding	9300-34800	4200	47600	03.09.08	Permanent	SC	9368651430	Bkdheeraniya75@gmail.com	
8	Accountant O.S.	Sh. Sanjeev Chandel	O.S. Cum Account	Accountancy	9300-34800	4600	60400	10.12.03	Permanent	OBC	9410860477	sanjeevchandel2012@gmail.com	
9	Stenographer	Sh. Praveen Kumar Premi	Stenographer	-	5200-20200	2400	35300	26.12.08	Permanent	SC	9718476096	pkpremi1975@gmail.com	
10	Driver	Sh. Papin Kumar	Driver Cum Mechanic	-	5200-20200	1900	27600	26.12.08	Permanent	OBC	8057332297	-	
11	Supporting staff	Sh. Salekh Chand	Watchman	-	4440-7440	2400	34300	01.12.92	Permanent	Others	9997530844	kvksalek@gmail.com	

1.6. Total land with KVK (in ha) :

S. No.	Item	Area (ha)
1	Under Buildings	3.000
2.	Under Demonstration Units (Integrated farming system)	0.600
3.	Under Crops	8.242
4.	Crop Cafeteria	0.400
5.	Orchard/Agro-forestry	0.400
Total		**12.642**



1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Complete	
			Plinth area (Sq.m)	Expenditure (Rs.)
1.	Administrative Building	ICAR	510	43.65
2.	Farmers Hostel	ICAR	300	22.92
3.	Staff Quarters (6)	ICAR	400	26.72
4.	Demonstration Units (2)	ICAR	160	11.06
5	Fencing	ICAR	2000 RM	38.43
6	Threshing floor	ICAR	300	2.34
7	Farm godown	ICAR	60	3.63
8	Irrigation channel	ICAR	1000 RM	8.26
Total				**157.01**

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Ran	Present status
Mahindra Marshal Jeep	2005	4,22,192.00	2,04,092	Good
Motorcycle	2006	46,575.00	77,804	Good

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Tractor Sonalika	2005	3,44,500.00	Good
12 Disc Harrow	2005	20,275.00	Good
Cultivator	2005	12,265.00	Good
Seed Drill Fert.	2005	19,015.00	Good
Tractor Pulley	2005	1,825.00	Good
Knapsack Sprayer (16 lit.)	2005	714.00	Good
Bund farmer blade	2005	2,860.00	Good
Leveler	2006	5,080.00	Good
Rigertin Far	2006	5,610.00	Good
Two tier tractor trolley	2006	65,106.00	Good
LCD Projector	2007	5700.00	Good

1.8. A). Details SAC meeting* conducted in the year 2019

Date	Name and Designation of Participants	Salient Recommendations	Action taken
19/03/2019	1. Dr. Gajendra Pal, Officer Incharge, KVK, Baghpat 2. Sh. Parshant Kumar, Dy. Director, Agriculture, Baghpat 3. Sh. Indermeet Singh, Dist. Vikas Pravandan, Nabard 4. Sh. Hari Narayan, SMS, Agriculture Department, Baghpat 5. Sh. Dharamvir Singh, Incharge, Fisheries, Baghpat 6. Dr. R.P. Kannaujia, Director, SYND Bank, Baghpat 7. Sh. Rishi Pal Singh, Soil testing lab., Baghpat 8. Sh. Sharanpal Singh, Soil testing lab., Baghpat 9. Sh. Sarvesh chandra, Horticulture department, Baghpat 10. Dr. Mukesh Gupta, Animal Husbandry, Baghpat 11. Sh. Ishwar Tiyagi, Progressive Farmer, Naithla 12. Sh. Parmod Kumar, Lehchauda, Baghpat 13. Dr. Sarita Joshi, Professor, KVK, Baghpat 14. Dr. Sandeep Chaudhary, Scientist (Agro.), KVK Baghpat 15. Dr. Amit Chaudhary, Scientist (Hort.), KVK Baghpat 16. Smt. Rakesh, Progressive Farmer, Mavikala, Baghpat 17. Smt. Rajviri Progressive Farmer, Sankarod, Baghpat 18. Sh. U.S. Rathi, Programme Asstt. (Computer), KVK Baghpat 19. Dr. Ravindar Kumar, Prog. Asstt. (Soil), KVK Baghpat 20. Dr. Bhupendar Kumar, Farm Manager, KVK Baghpat 21. Sh. Sanjeev Chandel, O.S., KVK, Baghpat 22. Sh. Parveen Kumar Premi, Steno, KVK Baghpat 23. Sh. Shyam Singh, Progressive Farmer, Basi, Baghpat 24. Sh. Ompal Sing, Farmer, Baghpat 25. Sh. Dev Kumar, S.R.F. NICRA, Baghpat 26. Sh. Papin Dhaka, Tractor Driver, KVK Baghpat 27. Sh. Salekhchand Sharma, Watchman, KVK Baghpat	1. Dy. Director Agriculture suggested that to provide agricultural machinery and equipments under various scheme, coordination with various agriculture and other line department should be made. 2. In-charge, Soil testing suggested, district wise soil fertility map should be made and target of soil sample should be fulfilled. 3. DDM (NABARD) suggested to do survey of e-marketing portal so that awareness among farmers of district can be created. 4. DDM (NABARD) suggested to present block wise activities of KVK graphwise. 5. DHO suggested to put photographs of OFT in the report to depict the result of OFT in a effective manner 6. As far as possible, seed improved variety should be included in conducting FLD.	1. As per suggestion work is being carried out. 2. Total 536 soil samples has been tested and district wise soil fertility map has been made. 3. Information of e-marketing is being provided to the through AgriMedia app. 4. Graphics presentation will be made to present the same as per the requirement in the future. 5. The same has been incorporated in the report. 6. Improved variety Pusa-1612 of rice has been included for conducting FLD.

**** Attach a copy of SAC proceedings along with list of participants***

2. DETAILS OF DISTRICT (2019)

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

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

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

a) Soil type

S. No.	Agro-climatic Zone	Characteristics
1	North Western Plain Zone	Sub humid to subtropical climate, maximum and minimum temperature 43 ^{o}C and 3 ^{o}C respectively with average rainfall is about 750 mm.

b) Topography

S. No.	Agro ecological situation	Characteristics
1	AES – I	Sandy loam to loam soils, normal PH, Good quality irrigation water, Canal/tube-well irrigation
2	AES – II	Sandy loam to loam soils, normal PH, Good quality irrigation water, slightly undulated and unleveled soils

2.3 Soil Types

S. No	Soil type	Characteristics	Area in ha
1	Sandy loam to loam with normal pH	The soils have enough clay to store adequate amounts of water and plant nutrients for optimum plant growth, containing enough sand, silt and clay. Clay content is not much as to cause poor aeration or to make working difficult. A soil containing 7 to 27% clay and approximately equal amount of silt and sand has been designated as loam textured soil.	110065

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

S. No	Crop	Area (ha)	Production (MT.)	Productivity (Qt./ha)
1	Rice	3279	75940	23.16
2	Urd	361	1940	5.37
3	Moong	06	20	3.33
4	Arhar	930	7930	8.53
5	Wheat	51320	1827505	35.61
6	Total Pulses (Rabi)	280	2629	9.39
7	Total oil seeds (Rabi)	1680	23385	13.92
8	Sugarcane	76047	49050315	717
9	Jawar (grain)	50	402	8.05
10	Maize	24	530	22.08

Source: District agriculture department. Statistical Patrika 2016.

2.5. Weather data

Month	Rainfall (mm)	Temperature ^{0} C		Relative Humidity (%)
		Maximum	Minimum	

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

Category	Population	Production	Productivity
Cattle			
Crossbred Cows	14332	150486 lit./day	10.5 lit./day
Indigenous Cows	21538	139997 lit./day	6.5 lit./day
Buffalo	139763	838578 lit./day	6.0 lit./day
Sheep			
Crossbred	3782	-	-
Indigenous	2924	-	-
Goats	22660	-	-
Pigs			
Crossbred	5866	-	-
Indigenous	16083	-	-
Rabbits			
Poultry			
Hens			
Desi	3446	-	-
Category		Production (Q.)	Productivity
Fish (Reservoir)	53.843 Ha.	1615.99 Q	30 Q/ Ha.

* Statistical Patrika 2016.

2.7 Details of Operational area / Villages (2019-20)

S. No.	Taluka	Name of the block	No. of the village	Major crops & enterprises	Major problems identified	Identified Thrust Areas
1.	Khekra	Khekra	46	Dairy, sugarcane, paddy, wheat, mustard, moong, arhar, poultry & vegetables	1. Low production in late sown wheat 2. Weed infestation in wheat 3. Reducing production area of pulses due to blue horse 4. White grub attack in sugarcane 5. Red rot in sugarcane 6. Late sowing of sugarcane due to wheat-sugarcane system 7. No use of potash in all crops 8. Deficiency of minor elements and organic matter in soil 9. Depletion of ground water	a. Increase productivity of wheat in late sown conditions. b. Increase milk production in Buffalos. c. Balance use of fertilizer in sugarcane. d. Balance use of fertilizer in wheat. e. Weed management in wheat. f. Management of pests in sugarcane. g. Creating awareness about human nutrition /nutritional needs to mitigate the problems of nutritional deficiency in rural woman & children. h. Management of mango
2.	Baghpat	Baghpat Pillna	51 50	Dairy, Sugarcane, paddy, wheat, fodder& vegetables Dairy, sugarcane, paddy, wheat, mustard, moong, arhar,& poultry		

3.	Baraut	Baraut Chhapr-auli Binoli	54 27 59	Dairy, Sugarcane, wheat, fodder, &vegetables crops Dairy, sugarcane, wheat, fodder & vegetables sugarcane, wheat, fodder, mustard, paddy, other enterprises- Dairy & poultry	10. Low production of old orchards 11. Insect attack in vegetables 12. Low production of milk in cow & buffalo. 13. Long dry period in milch animals 14. Undeveloped marketing system of Agriculture of produces 15. Less net return in sugarcane based cropping system. 16. Infertility in buffalo and cow and poor health of animal	orchards. i. Pest and weed management in paddy. j. Maintenance of soil health. k. Disease management in okra. l. Promotion of oilseed and pulse crops. m. Intercropping with sugarcane. n. Balance diet with mineral mixture and vaccination to animals. o. Renovation of old orchards

2.8 Priority/thrust areas

S. No	Crop/Enterprise	Thrust area
1	Wheat	Increase productivity of late sown conditions.
		Weed management.
2	Sugarcane	Management of pests.
3	Nutritional Management	Creating awareness about human nutrition /nutritional needs to mitigate the problems of nutritional deficiency in rural woman & children.
4	Paddy	Pest and weed management.
5	Soil	Maintenance of soil health.
6	Vegetables	Pest Management and crop husbandry
7	Oilseed and Pulses	Promotion of oilseed and pulses crops.

2.9 Intervention/ Programmes for the doubling the farmers income – during 2019 **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.							
Sugarcane	650	-	650	82000	129250	2.57	

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.							
Sugarcane + Onion	710	155	710+475=1185	125000	385750	3.08	
Sugarcane + Mustard	680	22	680+220=800	98000	292500	2.98	

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.							
Sugarcane	600	-	600	82000	113000	2.37	

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.							
Mulching in sugarcane (ratoon)	680	-	680	74000	147000	2.98	
Application of micronutrient (Zinc sulphate, Copper sulphate, Ferrus sulphate, Borax) in sugarcane (plant crop)	720	-	720	85000	149000	2.75	

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.							
Fodder (Jowar-Wheat)	Wheat= 40	-	40+50=90	58000	86000	2.48	

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.							
Fodder (Jowar) - Blackgram-Wheat	Wheat= 40 Fodder= 200	Urd= 9.6	50+30+40=120	74000	105200	2.42	

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

3. TECHNICAL ACHIEVEMENTS

3.A. Details of target and achievements of mandatory activities by KVK during 2019

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
10	06	30	18	50.0	34.75	200	167

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	60	1600	1188				
Rural youth	10	02	100	20				
Extn. Functionaries	16	10	240	155				
	100	72	2000	1363	1000	1204	10000	11659

Seed Production (Qtl.)			Planting material (Nos.)		
5			6		
Target	Achievement	Distributed to no. of farmers	Target	Achievement	Distributed to no. of farmers
200	215.2	Supply to NSC, Meerut	20000	1806	200

Soil/plant/water Analysis		
5		
Target	Achievement	No. of farmers covered
1200	576	642

I. 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
Varietal Evaluation	Wheat	*Introduction of new late sown varieties of wheat.*	3	3
	Field pea	*Introduced the improved variety of Pea*	3	3
	Tomato	*Introduced the improved variety of Tomato*	3	3
	Wheat	*Introduction of new early sown varieties of wheat*	3	3
	Wheat	*Introduction of new timely sown varieties of wheat*	3	3
Drudgery Reduction	Wheat	*Use of hanging type grain cleaner with sack holder for cleaning cereals*	3	3
Total			**18**	**18**

Summary of technologies assessed under livestock by KVKs : Nil

Summary of technologies assessed under various enterprises by KVKs : Nil

I.C. TECHNOLOGY ASSESSMENT IN DETAIL

1. VARIETAL EVALUATION

Problem definition: *Low yield due to late sown variety of wheat.*

Technology Assessed (as the case may be): *Introduction of new late sown varieties of wheat.*

A varietal evaluation trial to assess the yield potential of late varieties DBW-173 in comparison of existing variety PBW-590 has been conducted by KVK, Baghpat, with three treatment including farmer's practice on three locations in 1.2 ha. The crop was sown on 15 to 22 Nov., 2019 and the crop has been harvested on 12-13 April, 2020.

Table Varietal evaluation on Pea

Technology Option	*No.of trials*	*Yield (qt/ha)*	*Net Returns (Rs./ha)*	*BC Ratio*
Use of DBW-173 (Farmers Practice)	*03*		***Result Awaited***	
Use of PBW-590				

Scientist: *Dr. Sundeep Chaudhary, Professor (Agronomy)*

2. VARIETAL EVALUATION

Problem definition: *Lower yield due to old variety of Pea*

Technology Assessed (as the case may be): *Introduced the improved variety of Pea*

The KVKs of Baghpat, in U.P. conducted on-farm trial on varietal evaluation in Pea to assess the yield potential of new variety PSM-3 in comparison of existing local varieties with two treatment including farmer's practices on three location in 0.3 ha. The crop was sown on 15 to 20 Dec., 2019 and the crops are standing in the farmer's field.

Table Varietal evaluation on Pea

Technology Option	*No.of trials*	*Yield (qt/ha)*	*Net Returns (Rs./ha)*	*BC Ratio*
Local variety (Farmers Practice)	*03*		***Result Awaited***	
Improved variety of Pea i.e. PSM-3				

Scientist: *Sh. Amit Chaudhary, Asstt. Professor (Horticulture)*

3. VARIETAL EVALUATION

Problem definition: *Lower yield due to old variety of Tomato*

Technology Assessed (as the case may be): *Introduced the improved variety of Tomato*

The KVKs of Baghpat, in U.P. conducted on-farm trial on varietal evaluation in Tomato to assess the yield potential of new variety PSM-3 in comparison of existing local varieties with two treatment including farmer's practices on three location in 0.3 ha. The crop was sown on 15 to 20 Nov., 2019 and the crops are standing in the farmer's field.

Table Varietal evaluation on *Tomato*

Technology Option	*No.of trials*	*Yield (qt/ha)*	*Net Returns (Rs./ha)*	*BC Ratio*
Local variety (Farmers Practice)	*03*		***Result Awaited***	
Improved variety of Tomato i.e. Pusa hybrid-3				

Scientist: *Sh. Amit Chaudhary, Asstt. Professor (Horticulture)*

4. DRUDGERY REDUCTION

Problem definition: *Low work efficiency and injury (backache) in cleaning of grains*

Technology Assessed (as the case may be) : *Use of type grain cleaner with sack holder for cleaning cereals.*

Many agricultural operations are performed by women involve a lot of physical strain. Cleaning of grains (wheat) is one of them. Cleaning of wheat through traditional sieve is very time and energy consuming along with causing drudgery to them. In order to enhance the efficiency and reducing drudgery, krishi vigyan kendra Baghpat, Baghpat conducted a trial by introducing hanging type grain cleaner as T2 (technology option 2) for cleaning of wheat against traditional sieve as farmer practice T1 (technology option 1) on three locations. Result revealed that in T2 average working heart rate(AWHR)of farm women was 97beats/minute which was quite less as compared to T1(128)and energy expenditure in T2 was found 6.7KJ/min as compared to T1 (11.63KJ) Thus activity become comparatively light when performed with T2 .Drudgery is minimized as its been reduced from very severe to mild (moderate pain) activity when performed with T2 .The result also indicated that the hanging type grain cleaner cleaned 200 kg/hr wheat as compared to traditional sieve 50 kg/hr

Table :

Technology Option	*No. of trials*	*Parameters observed*	*Data*	*Remark*
T1- Use of traditional sieve *(Farmers Practice)*	*2*	1. *Average working heart rate* 2. *Total cardiac cost of work (TCCW)* 3. *Physiological cost of work* 4. *Energy consumed (EE)* 5. *Work efficiency* 6. *Pain (shoulder)*	= 128 beats/min = 420 beats/min = 28 = 11.63 KJ/min. = 50 Kg/hr = very severe	*In T_2 AWHR of farm women was 97 beats/min, quite less as compared to T_1 and energy expenditure in T_2 wa found less (6.7 KJ/min) as compared to T_1 (11.63 KJ/min). Activity was found comparatively light when performed using T_2*
T2- Use of hanging type grain cleaner with sack holder		1. *Average working heart rate* 2. *Total cardiac cost of work (TCCW)* 3. *Physiological cost of work* 4. *Energy consumed (EE)* 5. *Work efficiency* 6. *Pain (shoulder)*	= 97 beats/min = 125 beats/min = 8.33 = 6.7 KJ/min. =200 Kg/hr = No pain	

Scientist: *Dr. Sarita Joshi, Professor (Home science)*

5 *VARAITEL EVALUATION*

Problem definition: *Low yield due to early sown variety of wheat.*

Technology Assessed (as the case may be) : *Introduction of new early sown varieties of wheat.*

A varietal evaluation trial to assess the yield potential of new varieties HD-2967and HD-3086 in comparison of existing variety PBW-550 has been conducted by KVK, Baghpat, with three treatment including farmer's practice on three locations in 1.2 ha. The crop was sown on 15 to 22 Nov., 2018 and the crop is has been harvested on 12-13 April, 2019.

Table Performance various varieties of Wheat

Technology Option	***No. of trials***	***Yield (qtl/ha)***	***% increase in Yield***	***Cost of cultivation***	***Grass Return (Rs /ha)***	***Net return (Rs/ha)***	***BC ratio***
T_1 –Use of PBW-550 (Farmers Practice)	***3***	*41.20*	*-*	*48265*	*75808*	*27543*	*1.57*
T_2 - HD-2967		*44.75*	*8.62*	*49460*	*82340*	*32880*	*1.66*
T_3 - HD-3086 (Recommended Practice)		*50.65*	*22.94*	*49460*	*93196*	*43736*	*1.88*

Rate: *Wheat @ Rs. 1840/qtl.*

Programme Asstt.: *Dr. Bhupendra Kumar, Programme Asstt. (Genetics & Plant Breeding)*

6 *VARAITEL EVALUATION*

Problem definition: *Low yield due to timely sown old variety of wheat.*

Technology Assessed (as the case may be) : *Introduction of new timely sown varieties of wheat.*

A varietal evaluation trial to assess the yield potential of new varieties HD-3117and HDCSW-18 in comparison of existing variety HD-3112has been conducted by KVK, Baghpat, with three treatment including farmer's practice on three locations in 1.2 ha. The crop was sown on 20 to 29 Nov., 2019 and the crop to be harvested on April, 2020.

Table Performance various varieties of Wheat

Technology Option	***No. of trials***	***Yield (qtl/ha)***	***% increase in Yield***	***Cost of cultivation***	***Grass Return (Rs /ha)***	***Net return (Rs/ha)***	***BC ratio***
T_1 –Use of HD-2962 (Farmers Practice)	***3***			***Result Awaited***			
T_2 - HD-3117							
T_3 - HDCSW-18							

Programme Asstt.: *Dr. Bhupendra Kumar, Programme Asstt. (Genetics & Plant Breeding)*

II. FRONTLINE DEMONSTRATION

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

List of technologies demonstrated during previous year and popularized during 2018 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
1	Blackgram	Integrated Crop Management	Improved variety PU-31	Demonstrations and trainings	10	46	20.0
2	Greengram	Integrated Crop Management	Improved variety PM-2-3	Demonstrations and trainings	21	29	10.0
3	Pegion pea	Integrated Crop Management	Improved variety Pant-291	Demonstrations and trainings	18	28	10.0
4	Lentil	Integrated Crop Management	Improved variety PL 08	Demonstrations and trainings	07	66	20.0
5	Mustard	Integrated Crop Management	Improved variety RH-749	Demonstrations and trainings	17	22	10.0
6	Marigold	Varietal evaluation	Demonstration of improved variety marigold i.e. Pusa narangi	Demonstrations and trainings	06	10	1.0
7	Radish	Varietal evaluation	Improved variety of radish i.e. Pusa Chetki	Demonstrations and trainings	05	8	0.8
8	Cauliflower	Varietal evaluation	Improved variety of radish i.e. Pusa Hybrid	Demonstrations and trainings	06	12	1.2
9	Sugarcane	Mechanization	Deep ploughing techniques through disc plough	Demonstrations and trainings	21	10	4.0
10	Wheat	Mechanization	Line sowing of wheat by seed drill	Demonstrations and trainings	10	10	7.9
11	Seasonal fruit and vegetable	Food security	Growing of seasonal fruits and vegetable	Demonstrations, trainings and farmer's fair	10	10	0.1
12	Revolving Stool	Drudgery reduction	Use of revolving stool in milking of an animal	Demonstrations, trainings and farmer's fair	11	10	-

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

b. Details of FLDs implemented during **2019** (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	
PULSES										
1	Black gram	Varietal evaluation	Improved variety MASH-479 + Use of trichoderma	Kharif 2019	10.0	10.0	0	33	33	-
2	Green gram	Varietal evaluation	Improved variety IPM 2-3+ Use of trichoderma	Kharif 2019	10. 0	10.0	0	31	31	-

3	Field pea	Varietal evaluation	Improved variety IPF 4-9 + Use of trichoderma	Rabi 2019-20	10.0	10.0	0	43	43	-
CEREALS										
1	Paddy	Varietal evaluation	Improved variety i.e. Pusa-1612	Kharif 2019	2.0	2.0	0	10	10	-
2	Wheat	Varietal evaluation	Improved variety i.e. HD-3059	Rabi 2019-20	0.64	0.64	0	05	05	-
HORTICULTURAL CROPS										
1	Marigold	Varietal evaluation	Improved variety i.e. Haromoni	Kharif 2019	0.8	0.8	0	10	10	-
2	Radish	Varietal evaluation	Imporved hybrid variety i.e. Japani white	Rabi 2019-20	0.4	0.4	0	10	10	-
3	Marigold	Varietal evaluation	Improved variety i.e. French	Rabi 2019-20	0.8	0.8	0	10	10	-
OTHER CROPS										
1	Vegetables	House hold food security	Availability of fruits and vegetables around the year	Rabi, Kharif & Zaid	0.15	0.15	0	15	15	-

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					
Black gram	Kharif 2019	Irrigated	Sandy Loam	121	14.5	230	Paddy	27-31 July, 2019	25-28 Oct., 2019	-	-
Green gram	Kharif 2019	Irrigated	Sandy Loam	122	12.9	221	Dhaincha	25-29 July, 2019	28-30 Oct., 2019	-	-
Field pea	Rabi 2019-20	Irrigated	Sandy Loam	122	12.9	221	Cucumber	20-28 Nov., 2019	Crop is standing	-	-
Paddy	Kharif 2019	Irrigated	Sandy Loam	120	13.5	225	Wheat-Dhaincha	12 to 22 June., 2019	18-22 Oct., 2019	-	-
Wheat	Rabi 2019-20	Irrigated	Sandy Loam	128	12.5	226	Sugarcane	02 Jan., 2020	Crop is standing	-	-
Marigold	Kharif 2019	Irrigated	Sandy Loam	123	14.5	230	Field pea	07-15 July, 2019	10-25 Oct., 2019	-	-
Radish	Rabi 2019-20	Irrigated	Sandy Loam	124	14.5	223	Paddy	20-31 Nov., 2019	Crop is standing	-	-

Marigold	Rabi 2019-20	Irrigated	Sandy Loam	122	12.9	221	Lady finger	15-20 Nov., 2019	Crop is standing	-	-
Vegetables	Rabi, Kharif & Zaid	Irrigated	Sandy Loam	121	13.9	221	Vegetable	-	-	-	-

Technical Feedback on the demonstrated technologies

S. N.	Feed Back
1	Kitchen garden provided fresh, insecticide and pesticides free vegetable throughout the year. Use of hybrid seeds provided higher yield.
2	The keen interest has been taken regarding the pulse cultivation in existing cropping pattern.
3	Line sowing of wheat by seed drill was found 6% increase in yield and reduction in seed and fertilizer rate upto 20 kg/ha during sowing
4	Polarization of soil by deep ploughing reduces the insect and pest infestations in the crops and enhance the productivity.
5	Intercropping is suitable for sugarcane grower to have additional income.

Farmers' reactions on specific technologies

S. N.	Feed Back
1	By growing kitchen garden at their backyard availability of fruits and vegetable remained throughout the year.
2	The problem of wild animal namely blue bull, sheehi and wild pig persist continuously and can be avoided by intercropping of onion.
3	Farmers found that the implements are working better in paddy field rather than sugarcane field.
4	The irrigation water scarcity may be encountered with the use of bed planting system which also provided an option of intercropping with.
5	Intercropping of lentil with mustard gave better results.

Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	1	01-11-2019	20	
2	Farmers Training	2	20-01-2019 05-03-2019	21 21	

Performance of Frontline demonstrations

Frontline demonstrations on oilseed crops : Nil

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										
Blackgram																		
		Improved variety MASH-479	MASH-479	33	10.0			10.0	8.1	23.4	18800	45000	26200	1:2.39	18800	36450	17650	1:1.93
Greengram																		
		Improved variety IPM-2-3	IPM-2-3	31	10.0			10.8	8.5	27.6	19000	54000	35000	1:2.84	19000	42500	23500	1:2.23
Fieldpea																		
		Improved variety IPF 4-9	IPF 4-9	43	10.0			12.5	10.5	19.0	18500	106250	87750	1:4.70	18500	89250	70750	1:3.82

* Blackgram @ Rs. 4500 q/ha, Greengram @ Rs. 5400 q/ha and Fidlepea @ Rs.8500 q/ha

** BCR= GROSS RETURN/GROSS COST

FLD on Other crops

Category & Crop	Thematic Area	Name of the technology	No. of Farmers	Area (ha)	Yield (q/ha)				% Change in Yield	Other Parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demo			Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Average												
Cereals																			
Paddy																			
	Varietal evaluation	Improved variety of paddy i.e. Pusa-1612	10	2.0			58.79	48.15	22.09			65895	123459	57564	1:1.87	65846	105930	40084	1:1.60
Wheat	Varietal evaluation	Improved variety i.e. HD-3059	5	0.64					RESULT AWAITED										
Flower crops																			
Marigold																			
	Varietal evaluation	Improved variety of marigold i.e. Harmony	10	0.8			180	142	26.7			57750	150000	92250	1:2.59	41750	75000	33250	1:1.79

Vegetable crops																			
Radish																			
	Varietal evaluation	Improved hybrid variety i.e. Japani white	10	0.4					RESULT AWAITED										

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

FLD on Livestock : Nil

FLD on Fisheries : Nil

FLD on Other enterprises : Nil

FLD on Women Empowerment : Nil

FLD on Farm Implements and Machinery : Nil

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)
Kitchen gardening	Nutrition food security	Growing of seasonal vegetables and fruits	15	15	268	74	262.16%	DD* =325 Saving=6830	DD* =120 Saving=1445	1570	8400	6830	1:5.35	775	2220	1445	1:2.86

*** Duration days**

FLD on Demonstration details on crop hybrids *(Details of Hybrid FLDs implemented during* **2019***): Nil*

III. Training Programme (Jan 2019 to December 2019)

Farmers' Training including sponsored training programmes (on campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Integrated Crop Management	3	54	0	54	6	0	6	60	0	60
Total	**3**	**54**	**0**	**54**	**6**	**0**	**6**	**60**	**0**	**60**
II Horticulture										
a) Fruits										
Rejuvenation of old orchards	1	20	0	20	0	0	0	20	0	20
Total (b)	**1**	**20**	**0**	**20**	**0**	**0**	**0**	**20**	**0**	**20**
b) Ornamental Plants										
Nursery Management	1	19	0	19	1	0	1	20	0	20
Total (c)	**1**	**19**	**0**	**19**	**1**	**0**	**1**	**20**	**0**	**20**
GT (a-g)	**2**	**39**	**0**	**39**	**1**	**0**	**1**	**40**	**0**	**40**
III Soil Health and Fertility Management										
Soil fertility management	2	38	0	38	2	0	2	40	0	40
Integrated Nutrient Management	1	20	0	20	0	0	0	20	0	20
Soil and Water Testing	2	38	0	38	2	0	2	40	0	40
Total	**5**	**96**	**0**	**96**	**4**	**0**	**4**	**100**	**0**	**100**
IV Home Science/Women empowerment										
Processing and cooking	1	0	20	20	0	0	0	0	20	20
Value addition	1	0	20	20	0	0	0	0	20	20
Rural Crafts	1	0	20	20	0	0	0	0	20	20
Total	**3**	**0**	**60**	**60**	**0**	**0**	**0**	**0**	**60**	**60**
V Production of Inputs at site										
Seed Production	3	57	0	57	3	0	3	60	0	60
Total	**3**	**57**	**0**	**57**	**3**	**0**	**3**	**60**	**0**	**60**
GRAND TOTAL	**16**	**246**	**60**	**306**	**14**	**0**	**14**	**260**	**60**	**320**

Farmers' Training including sponsored training programmes (off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Resource Conservation Technologies	1	20	0	20	0	0	0	20	0	20
Cropping Systems	2	37	0	37	3	0	3	40	0	40
Integrated Farming	2	37	0	37	3	0	3	40	0	40
Micro Irrigation/irrigation	1	19	0	19	1	0	1	20	0	20
Seed production	1	18	0	18	2	0	2	20	0	20
Nursery management	1	18	0	18	2	0	2	20	0	20
Integrated Crop Management	5	88	0	88	12	0	12	100	0	100
Integrated nutrient management	1	19	0	19	1	0	1	20	0	20
Production of organic inputs	1	19	0	19	1	0	1	20	0	20
Total	**15**	**275**	**0**	**275**	**25**	**0**	**25**	**300**	**0**	**300**
II Horticulture										
a) Vegetable Crops										
Nursery raising	2	38	0	38	2	0	2	40	0	40
Protective cultivation	1	19	0	19	1	0	1	20	0	20
Total (a)	**3**	**57**	**0**	**57**	**3**	**0**	**3**	**60**	**0**	**60**
b) Fruits										
Management of young plants/orchards	2	38	0	38	2	0	2	40	0	40
Total (b)	**2**	**38**	**0**	**38**	**2**	**0**	**2**	**40**	**0**	**40**
GT (a-b)	**5**	**96**	**0**	**95**	**5**	**0**	**5**	**100**	**0**	**100**

III Soil Health and Fertility Management										
Soil fertility management	2	38	0	38	2	0	2	40	0	40
Integrated Nutrient Management	2	38	0	38	2	0	2	40	0	40
Micro nutrient deficiency in crops	3	57	0	57	3	0	3	60	0	60
Balance use of fertilizers	1	19	0	19	1	0	1	20	0	20
Total	**8**	**152**	**0**	**152**	**8**	**0**	**8**	**160**	**0**	**160**
IV Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	0	18	18	0	2	2	0	20	20
Design and development of low/minimum cost diet	1	0	19	19	0	1	1	0	20	20
Designing and development for high nutrient efficiency diet	1	0	21	21	0	3	3	0	24	24
Processing and cooking	1	0	18	18	0	2	2	0	20	20
Gender mainstreaming through SHGs	1	0	18	18	0	2	2	0	20	20
Storage loss minimization techniques	1	0	22	22	0	2	2	0	24	24
Value addition	1	0	18	18	0	2	2	0	20	20
Women and child care	1	0	19	19	0	1	1	0	20	20
Total	**8**	**0**	**153**	**153**	**0**	**15**	**15**	**0**	**168**	**168**
V Production of Inputs at site										
Seed Production	7	132	0	132	8	0	8	140	0	140
Others (Capacity building for ICT application)	1	19	0	19	1	0	1	20	0	20
Total	**8**	**151**	**0**	**151**	**9**	**0**	**9**	**160**	**0**	**160**
GRAND TOTAL	**44**	**674**	**153**	**826**	**47**	**15**	**62**	**720**	**168**	**888**

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

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Resource Conservation Technologies	1	20	0	20	0	0	0	20	0	20
Cropping Systems	2	37	0	37	3	0	3	40	0	40
Integrated Farming	2	37	0	37	3	0	3	40	0	40
Micro Irrigation/irrigation	1	19	0	19	1	0	1	20	0	20
Seed production	1	18	0	18	2	0	2	20	0	20
Nursery management	1	18	0	18	2	0	2	20	0	20
Integrated Crop Management	8	144	0	144	16	0	16	160	0	160
Integrated nutrient management	1	19	0	19	1	0	1	20	0	20
Production of organic inputs	1	19	0	19	1	0	1	20	0	20
Total	**18**	**331**	**0**	**331**	**29**	**0**	**29**	**360**	**0**	**360**
II Horticulture										
a) Vegetable Crops										
Nursery raising	2	38	0	38	2	0	2	40	0	40
Protective cultivation	1	19	0	19	1	0	1	20	0	20
Total (a)	**3**	**57**	**0**	**57**	**3**	**0**	**3**	**60**	**0**	**60**
b) Fruits										
Management of young plants/orchards	2	38	0	38	2	0	2	40	0	40
Rejuvenation of old orchards	1	20	0	20	0	0	0	20	0	20
Total (b)	**3**	**58**	**0**	**58**	**2**	**0**	**2**	**60**	**0**	**60**
c) Ornamental Plants										
Nursery Management	1	19	0	19	1	0	1	20	0	20
Total (c)	**1**	**19**	**0**	**19**	**1**	**0**	**1**	**20**	**0**	**20**
GT (a-c)	**7**	**134**	**0**	**134**	**6**	**0**	**6**	**140**	**0**	**140**

III Soil Health and Fertility Management										
Soil fertility management	4	76	0	76	4	0	4	80	0	80
Integrated Nutrient Management	3	58	0	58	2	0	2	60	0	60
Micro nutrient deficiency in crops	3	57	0	57	3	0	3	60	0	60
Balance use of fertilizers	1	19	0	19	1	0	1	20	0	20
Soil and water testing	2	38	0	38	2	0	2	40	0	40
Total	**13**	**248**	**0**	**248**	**12**	**0**	**12**	**260**	**0**	**260**
IV Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	0	18	18	0	2	2	0	20	20
Design and development of low/minimum cost diet	1	0	19	19	0	1	1	0	20	20
Designing and development for high nutrient efficiency diet	1	0	21	21	0	3	3	0	24	24
Processing and cooking	2	0	38	38	0	2	2	0	40	40
Gender mainstreaming through SHGs	1	0	18	18	0	2	2	0	20	20
Storage loss minimization techniques	1	0	22	22	0	2	2	0	24	24
Value addition	2	0	38	38	0	2	2	0	40	40
Women and child care	1	0	19	19	0	1	1	0	20	20
Rural craft	1	0	20	20	0	0	0	0	20	20
Total	**11**	**0**	**213**	**213**	**0**	**15**	**15**	**0**	**228**	**228**
V Production of Inputs at site										
Seed Production	10	189	0	189	11	0	11	200	0	200
Others (Capacity building for ICT application)	1	19	0	19	1	0	1	20	0	20
Total	**11**	**208**	**0**	**208**	**12**	**0**	**12**	**220**	**0**	**220**
GRAND TOTAL	**60**	**921**	**213**	**1134**	**59**	**15**	**74**	**980**	**228**	**1208**

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
Value addition	1	0	10	10	0	0	0	0	10	10
Rural Crafts	1	0	10	10	0	0	0	0	10	10
TOTAL	**2**	**0**	**20**	**20**	**0**	**0**	**0**	**0**	**20**	**20**

Training for Rural Youths including sponsored training programmes (Off campus): Nil

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Value addition	1	0	10	10	0	0	0	0	10	10
Rural Crafts	1	0	10	10	0	0	0	0	10	10
TOTAL	**2**	**0**	**20**	**20**	**0**	**0**	**0**	**0**	**20**	**20**

Training programmes for Extension Personnel 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
Productivity enhancement in field crops	**4**	**57**	**0**	**57**	**6**	**0**	**6**	**63**	**0**	**63**
Protected cultivation technology	**1**	**16**	**0**	**16**	**0**	**0**	**0**	**16**	**0**	**16**
Gender mainstreaming through SHGs	**2**	**0**	**28**	**28**	**0**	**2**	**2**	**0**	**30**	**30**
Women and Child care	**1**	**0**	**14**	**14**	**0**	**2**	**2**	**0**	**16**	**16**
Low cost and nutrient efficient diet designing	**1**	**0**	**14**	**14**	**0**	**1**	**1**	**0**	**15**	**15**
Any other (Irrigation system)	**1**	**14**	**0**	**14**	**1**	**0**	**1**	**15**	**0**	**15**
TOTAL	**10**	**87**	**56**	**143**	**7**	**5**	**12**	**94**	**61**	**155**

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

Training programmes for Extension Personnel including sponsored training programmes – CONSOLIDATED (On + Off campus)

Area of training	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	4	57	0	57	6	0	6	63	0	63
Protected cultivation technology	1	16	0	16	0	0	0	16	0	16
Gender mainstreaming through SHGs	2	0	28	28	0	2	2	0	30	30
Women and Child care	1	0	14	14	0	2	2	0	16	16
Low cost and nutrient efficient diet designing	1	0	14	14	0	1	1	0	15	15
Any other (Irrigation system)	1	14	0	14	1	0	1	15	0	15
TOTAL	**10**	**87**	**56**	**143**	**7**	**5**	**12**	**94**	**61**	**155**

Table. Sponsored training programmes

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management										
Increasing production and productivity of crops	4	140	10	150	28	22	50	168	32	200

Details of vocational training programmes carried out by KVKs for rural youth: Nil

IV. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Diagnostic visits	39	53	0	53
Field Day	1	20	0	20
Kisan Ghosthi	12	1335	16	1351
Kisan Mela	8	5467	52	5519
Scientists' visit to farmers field	240	570	0	570
Farmers' seminar/workshop	4	480	0	480
Method Demonstrations	5	112	12	124
Celebration of important days	1	335	15	350
Special day celebration	1	51	0	51
Others (pl. specify)				
Lecture delivered	41	2922	24	2846
Swachta Pakhwada	1	290	0	290
Farmer visit to KVK	851	905	0	905
Total	**1204**	**11540**	**119**	**11659**

Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	0
Extension Literature	1
News paper coverage	25
Popular articles	4
Radio Talks	6
TV Talks	6
Animal health amps (Number of animals treated)	0
Others (Research paper)	2
Total	**44**

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marke-ting	Aware-ness	Other enterprise	Total
	Text only	10	-	-	-	-	-	10
	Voice only	-	-	-	-	-	-	-
	Voice & Text both	-	-	-	-	-	-	-
	Total Messages	**10**	-	-	-	-	-	**10**
	Total farmers Benefitted	**2500**	-	-	-	-	-	**2500**

Other Programme organized on KVK, Baghpat

S.No.	Name of the Programme	Date	No. of farmers participated
1	Establishment of Sahjan Vatika (1400 m^2) at KVK	09-08-2019	-
2	Jal Shakti Abhiyan (38 Programme)	1st July to 30 Sept., 2019	2150

3	Kisan mela organized by KVK under CRM	03-09-2019	635
4	Intensive plantation and kisan gosthi (1000 plants distribution)	17-09-2019	200
5	Live webcast from Mathura (UP) of the event Hon'ble Prime Minister of India was going to launch NADCP for FMD and Brucellosis and NAIP	11-09-2019	126
6	District level rabi gosthi and awareness programme under CRM	13-09-2019	156
7	Block level kisan mela organized by KVK	02-10-2019	513

Crop residue management (CRM) programme conducted in the district Baghpat

S.No.	Date	Programme	Place	No. of participants
1	20-8-2019	Training	Kaidwa	20
2	03-9-2019	Kisan mela	KVK, Baghpat	647
3	09-9-2019	Field day	NAAS complex, Delhi	25
4	28-9-2019	Crop residue management awareness programme	Faizallapur	57
5	03-10-2019	Crop residue management awareness programme	Goripur	55
6	19-10-2019	Crop residue management awareness programme	Dolla	53
7	23-10-2019	Crop residue management awareness programme	Intermediate college, Dhanora	225
8	23-11-2019	Crop residue management awareness programme	Kisan inter college, Mavikala	205

V. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS : Nil

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	HD-2967	-	215.20	118316.00	NSC Meerut
Oilseeds						
	Mustard	RH-749	-	36.80	41174.00	NSC Meerut
Commercial crops						
	Jowar	Local	-	-	45850.00	Auctioned
Total				**252.00**	**205340.00**	

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						
	Tomato	Pusa Hybrid-4	-	200		At KVK farm
	Brinjal	Pant bangan-6	-	206		At KVK farm
	Chilli	Pusa Jawala	-	200		At KVK farm
Fruits						
	Mango	Langda, Chausa, dasheri	-	50		
	Aonla	-	-	175		
	Jamun	-	-	25		
	Imli	-	-	100		
Ornamental plants						
	Marigold	Pusa basanti	-	200		At KVK farm
Medicinal and Aromatic						
	Sahjan	-	-	650		200
Total				**1806**		

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	No. of Farmers
Bio Fertilisers				
	Vermicompost	20000	0	At KVK farm
Total		**20000**	**0**	

Table: Production of livestock materials: Nil

VII. DETAILS OF SOIL, WATER AND PLANT ANALYSIS

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)
Soil	**576**	**642**	**17**	**23795.00**
Total	**576**	**642**	**17**	**23795.00**

VIII. SCIENTIFIC ADVISORY COMMITTEE

Name of KVK	Number of SACs conducted
KVK, Baghpat	01

IX. NEWSLETTER/MAGAZINE

Name of News letter/Magazine	No. of Copies printed for distribution
1	500

X. PUBLICATIONS

Category	Number
Research Paper	1
Technical bulletins	2
Technical reports	26

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

Nil

XII. INTERVENTIONS ON DISASTER MANAGEMENT/UNSEASONAL RAINFALL/HAILSTORM/COLD WAVES ETC :

Nil

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
Sardar Vallabhbhai Patel University of Agri. & Tech., Meerut	Integrated farming system for livelihood of the farmers (15 to 16 March, 2019)	01	20	13
Total		**01**	**20**	**13**

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

XIV. CASE STUDIES :

Nil

XIV. AGRICULTURAL TECHNOLOGY INFORMATION CENTRE (2019)

A. Details on ATICs

S. No	Name of the ATIC	Name of the Host Institute	Name of the ATIC Manager
1	KVK, Baghpat	S.V.P.U.A.&T, Meerut	Dr. Sundeep Chaudhary

B. Details on Farmer's visit

S. No	Purpose of visit	Number of farmer's visited
01	Technology Information	18
02	Technology Products	25

C. Facilities in the ATIC which are in operation

S. No	Particulars	Availability (Please √ mark)	Number of ATICs
01	Reception counter	X	1
02	Exhibition / technology museum	√	1
03	Touch screen Kiosk	X	1

04	Cafeteria	X	1
05	Sales counter	X	1
06	Farmer's feedback register	X	1
07	10 numbers of model of latest agriculture technology	√	1

D. Technology information provided

D.1. Details on technology information

S. No	Information category	Number of ATICs	Total number of farmers benefitted	Category of information						
				Varieties / hybrids	Pest management	Disease management	Agro-techniques	Soil and water conservation	Post Harvest technology and Value addition	Animal Husbandry and fisheries
01	Kisan Call Centre / other Phone calls from farmers									
02	Video shows									
03	Letters received									
04	Letters replied									
05	Training to farmers / technocrats / students									

D.2 . Publications (Print & Electronic media): Nil

E. Technology Products provided : Nil

F. Technology services provided : Nil

XV. TECHNOLOGICAL BACKSTOPPING BY DIRECTORATES OF EXTENSION (Jan 2019 to Dec 2019)

NIL

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Progress of NARI
(January to December, 2019)

Village selected for conducting NARI

a) Lehchauda
b) Odhapur

Activities conducted:

1) Other demonstration: under nutritional farming

(i) On pulses

S.N.	Crop	Variety	Thematic area	season	Area (ha)	Result
1	Blackgram	MASH-479	Nutritional farming	Kharif-2019	4.0 (2.0 ha in each village i.e. Odhpur & Lehchoda)	• Production: 10.0 qtl/ha production • Acceptance : Nutritionally accepted & incorporated in their diet for various recipes.
2	Greengram	IPM 2-3	Nutritional farming	Kharif-2019	4.0 (2.0 ha in each village i.e. Odhpur & Lehchoda)	• Production: 10.8 qtl/ha production • Acceptance : Nutritionally accepted & incorporated in their diet for various recipes.

(ii) Nutritional garden

S.N.	Crop	Variety	Thematic area	season	Area (ha)	Result parameter
1	Fruit & vegetable	Hybrid & latest variety	Nutritional security	Zaid, Kharif, Rabi (2019)	0.1 (10 families 0.01 ha each village)	• Obtained fresh fruit & vegetables throughout the season and less incidence of diseases i.e. common cold.

(iii) Preparation of Nutriflour have been conducted under mixing and enrichment. Farm women appreciated the taste and accepted it for incorporating in their routine diet.

2) Capacity building programme:

(i) Training

S.N.	Date	Title	Duration (days)	Venue	No. of participants
1	19.03.2019	Protein rich wheat production technique.	01	Lehchauda	20

2	25.04.2019	Processing of soybean for food use	01	Lehchauda	20
3	28.05.2019	Protein se bharpoor genhu utpadan taknik	01	Lehchauda	20
4	26.07.2019	Nutrient & cost effective recipies for children	01	Odhapur	20

(ii) Gosthi

S.N.	Date	Title	Venue	No. of participants
1	28.05.2019	Women empowerment and livelihood.	KVK, Baghpat	62

(ii) Total 27 advisory service on various topics specially on soybean processing, in-corporation of green leafy vegetable in diet etc. have been provided.

(iii) One exposure visit 62 farm women to KVK farm on 28.05.2019.

(iv) Other programmes

S.N.	Date	Title	Venue	No. of participants
1	26.07.2019	Jal Shakti Abhiyan	Odhapur	47
2	27.09.2019	Jal Shakti Abhiyan	Mavi kalan	42

Action Plan 2020 of NARI

1. Front Line Demonstration: under nutritional farming

(i) On pulses

S.N.	Crop	Variety	Thematic area	Season	Area (ha)	Parameter
1	Pigeon pea	Pusa-991/ 992	Nutritional farming	Kharif 2019-20	4.0 (2.0 ha each village)	• Taste • Acceptance
2	Green gram	PM-2-3	Nutritional farming	Kharif 2019-20	4.0 (2.0 ha each village)	• Taste • Acceptance

(ii) Nutritional garden

S.N.	Crop	Variety	Thematic area	Season	Area (ha)	Parameter
1	Vegetable and fruits	Latest variety	Mal nutrition /Food security	Rabi, Kharif & Zaid	0.10 (0.01 ha in each village)	• Yield • Cost of cultivation • Net return • C:B ratio • Monthly saving

(iii) Value addition/ Fortification

S.N.	Crop	Thematic area	Year	No. of families	Parameter
1	Wheat, Maize, Soybean, Horsegram	Fortification	2020	30	• Taste • Acceptance

3. Capacity Building Programme

Training for farmers and farm women

S.N.	Date	Title	Duration (days)	No. of participant		
				SC/ST	others	Total
1	18-02-2020	Nutritional deficiency disease & their management	1	02	18	20
2	19-03-2020	Protein rich wheat production technology	1	02	18	20
3	16-07-2020	Low cost nutrient efficient diet for children	1	02	18	20
4	17-09-2020	Nutri sensitive diet & its importance	1	02	18	20
5	22-10-2020	Establishment of kitchen gardening	1	02	18	20

4. Other extension activities

S.N.	Event	No.	Participants
1	Gosthi	1	100
2	Campaign	1	100
4	Advisory services	As per requirement	-

NARI programme will be implemented by Dr. Sarita Joshi (Home Science), Dr. Sundeep Chaudhary (Agronomy), and Sh. Amit Chaudhary (Hort.)

PROGRESS REPORT 2019

OF *IN-SITU* CROP RESIDUE MANAGEMENT

Krishi Vigyan Kendra, Baghpat (U.P.)

Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut

DETAILS OF PROGRESS REPORT- 2019
OF *IN-SITU* CROP RESIDUE MANAGEMENT

Name of KVK: Baghpat
Name of Host organization: S.V.P. U& Tech. Meerut

A) Name of Villages to be adopted in 2019

SN	Name of village	Name of block	Name of district
1	Nethla	Baghpat	Baghpat

B) Machinery details -

SN	Name of equipment	Date of Invoice	Target (Nos.)	Achiev. (Nos.)
1	Shrub Master /Cutter cum speeder (05 feet)	21-10-2018	01	01
2	Hydraulic Reversible M.B. Plough (Bottom-02)	25-10-2018	01	01
3	Seed Cum Fertiliser Drill (Zero Till)	25-10-2018	01	01
4	Happy Seeders (09 Row)	25-10-2018	01	01
5	Melcher/ Straw Chopper/Shredder/ (07 feet cutter bar)	17-01-2019	02	01
Total			**06**	**05**

C) IEC activities to be conducted

SN	Name of activity	Place	Date	Days	Number/Area
1	Demonstration (ha)	Nethla	Rabi 2019-20	-	41/48.8 Acre
2	Training courses	Nethla	20-08-19	01	20 Participants
3	KissanMela	1-Nethla 2-KVK	12-03-19 03-09-19	01 01	211 Participants 647 Participants
4	Farmer-visit	Delhi	09-09-19	01	25 Participants
5	Awareness camps At village level	1-Fezaullapur 2- Gouripur 3-Doula 4-Mukandpur	28-09-19 03-10-19 19-10-19 16-12-19	01 01 01 01	57 Participants 55 Participants 53 Participants 85 Participants
6	Awareness camps At Block level	1-Binauli 2-Khekra 3-Baghpat	10-12-19 11-12-19 13-12-19	01 01 01	50 Participants 35Participants 35 Participants
7	Mobilization of school students	1-I. College, Dhaunara 2-K.I.C., Mawikalan	23-10-19 23-11-19	01 01	225 Participants 216 Participants

D) Publicity and Advertisement

SN	Particulars	Number(s)
1	Advertisement in Print media	-
2	Columns/Articles in newspaper and magazines etc. to be published	-
3	Hoardings to be fixed (at Mandi/ Road side/ Market/ Schools/ Petrol pump/ Panchayat etc.)	-
4	Jingles on Radio/ TV, Scroll message on TV and Audio-Visual clips to be prepared	-
5	Wall panting/Poster/ Banner to be prepared	-
6	Publicity material – leaflets/ pamphlets etc. to be prepared	5000
7	TV programmes/ panel discussion Doordarshan/ DD-Kisan and other private channels	01
8	Other any	-

E) Demonstration details - Rabi 2019-20

S.No.	Name of equipment	Area (Acre)	No. of Demo.
01	Happy Seeders (09 Row)	3.6	04
02	Hydraulic Reversible M.B. Plough (Bottom-02)	6.4	05
03	Shrub Master /Cutter cum speeder (05 feet)	2.6	02
04	Straw Chopper/Shredder/Melcher (07 feet cutter bar)	18.4	14
05	Zero Tillage cum Ferti Seed Drill	17.8	16
	Total	**48.8**	**41**

Note:- Balance budget up to till date- Rs. 953781.00

Action Photographs:

1- Kisan mela organized by KVK under CRM programme on 03 September, 2019

One day kisan mela organized by KVK under Crop Residue Management (CRM) programme . Chief gust Honorable Member of Parliament Baghpat Dr. Satypal Singh ji, Joint Secretary Govt. India Smt. Leena Joheri ji (Nodal Officer Baghpat), CDO, DDAg., DAO, CVO, and all district officers

2- Awareness camps at village level-

3- Mobilization of school students-

Demonstration:

N I C R A

ANNUAL PROGRESS REPORT
(January to December, 2019)

1. Location of KVK & Selected Village Shikhera and their brief profile

District Baghpat is located in the extreme Western corner of Uttar Pradesh falling in North – Western plain zone possessing fertile soil (sandy-loam to loam soil with normal pH) and conducive climate for agriculture. District is bounded with Holi River Yamuna from western side and from historical river Hindon in eastern side. Haryana and Delhi are the bordering states of the district. There are six community developmental blocks in the district. Among those, Krishi Vigyan Kendra is situated in Khekra block across Delhi-Saharanpur highway.

The Village Shikera selected under NICRA project is situated in Pilana Block of Baghpat district which is 35 Km. away from KVK and 24 Km. away from district head quarter towards Meerut.

No. of households : 152

Total cultivated area : 140 ha.

Major soil type : Loam to Sandy loam

Mean annual rainfall : 750mm

Major crops : Sugarcane, Wheat, Paddy

Climate vulnerability : Water stress

GPS location :

Latitude- 28°55'02.10"N

Longitude- 77°22'06.80"E

Altitude- 182m

2. Climatic Vulnerability of Village Shikhera

The major issues regarding the dimatic vulnerability of the village are drought, heat wave, cyclone, cold wave, frost, irregular rainfall trend etc. and frequency of such occurrences in the previous year put extra pressure on cultivation, which resulted in loss of crops and livestock. Shikera village is situated in the Pillana Block of Baghpat district, which was already declared as dark zone in reference to grand water depilation table. The availability of ground water strata for irrigation is below than 90-100 meter. Although all the tube-wells are equipped with submersible turbine type of devices, but it faces the problems of low water efficiency during the summer seasons. The village also faces the problems of pre-maturation of cereal crops due to it cropping pattern. The available period for maturation of wheat is always in short due to the use late shown practices in the village. The effects of overall dimatic charges are also visible in the village. The shrinkage of winter period cause low productivity of Rabi seasons crops. The summer temperature reaches up to 45^0 C and non availability of irrigation water resulted in very low productivity fodder crops. This causes the lower productivity of milching animals.

3. Predominant farm enterprises

a) Cropping pattern: Crops/cropping systems, area under major crops (cereals, pulses, oilseeds, commercial crops)

i. Major cropping systems: Sugarcane- Ratoon- Wheat, Rice-Wheat and Fodder-Wheat

ii. Area and productivity of major crops:

Sl.No.	Crop	Area (ha.)	Before start NICRA Yield (q/ha.)	After start NICRA Yield (q/ha.)	Par cant yield increase
1	Sugarcane	70.00	595.20	735.00	19.05
2	Paddy	29.58	48.50	50.30	3.5
3	Wheat	43.11	43.11	48.64	11.3
4	Fodder (Kharif)	28.64	426.40	460.00	7.3
5	Fodder (Rabi)	13.46	550.00	560.00	1.8
6	Mustard	13.04	13.04	17.90	27.1

b) Predominant varieties of major **food crops** (up to 4 crops) in the village (give the name of varieties of each crop, extent of area under HYV/Hybrids)

Sl No.	Crop	Name of variety/ hybrid(s)	No. of farmers using improved varieties/ hybrids	Area under improved varieties/ hybrids (ha) in the village
1	Paddy	Pusa-1121,P.B.-1	26	18.00
2	Wheat	PBW-373	31	14.76
3	Mustard	Pusa Jagannath	50	10.00

c) Cropping intensity (%): 135

d) Horticulture: crops (fruits, vegetables, flower crops etc), area and productivity of each crop

Sl No.	**Crop**	**Area (ha)**	**Yield (q/ha)**	**Name of variety/ hybrid(s)**	**Area under improved varieties/ hybrids (ha) in the village**
1	Okra	2.50	90.00	Parbhani Kranti	1.00

e) Area under fodder cultivation (ha) and number of farmers growing green fodder 68.60 ha. /85 farmers

f) Major source(s) of irrigation: Open well, tube well, canal, ponds, village tanks etc.

Sl No.	**Source of irrigation**	**Area (ha) under irrigation**
1	Open well	25
2	Tube well	232
3	Canal	-
4	Ponds	1.5
5	Village tank	-
6	Any others (specify)	-

g) Micro-irrigation:

Sl No.	Micro-irrigation	Area (ha)	No. of farmers
1	Drip	nil	Nil
2	Sprinkler	nil	nil

h) Livestock:

Sl No.	Livestock types	Total number	No. of livestock owners	Share of improved breeds (%)	Major livestock diseases
1	Small ruminants	65	22	4	Rinderpest
2	Large ruminants	539	158	99	FMD, Mestitis and
3	Poultry	-	-	-	Goiter
4	Any other				-

i) Milk productivity (liters/milch animal/day)- 11.22

j) Inland fisheries: Practiced or not?, if yes, please give the following details : **N.A**

i. Where practiced: Ponds/village tanks/farm ponds/any other (specify): **N.A**
ii. Quantity of fish production/year from different sources: **N.A**

k) Any other enterprise: give details

4. Resource availability

a) Status of common pool resources (CPRs): grazing lands, water bodies, any other (give details like area/numbers, present status, whether functioning or defunct etc) As per concern with the common pool resources, there is a primitive pond is available in Shikera village. The availability of water in primitive reservoir is in only rainy season. The size of the reservoir is not enough large and cann't be used for summer irrigation purpose. This primitive reservoir may be considered as defunct.

Sl No.	CPR	Area (ha) or numbers	Current status* (before start of NICRA)
1	Grazing land (ha)	-	-
2	Water bodies (No)	01 pond	01 pond

b) NRM structures:

The pond is not restructured by any Govt. agency for increasing its water holding capacity. The water body is not even managed by local body (Gram Panchayat) as well as govt. body.

Sl No.	Name of NRM structure	No's	Storage Capacity (cu m)	No. of farmers benefited	Protective Irrigation potential* (ha)	Status (Defunct/ effectively used)
		1	2	3	4	5
1	Farm pond	1	N.A.	N.A.	N.A.	N.A.
2	Village tank	N.A.	N.A.	N.A.	N.A.	N.A.
3	Percolation tank	N.A.	N.A.	N.A.	N.A.	N.A.
4	Open well	N.A.	N.A.	N.A.	N.A.	N.A.
5	Check dam	N.A.	N.A.	N.A.	N.A.	N.A.

* Two protective irrigations at a depth of 5 cm per irrigations;

Note: For items with S.No. 7, 8, 9 and 10, fill only column numbers 1, 3 and 5

c) Status of farm mechanization before start of NICRA: No. of tractors, power tillers, seed drills, weeders, threshers, etc

S.No.	Machine	No.
1	Tractor	31
2	Power tiller	29
3	Seed drills	-
4	Weeder	3
5	Thresher	07

5. Socio-economic status

a) No. of households

Sl no.	Category	No.
1	General	06
2	OBC	132
3	SC	85
4	ST	-
	Total	**219**

b) Literacy rate (%): Male: 71.5 Female: 60.0

Average family income from agricultural and allied activities

Sl no.	Category	No. of families	Annual income (Rs/family)
1	Marginal	127	65,000-70,000
2	Small	53	1,35,000-1,75,000
3	Large	Nil	-

c) Workers engaged in agricultural activities (%): 70.25

Module wise Progress Report Jan 2019-Dec-19

Name of KVK: Baghpat (U.P.) **Village: Sikhera and Patoli**

Module-1: Natural Resource Management:

Interventions	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Measurable indicators of output*	Economics of demonstration (Rs./ha)			
						Gross Cost	Gross Return	Net Return	C:B
1	2	3	4	5	6	7	8	9	10
In-situ moisture conservation RCT	Promotion of less water requiring crop-Mustard	Seed Var-Giriraj	31	10.0	Result awaited				
		Seed Var-RH-749 (2019)	29	12.5	Yield 19.85 Q/ha	22200	69475	47275	3.12
	less water requiring crop in kharif-Black Gram	Seed Var-	34	10.0	Yield 10.71 Q/ha	14910	55692	40782	3.73
Any other	Promotion of Hyderogel to reduces the water requirement in rice	Hyderogel	10	4.0	Yield - 38.71Q/ha & water saving	56600	121937	65337	2.15
						Reduce the one irrigation during the crop period & save 1500 m3 water / ha			
	Kitchen Gardening	Vegetable seed kit	25	--	To provide more nutrition throughout the year				
	Soil test based nutrients management	Soil health card distribution	35	--	Nutrient status Increase OC % 0.42 to 0.46	Using soil test based fertilizer application during Kharif and Rabi season			
Borers management	Uses of Trichocards	Trichocards @5 card / Ha.	100	40	Yield and economics	Yield of Demo. 738Q/ha and other 625 Q/ha			
			Four times Tricho-cards were repeated			Borers' infestation in demonstrated field was found only 1.86%. and in other is 6.36 %			

Mulching	Brown mulching in Sugarcane	-	-	Brown mulching in Sugarcane crop to moisture conservation, weed control and to increase organic matter content in soil.





Activities under : Natural Resource Management

Module-2: Crop Production:

Interventions	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Area (ha)	Measurable indicators of output*		% Increase	Economics of demonstration (Rs./ha)				Economics of Local (Rs./ha)			
					Demo Qts./ ha.	Local Qts./ ha.		Gross Cost	Gross Return	Net Return	C:B	Gross Cost	Gross Return	Net Return	C:B
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Introducing flood/ drought /temp. tolerant varieties	Serial crop	wheat Seed Var-DBW-90	45	18	-	Result awaited -									
	2018-19	wheat Seed Variety -DBW-71	50	20	44.3	39.2	13.01	38400	99012	64212	2.84	37400	89033	51633	2.38
	Sowing of Pulse crop	Black gram seed (MASH-479)	34	10.0	10.71	8.46	26.59	14910	55692	40782	3.73	14910	43992	29082	2.95
	Sowing of Oil crop (2019)	Mustard Seed Variety -RH 749	29	12.5	19.85	16.4	21.03	22200	69475	47275	3.12	21200	57400	36200	2.70
	Sowing of Oil crop	Mustard Seed Variety -Giriraj	31	10.0	Result awaited										
Moisture stress management	Use of hydrogel in Rice	Hydrogel	10	4	38.71	31.61	22.46	56600	121937	65337	2.15	56600	99572	42972	1.75

Module-3: Livestock & Fisheries:

Interventions	Technology demonstrate	Critical input (Variety, Fertilizer / Chemicals doses,)	No. of farmers	Unit/ No. / Area (ha)	Measurable indicators of output*	% increase	Economics of demonstration (Rs./ha)	Economics of local (Rs./ha)
Animal health checkup	Animal health Camp	Medicines	81	171 cattle	-			
Breed upgradtion	Artificially insemination	Collaboration with Vet. Doctor	11	16 **cattle**	--	Breed up gradation through Artificially insemination tom increase milk production		
Animal health checkup 2020	Animal health Camp	Medicines		Not done due to unavailability of fund				

Module-4: Institutional Interventions:

Interventions	Details of activity			Critical input (Breed / Vari. / Medi. doses,)	No. of farmers		Unit / No. / Area (ha)
	Name of crops / Commodity groups / Implements	Quantity / Number / Rent / Charges	Technology used in seed / fodder bank & function of groups		Male	Female	
Custom hiring centre 2019	Implements	April 2018 to March., 2019 total 10640	31	---	19.5		
Kitchen Gardening 2019	Vegetable seed kit (Aug)	25	--	Seed		25	25
Exposure to the knowledge regarding the new agricultural technology for early adoption	Exposer visit of student dated: 25-09-2019	-	-		35	-	35
Custom hiring centre	Implements	April 2019 to Dec, 2019 total 1500			-	---	10

Date 25-09-2019 Village-Sikhera

Date 25-09-2019 Village-Sikhera

Date 16-10-2019 Village-Sikhera

Activities under Institutional Interventions

Module-5: Capacity Building (HRD):

Sl. No.	Thematic area	Title of training	No. of Course	Date	No. of beneficiaries		
					Male	Female	Total
1.	Resource conservation technology	Use of natural resources in paddy crops	01	24.07.19	20	-	20
2.	Health awareness	Importance of pulses in growing kids	01	25.09.19	0	20	20
3.	Resource conservation technology	water harvesting technique	01	06.09.19	20	0	20
4.	Awareness	Use of balanced fertilizers in crops	01	31.07.19	20	0	20
5.	Awareness	Soil health management	01	24.09.19	20	0	20
6	Resource conservation technology	Organic manure and crop management	01	07.02.19	20	0	20
7	Awareness	Soil nutrient deficiency and their management	01	06.02.19	20	0	20
8	Awareness	Green fodder production in rabi	01	04.02.19	20	0	20
	Total		**08**		**140**	**20**	**160**

Module-6 : Extension activities

Thematic area	No. of activities	No. of beneficiaries		
		Males	Females	Total
Kisan Mela	01	100	-	100
Group discussion	25	109	-	109
Diagnostic .visit	14	31	-	31
Total	**40**	**240**	**-**	**240**

Digonestic visit of sugarcane		Distribution of Urd, Moong and Hydrogel to Farmers
		

Status of implements:

Name of items	No. of units	Date of purchase	Amount Spent (Rs.)
Rotavator	01	30.03.11	83,000.00
Land Leveller	02	30.03.11	30,000.00
Zero Tillage seed drill/ZT-cum-ferti seed drill	02	30.03.11	80,000.00
Disc harrow / Disc plough	02	30.03.11	40,000.00
Multi crop raised bed ferti cum seed drill	02	30.03.11	1,30,000.00
Sugarcane ridge-cum fertilizer applicator	02	30.03.11	71,000.00
SRI marker	02	30.03.11	5,000.00
Cono-weeder	02	30.03.11	5,000.00
Rain Gun	02	30.03.11	46,599.00
GPS	01	30.03.11	19,855.00
Small weather equipments	7 items	30.03.11	48,000.00
Digital camera	01	30.03.11	9,990.00

Status of Contractual staff (SRF):

Sl. No.	Name of SRF	Specialization	Date of recruitment	Up to	Remark
1.	Mr. Dev Kumar	Agronomy	16.08.18	Till date	

Status of custom hiring committee:

Committee has been formulated and is in operation with the following staff positions

S.No.	Name	Father's name	Position
1	Sri Yashpal Singh	Sri Sriram	Chairman
2	Sri Nagendra	Sri Jagat Singh	Secretary
3	Sri Baburam	Sri Ganiram	Member
4	Sri Jagmeher	Sri Nahar Singh	Member
5	Sri Sunil	Sri Rambhajan	Member
6	Sri Praveen	Sri Sahendra	Member