

## ANNUAL REPORT (April-2018-March-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	50	759	272	1031
Rural youths	4	30	10	40
Extension functionaries	4	40	45	85
Sponsored Training	4	168	32	200
Vocational Training	0	0	0	0
<b>Total</b>	<b>62</b>	<b>997</b>	<b>359</b>	<b>1356</b>

## 2. Frontline demonstrations

Enterprise	No. of Farmers	Area (ha)	Units/Animals
Oilseeds	22	12.5	
Pulses	169	60.0	
Cereals	0	0	
Vegetables	20	2.0	
Other crops	5	0.4	
Hybrid crops	0	0	
<b>Total</b>	<b>216</b>	<b>74.9</b>	
Livestock & Fisheries	0	0	
Other enterprises	35	6.0	
<b>Total</b>	<b>35</b>	<b>6.0</b>	
<b>Grand Total</b>	<b>251</b>	<b>80.9</b>	

## 3. Technology Assessment &amp; Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
<b>Technology Assessed</b>			
Crops	4	13	19
Livestock		0	0
Various enterprises	4	8	8
<b>Total</b>	<b>8</b>	<b>21</b>	<b>27</b>
<b>Technology Refined</b>			
Crops	-	-	-
Livestock	-	-	-
Various enterprises	-	-	-
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Grand Total</b>	<b>8</b>	<b>21</b>	<b>27</b>

## 4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	1693	10518
Other extension activities		
<b>Total</b>		

## 5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	
	Text only	10						10
	Voice only							
	Voice & Text both							
	<b>Total Messages</b>	<b>10</b>						<b>10</b>
	<b>Total farmers Benefitted</b>	<b>2500</b>						<b>2500</b>

## 6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	252.00	629943.00
Planting material (No.)	3050	1100.00
Bio-Products (kg)	100.00	60000.00
Livestock Production (No.)	-	-
Fishery production (No.)	-	-

## 7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil	536	32000.00
Water	-	-
Plant	-	-
<b>Total</b>	<b>536</b>	<b>32000.00</b>

## 8. HRD and Publications

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

## DETAIL REPORT OF APR-2018-19

### 1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail
	Office	FAX	
Krishi Vigyan Kendra, Baghpat – 250 609 www.baghpat.kvk4.in	0121-2969011	-	baghpatkvk1@gmail.com

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

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

#### 1.3. Name of the Programme Coordinator with phone & mobile No

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

#### 1.4. Year of sanction: 2004 (27-10-2004)

#### 1.5. Staff Position (as on 30<sup>th</sup> April, 2019)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discip-line	Pay Scale (Rs.)	Present basic (Rs.)	Date of joining	Permanent / Temporary	Category (SC/ST/OBC/ Others)	Mobile no.	Age	Email id
1	Programme Coordinator	Dr. Gajendra Pal	Officer Incharge	Agronomy	37400-67000	76610	27.06.87	Permanent	OBC	9456449671	59	gajendrapal@gmail.com
2	Subject Matter Specialist	Dr. Sarita Joshi	Professor	Home Science	37400-67000	66040	26.08.95	Permanent	Others	9871134441	50	saritajoshi156@yahoo.com
3	Subject Matter Specialist	Dr. Sundeep Cahaudhary	Professor	Agronomy	37400-67000	58830	01.01.96	Permanent	OBC	9412311502	50	sundeep.baraut@gmail.com
4	Subject Matter Specialist	Dr. Amit Cahaudhary	SMS/ Asstt. Professor	Horticulture	15600-39100	33740	09.12.03	Permanent	OBC	9897060189	50	amitchaudhary1368@gmail.com
5	Computer Programmer	Sh. U.S. Rathi	Programme Asstt.	Computer Science	9300-34800	50500	30.07.07	Permanent	OBC	9012347688	38	uttam.svp@gmail.com
6	Programme Assistant	Dr. Ravindra Kumar	Programme Asstt.	Soil Science	9300-34800	50500	02.08.07	Permanent	OBC	9758987011	42	malikrk04@rediffmail.com
7	Farm Manager	Dr. Bhupendra Kumar	Programme Asstt./ Farm Manager	Plant Breeding	9300-34800	47600	03.09.08	Permanent	SC	9368651430	43	bkdheeraniya75@gmail.com
8	Accountant / Superintendent	Sh. Sanjeev Chandel	O.S. Cum Accountant	Accountancy	9300-34800	60400	10.12.03	Permanent	OBC	9410860477	43	anjeevchandel2012@gmail.com
9	Stenographer	Sh. Praveen Kumar Premi	Stenographer	-	5200-20200	35300	26.12.08	Permanent	SC	9718476096	43	plkpremi1975@gmail.com
10	Driver	Sh. Papin Kumar	Driver Cum Mechanic	-	5200-20200	27600	26.12.08	Permanent	OBC	8057332297	40	-
11	Supporting staff	Sh. Salekh Chand	Watchman	-	5200-20200	34300	01.12.92	Permanent	Others	9997530844	43	-

1.6. Total land with KVK (in ha) :

S. No.	Item	Area (ha)
1	Under Buildings	3.000
2.	Under Demonstration Units	0.600
3.	Under Crops	8.242
4.	Orchard/Agro-forestry	0.400
5.	Others (Pond, IFS, Lawn etc.)	0.400
	<b>Total</b>	<b>12.642</b>

1.7. Infrastructural Development:

**A) Buildings**

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	2008	510	43.65	2005	N.A.	Completed
2.	Farmers Hostel	ICAR	2008	300	22.92	2005	N.A.	Completed
3.	Staff Quarters (6)	ICAR	2008	400	26.72	2005	N.A.	Completed
4.	Demonstration Units (2)	ICAR	2008	160	11.06	2005	N.A.	Completed
5	Fencing	ICAR	2008	2000 RM	38.43	2005	N.A.	Completed
6	Irrigation channel	ICAR	2008	1000 RM	8.26	2005	N.A.	Completed
7	Threshing floor	ICAR	2008	300	2.34	2005	N.A.	Completed
8	Farm godown	ICAR	2008	60	3.63	2005	N.A.	Completed

**B) Vehicles**

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Ran	Present status
Mahindra Marshal Jeep	2005	4,22,192.00	2,25,385	Not Good
Motorcycle	2006	46,575.00	86,137	Good

**C) Equipments & AV aids**

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

## 1.8. A). Details SAC meeting\* conducted in the year 2018-19 (19/03/2019)

Date	Name and Designation of Participants	Salient Recommendations	Action taken
19/03/2019	<ol style="list-style-type: none"> <li>1. Dr. Gajendra Pal, Officer Incharge, KVK, Baghpat</li> <li>2. Sh. Parshant Kumar, Dy. Director, Agriculture, Baghpat</li> <li>3. Sh. Indermeet Singh, Dist. Vikas Pravandan, Nabard</li> <li>4. Sh. Hari Narayan, SMS, Agriculture Department, Baghpat</li> <li>5. Sh. Dharamvir Singh, Incharge, Fisheries, Baghpat</li> <li>6. Dr. R.P. Kannaujia, Director, SYND Bank, Baghpat</li> <li>7. Sh. Rishi Pal Singh, Soil testing lab., Baghpat</li> <li>8. Sh. Sharanpal Singh, Soil testing lab., Baghpat</li> <li>9. Sh. Sarvesh chandra, Horticulture department, Baghpat</li> <li>10. Dr. Mukesh Gupta, Animal Husbandry, Baghpat</li> <li>11. Sh. Ishwar Tiyaagi, Progressive Farmer, Naithla</li> <li>12. Sh. Parmod Kumar, Lehchauda, Baghpat</li> <li>13. Dr. Sarita Joshi, Professor, KVK, Baghpat</li> <li>14. Dr. Sandeep Chaudhary, Scientist (Agro.), KVK Baghpat</li> <li>15. Dr. Amit Chaudhary, Scientist (Hort.), KVK Baghpat</li> <li>16. Smt. Rakesh, Progressive Farmer, Mavikala, Baghpat</li> <li>17. Smt. Rajviri Progressive Farmer, Sankarod, Baghpat</li> <li>18. Sh. U.S. Rathi, Programme Asstt. (Computer), KVK Baghpat</li> <li>19. Dr. Ravindar Kumar, Prog. Asstt. (Soil), KVK Baghpat</li> <li>20. Dr. Bhupendar Kumar, Farm Manager, KVK Baghpat</li> <li>21. Sh. Sanjeev Chandel, O.S., KVK, Baghpat</li> <li>22. Sh. Parveen Kumar Premi, Steno, KVK Baghpat</li> <li>23. Sh. Shyam Singh, Progressive Farmer, Basi, Baghpat</li> <li>24. Sh. Ompal Sing, Farmer, Baghpat</li> <li>25. Sh. Dev Kumar, S.R.F. NICRA, Baghpat</li> <li>26. Sh. Papin Dhaka, Tractor Driver, KVK Baghpat</li> <li>27. Sh. Salekhchand Sharma, Watchman, KVK Baghpat</li> </ol>	<ol style="list-style-type: none"> <li>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.</li> <li>2. In-charge, Soil testing suggested, district wise soil fertility map should be made and target of soil sample should be fulfilled.</li> <li>3. DDM (NABARD) suggested to do survey of e-marketing portal so that awareness among farmers of district can be created.</li> <li>4. DDM (NABARD) suggested to present block wise activities of KVK graphwise.</li> <li>5. DHO suggested to put photographs of OFT in the report to depict the result of OFT in a effective manner</li> <li>6. As far as possible, seed improved variety should be included in conducting FLD.</li> </ol>	<ol style="list-style-type: none"> <li>1. As per suggestion work is being carried out.</li> <li>2. Total 536 soil samples has been tested and district wise soil fertility map has been made.</li> <li>3. Information of e-marketing is being provided to the through AgriMedia app.</li> <li>4. Graphics presentation will be made to present the same as per the requirement in the future.</li> <li>5. The same has been incorporated in the report.</li> <li>6. Improved variety Pusa-1612 of rice has been included for conducting FLD.</li> </ol>

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

## **2. DETAILS OF DISTRICT (2018-19)**

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

<b>S. No</b>	<b>Farming system/enterprise</b>
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)

<b>S. No</b>	<b>Agro-climatic Zone</b>	<b>Characteristics</b>
1	North Western Plain Zone	Sub humid to subtropical climate, maximum and minimum temperature 43 °C and 3 °C respectively with average rainfall is about 750 mm.
<b>S. No.</b>	<b>Agro ecological situation</b>	<b>Characteristics</b>
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 type/s

<b>S. No</b>	<b>Soil type</b>	<b>Characteristics</b>	<b>Area in ha</b>
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 appropriate ratio of sand, silt and clay. Percent of clay content is not as much as to cause poor aeration or to make the working difficult. The soil of the district is containing 7 to 27% clay and approximately equal amount of silt and sand and it has been designated as loam textured soil.	110065

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

<b>S. No</b>	<b>Crop</b>	<b>Area (ha)</b>	<b>Production (Qtl)</b>	<b>Productivity (Qtl /ha)</b>
1	Rice	5468	126632.88	23.16
2	Urd	380	2040	5.34
3	Moong	45	270	6.80
4	Arhar	536	4052.16	7.56
3	Wheat	54175	183800	33.93
4	Total oil seeds (Rabi)	1963	30622	15.64
5	Sugarcane	76387	59050206	737.04
6	Jawar (grain)	07	62	8.87
7	Maize	04	88.32	22.08

Source : Statistical magazine, Baghpat 2016

## 2.5. Weather data:

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
April, 2018	2.54	37	20	
May, 2018	10.16	37	25	
June, 2018	21.66	39	26	
July, 2018	78.84	35	27	
August, 2018	59.23	34	25	
September, 2018	30.48	33	24	
October, 2018	0.0	33	16	
November, 2018	0.0	30	12	
December, 2018	0.0	26	10	
January, 2019	22.86	22	12	
February, 2019	27.82	23	13	
March, 2019	4.10	30	15	

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

Category	Population	Production	Productivity
<b>Cattle</b>			
Crossbred	79556	-	-
Indigenous	19392	-	-
<b>Sheep</b>			
Crossbred	2317	-	-
Indigenous	533	-	-
<b>Goats -</b>	23712	-	-
<b>Pigs</b>			
Crossbred	2393	-	-
Indigenous	7712	-	-
<b>Poultry (Hens and chicken)</b>	70068		
<b>Fish</b> Inland	202 Ha.	1635 Q	30 Q/ Ha.

Source : Statistical magazine, Baghpat 2016

## 2.7 Details of Operational area / Villages (2018-19)

S. No.	Taluka	Name of the block	No. of the village	Major crops & enterprises	Major problems identified	Identified Thrust Areas
1.	Khekra	Khekra	41	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	1) To increase productivity of wheat in late sown conditions. 2) Increase milk production in Buffalos. 3) Balance use of fertilizer in sugarcane.
2.	Baghpat	Baghpat	48	Dairy, Sugarcane, paddy, wheat, fodder & vegetables	4. White grub attack in sugarcane 5. Red rot in sugarcane 6. Late sowing of sugarcane due to wheat-sugarcane cropping system	4) Balance use of fertilizer in wheat. 5) Weed management in wheat. 6) Management of pests in sugarcane.
		Pillna	35	Dairy, sugarcane, paddy, wheat, mustard, moong, arhar, & poultry	7. No use of potash in all crops 8. Deficiency of minor elements and organic matter in soil 9. Depletion of ground water	7) To create awareness about human nutrition /nutritional needs to mitigate the problems of nutritional deficiency in rural woman & children. 8) Management of mango orchards.
3.	Baraut	Baraut	45	Dairy, Sugarcane, wheat, fodder, & vegetables crops	10. Low production of old orchards 11. Insect attack in vegetables 12. Low production of milk in milching animals.	9) Pest and weed management in paddy. 10) Maintenance of soil health. 11) Disease management in okra.
		Chhaprauli	22	Dairy, sugarcane, wheat, fodder & vegetables	13. Long dry period in milch animals 14. Undeveloped marketing system of Agriculture of produces	12) Promotion of oilseed and pulse crops. 13) Intercropping with sugarcane.
		Binoli	18	sugarcane, wheat, fodder, mustard, paddy, other enterprises- Dairy	15. Poor net return in sugarcane based cropping system. 16. Infertility in buffalo and cow. Poor health of animal due to malnutrition.	14) Balance diet with mineral mixture and vaccination to animals. 15) Renovation of old orchards

## 2.8 Priority/thrust areas

S. No	Crop/Enterprise	Thrust area
1	Wheat	To 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 2018-19

### 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 2018-19

OFT (Technology Assessment and Refinement)				FLD (Oilseeds, Pulses, 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	07	34	21	100.0	80.9	200	251

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	72	50	14400	1031	1000	1693	10000	10518
Rural youth	12	4	72	40				
Extn. Functionaries	8	4	90	85				
Sponsored	8	4	200	200				
<b>Total</b>	<b>100</b>	<b>62</b>	<b>14762</b>	<b>1356</b>	<b>1000</b>	<b>1693</b>	<b>10000</b>	<b>10518</b>

Seed Production (Qtl.)			Planting material (Nos.)		
5			6		
Target	Achievement	Distributed to no. of farmers	Target	Achievement	Distributed to no. of farmers
275.0	252.00	Supply to NSC, Meerut and APMC, Khekra	20000	3050	-

### I.A TECHNOLOGY ASSESSMENT

#### Summary of technologies assessed under various crops by KVKs

Thematic areas	Crop	Name of the technology assessed	No. of trials	No. of farmers
Varietal Evaluation	Wheat	Introduction of new early sown varieties HD-2967 and HD-3086 of wheat	3	3
	Chilli	Introduction of new varieties Pusa Jawala and Pusa Sadabahar of Chilli	3	4
	Onion	Introduction of improved varieties of Onion	3	6
Integrated Crop Management	Sugarcane	Intercropping of onion with autumn sugarcane	1	3
Drudgery Reduction	Sugarcane	Use of sugar cane dethrasher for dethrashing of sugarcane leaves	5	5
Value addition	Potato	Preparation of chips	3	3
Mechanization	Sugarcane	Effect of sowing techniques on sugarcane production	3	3
<b>Total</b>			<b>21</b>	<b>27</b>

## I.B. TECHNOLOGY REFINEMENT: Nil

## I.C. TECHNOLOGY ASSESSMENT AND REFINEMENT IN DETAIL

### 1. Integrated Crop Management

**Problem definition:** Low return of sole cultivation of Sugarcane.

**Technology Assessed (as the case may be) :** Intercropping of onion with autumn sugarcane.

KVK, Baghpat conducted a intercropping trial to assess the yield potential of intercropping of onion (NHRFD Red) with Sugarcane varieties CoS-0238 in comparison of existing sole cultivation of sugarcane with three treatment including farmer's practice on three locations in 1.2 ha. The sugarcane was planted on second week of October, 2018 & Onion transplanted Jan 2019. However, Final result will be concluding after crops harvested in Rabi 2019-20.

**Table Performance of onion as intercrop in sugarcane.**

<b>Technology Option</b>	<b>No. of trials</b>	<b>Yield of intercrop (qtl/ha)</b>	<b>Gross Return of intercrop (Rs /ha)</b>	<b>Cost of cultivation of system</b>	<b>Gross Return of system (Rs /ha)</b>	<b>Net return of system (Rs/ha)</b>	<b>BC ratio</b>
Sugarcane (Farmers Practice)	3	-	-	-	-	-	-
Two row of Onion between two line of Sugarcane (90 cm)		-					

**Scientist:** Dr. Sandeep chaudhary, Agronomy

### 2. DRUDGERY REDUCTION

**Problem definition:** Low work efficiency, injury and higher drudgery in sugarcane striping.

**Technology Assessed (as the case may be) :** Use of sugarcane dethrasher.

Sugarcane is the main crop of district Baghpat. Women are actively involved in dethrashing of sugarcane. This task is done by traditional sickle hence, it is time and energy consuming along with causing drudgery to them. In order to enhance the efficiency and reducing drudgery, KVK, Baghpat conducted a trial by introducing sugarcane dethrasher as T2 for dethrashing of sugarcane leaves in comparison to traditional sickle as farmer practice T1 on five locations.

Result revealed that Drudgery is minimized as its been reduced from very exhausted to mild and very painful to pain lesspainfull (moderate pain ) activity. 34 man days and Rs 10200 /is saved in dethrashing of sugarcane done by T2 as compared to T1. 37.5% time is saved in dethrashing of sugarcane by using sugarcane dethrasher as compare to traditional sickle.

**Table Performance of traditional sickle versus sugarcane dethrasher/ha.**

<b>Technology Option</b>	<b>No. of trials</b>	<b>Parameter observed</b>	<b>Data</b>	<b>Results</b>	<b>Saving of expenses (Rs./ha)</b>
				<b>Saving of time (man days)</b>	
<i>T<sub>1</sub> -Traditional sickle (Farmers Practice)</i>	05	<ul style="list-style-type: none"> <li>• Time(mandays)</li> <li>• Quantity of sugarcane dethrashed</li> <li>• Exertion perceived</li> <li>• Difficulty perceived</li> <li>• Yield (q/ha)</li> </ul>	= 90 mandays = 900 qtl. = Very exhausted = Very painful =900qtl	34 (37.77 %)	10200/
<i>T<sub>2</sub> -Sugarcane dethrasher (Recommended Practice)</i>		<ul style="list-style-type: none"> <li>• Time(mandays)</li> <li>• Quantity of sugarcane dethrashed</li> <li>• Exertion perceived</li> <li>• Difficulty perceived</li> <li>• Yield(q/ha)</li> </ul>	= 56mandays = 900 qtl = mildly exhausted =moderate pain =900qtl		

8 hour=one man day.



*sugarcane dethrasher*



*Farm women dethrashing sugarcane by using sugarcane dethrasher*

**Scientist:** Dr. Sarita Joshi, Home science and Dr. Sandeep chaudhary, Agronomy

### 3. VALUE ADDITION

**Problem definition:** Low income due to low price of potato and no value added products & wastage due to surplus production

**Technology Assessed :** Potato chips making

Potato is the perishable commodity. There have been frequent gluts in the market causing substantial economic loss to farmers and wastage also. One of the solution to this is the diversification of potato utilization KVK, Baghpat conducted a trial on value addition on potato chips making to assess the enhanced income and shelf life of potato by making potato chips in comparison to direct selling of raw potato. The observation was made with the respect of economy of chips and shelf life of the product.

**Table : chips making versus Raw/direct selling of potatoes**

<b>Technology Option</b>	<b>No. of trials</b>	<b>Parameter observed</b>	<b>Data</b>	<b>CB Ratio</b>	<b>Result</b>
<i>T<sub>1</sub> - Selling Raw potatoes commercially. (Farmers Practice)</i>	3	<i>Yield of potatoes Gross cost (Rs.) Gross return (Rs.) Net return (Rs.) Shelf life</i>	<i>350 qtl/hac 110000/ 350000/ 240000/ 10-15 days in normal condition storage</i>	<i>1:3.1</i>	<i>T<sub>2</sub> is beneficial as compared to T<sub>1</sub> as CB ratio is much higher and Shelf life of the value added product i.e. potato chips is enhanced.</i>
<i>T<sub>2</sub> - Selling of value added product i.e. potato chips. (Recommended Practice)</i>		<i>Chips prepared Gross cost (Rs.) Gross return (Rs.) Net return (Rs.) Shelf life</i>	<i>120 qt/hac 475000/ 4800000/ 4325000/ Stayed at best quality for about 2-3 months after date of pouching</i>	<i>1:1.1</i>	



**Selling price of raw potato (Chipsosna variety) Rs10/kg**

**Selling price of value added of potato chips (Chipsosna variety) Rs400/kg**

**Scientist: Dr. Sarita Joshi, Home science**

#### 4. VARAITELE EVALUATION

**Problem definition:** Low yield due to old variety Chilli.

**Technology Assessed (as the case may be) :** Introduction of improved varieties of chilli.

A varietal evaluation trial to assess the yield potential of new varieties Pusa Jawala and Pusa Sadabahar in comparison of existing local variety has been conducted by KVK, Baghpat, with three treatment including farmer's practice on four locations in 0.4 ha. The crop was sown on 25 to 28 Oct., 2018 and the same has been harvested on 15 to 20 March., 2019.

**Table Performance various varieties of Chilli**

<b>Technology Option</b>	<b>No. of trials</b>	<b>Yield (qtl/ha)</b>	<b>% increase in Yield</b>	<b>Cost of cultivation</b>	<b>Gross Return (Rs /ha)</b>	<b>Net return (Rs/ha)</b>	<b>BC ratio</b>
<i>T<sub>1</sub> - Use of local variety (Farmers Practice)</i>	4	70	-	52500	105000	72500	2.0
<i>T<sub>2</sub> - Pusa Jawala</i>		85	21.4	42800	127500	84700	2.9
<i>T<sub>3</sub>- Pusa Sadabahar</i>		95	35.7	45500	142500	97000	3.1





**Rate:-** Chillie @ Rs. 1500 per qtl.

**Scientist:** Sh. Amit Chaudhary, Horticulture

## 5. VARAITELE EVALUATION

**Problem definition:** Low yield due to old variety Onion.

**Technology Assessed (as the case may be) :** Introduction of improved varieties of Onion.

A varietal evaluation trial to assess the yield potential of new varieties Nasik Red and Agrifound Red in comparison of existing local variety has been conducted by KVK, Baghpat, with three treatment including farmer's practice on six locations in 0.6 ha. The crop was sown on 21 to 25 Oct., 2018 and the same has been harvested on 12 to 15 March., 2019.

**Table Performance various varieties of Chillie**

Technology Option	No. of trials	Yield (qtl/ha)	% increase in Yield	Cost of cultivation	Gross Return(Rs /ha)	Net return (Rs/ha)	BC ratio
<i>T<sub>1</sub></i> - Use of local variety (Farmers Practice)	6	225	-	60800	337500	294700	5.5
<i>T<sub>2</sub></i> – Nasik Red		300	33.33	62000	450000	388000	7.2
<i>T<sub>3</sub></i> - Agrifound Red		350	55.55	62500	5255000	462500	8.4

**Rate:-** Onion @ Rs. 1500 per qtl.

**Scientist:** Sh. Amit Chaudhary, Horticulture

## 6. VARAITELE 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-2967 and 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	Gross Return (Rs /ha)	Net return (Rs/ha)	BC ratio
<i>T<sub>1</sub></i> –Use of PBW-550	3	41.20	-	48265	75808	27543	1.57



(Farmers Practice)							
T <sub>2</sub> - HD-2967		44.75	8.62	49460	82340	32880	1.66
T <sub>3</sub> - HD-3086 (Recommended Practice)		50.65	22.94	49460	93196	43736	1.88



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

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

## 7. MECHANIZATION

**Problem definition:** Lack of information regarding the planting technique of sugarcane by mechanical mean.

**Technology Assessed (as the case may be) :** Effect of sowing techniques on sugarcane production

The farmers of the district are using the only conventional technique of sugarcane plantation ie. By using ridger to make furrow and manual placing the sets in furrow since a long time. But they not aware of other planting techniques of the sugarcane due to non-availability of machines like trencher or other planter. To overcome from this problem an OFT was conducted at the farmer's field to demonstrate the effect different planting technique on the productivity of sugarcane crop. For this 3 farmers with three replications was selected along with three treatments. The results of the trial shows the increase in productivity as well as reduction of insect and pest due to solarization of fallow land between the rows. The observation were made in respect of cost of cultivation, field capacity, field efficiency and yield of sugarcane.

The crop was planting on 10 to 12 March, 2018 and the same was harvested on 10 to 17 Feb., 2019 and supplied to sugar mill.

**Table** Effect of deep ploughing on the productivity.

Technology Option	No. of trials	Yield (qtl/ha)	% increase in Yield	Cost of cultivation	Gross Return (Rs /ha)	Net Returns (Rs. /ha)	BC ratio
Planting of sugarcane by ridger after harrowing (Farmers Practice)	3	610	-	85000	198250	113250	2.33
Planting of sugarcane by ridger after ploughing and subsequent rotavator		745	22.13	85000	242125	157125	2.84
Planting of sugarcane by Trencher after ploughing and subsequent harrowing (Recommended Practice)		910	49.18	85000	295750	210750	3.47

**Rate:-** Sugarcane @ Rs. 325 per quintal

**Scientist:** Dr. Sanjay Kumar, Agril. Engineering

## II. FRONTLINE DEMONSTRATION

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

List of technologies demonstrated during previous year and popularized during 2017-18 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	Varietal evaluation	Seed of improved variety (PU-31), application of tricho-derma in soil and chemical weed control through pre-emergence weedicides.	Demonstrations and trainings	28	75	69.0
2	Greengram	Varietal evaluation	Seed of improved variety (PM 2-3), application of tricho-derma in soil and chemical weed control through pre-emergence weedicides.	Demonstrations and trainings	09	66	32.0
3	Lentil	Varietal evaluation	Seed of improved variety (VL-08), application of tricho-derma in soil and chemical weed control through pre-emergence weedicides.	Demonstrations and trainings	14	37	21.0
4	Mango	Value addition	Preparation of mango squash by the use of 610 mg KMS /lt. mango squash as a preservative	Demonstrations, trainings, farmers fairs and press news	10	21	-
5	Sugarcane/ wheat	RCT	Solarization through deep ploughing	Demonstrations, trainings and advisory service	10	80	70
6	Wheat	RCT	Line sowing of wheat	Demonstrations, trainings and advisory service	10	50	35

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

b. Details of FLDs implemented during **2018-19** (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	
1	Blackgram	Integrated Crop Management	Improved variety PU-31	Kharif-2018	20.0	20.0	0	46	46	None
2	Greengram	Integrated Crop Management	Improved variety PM-2-3	Kharif-2018	10.0	10.0	0	29	29	None
3	Pegion pea	Integrated Crop Management	Improved variety Pant-291	Kharif 2018	10.0	10.0	0	28	28	None
4	Lentil	Integrated Crop Management	Improved variety PL 08	Rabi 2018-19	20.0	20.0	0	66	66	None

5	Mustard	Integrated Crop Management	Improved variety RH-749	Rabi 2018-19	10.0	10.0	0	22	22	None
6	Marigold	Varietal evaluation	Demonstration of improved variety marigold i.e. Pusa narangi	Rabi 2018-19	1.0	1.0	0	10	10	None
7	Radish	Varietal evaluation	Improved variety of radish i.e. Pusa Chetki	Rabi 2018-19	0.8	0.8	0	8	8	None
8	Cauliflower	Varietal evaluation	Improved variety of radish i.e. Pusa Hybrid	Rabi 2018-19	1.2	1.2	0	12	12	None
9	Sugarcane	Mechanization	Deep ploughing techniques through disc plough	2018-19	4.0	4.0	0	10	10	None
10	Wheat	Mechanization	Line sowing of wheat by seed drill	Rabi-2018-19	4.0	7.9	0	10	10	None
11	Seasonal fruit and vegetable	Food security	Growing of seasonal fruits and vegetable	Rabi 18-19 Kharif & Zaid -18	0.1	0.1	0	10	10	None
12	Revolving Stool	Drudgery reduction	Use of revolving stool in milking of an animal	-	-	-	0	10	10	None

#### Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil (kg/ha)			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Blackgram	Kharif-2018	Irrigated	Sandy Loam	121	14.5	230	Sugarcane	10-15 June, 2018	25-30 Aug., 2018	155	18
Greengram	Kharif-2018	Irrigated	Sandy Loam	122	12.9	221	Sugarcane	15-20 June, 2018	20-25 Aug., 2018	155	18
Pegion pea	Kharif-2018	Irrigated	Sandy Loam	122	12.9	221	Sugarcane	10-15 June, 2018	05-12 Nov., 2018	168	21
Lentil	Rabi 2018-19	Irrigated	Sandy Loam	120	13.5	225	Jowar (fooder) and paddy	16 Nov to 06 Dec., 2018	12-15 April, 2019	85	19
Mustard	Rabi 2018-19	Irrigated	Sandy Loam	128	12.5	226	Jowar (fooder) and paddy	15 -28 Oct., 2018	26 Feb. to 05 Mar., 2019	71	17
Marigold	Rabi 2018-19	Irrigated	Sandy Loam	123	14.5	230	Jowar (fodder) and paddy	05-20 Oct., 2018	8-15 Mar., 2019	155	18
Radish	Rabi 2018-19	Irrigated	Sandy Loam	124	14.5	223	Paddy	10-18 Oct., 2018	22-25 Mar., 2019	151	15
Cauliflower	Rabi 2018-19	Irrigated	Sandy Loam	122	12.9	221	Jowar (fodder)	08-22 Oct., 2018	27-30 Mar., 2019	152	16

Sugarcane	2018-19	Irrigated	Sandy Loam	121	13.9	221	Ratoon, wheat	10-12, Mar., 18	20 -26 Feb., 2019	450	22
Wheat	Rabi-2018-19	Irrigated	Sandy Loam	127	12.7	227	Sugarcane	25 Nov. to 10 Dec., 18	18 – 25 Apr., 2019	18	04

#### Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	Kitchen garden provided fresh, insecticide and pesticides free vegetable throughout the year. Use of hybrid seeds provided higher yield.
2	The farmers found that the additional dose of sulphur @ 30 kg /ha given to the mustard crop, result in better oil content and quality.
3	The keen interest has been taken regarding the pulse cultivation in existing cropping pattern.
4	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
5	Polarization of soil by deep ploughing reduces the insect and pest infestations in the crops and enhance the productivity.
6	Intercropping is suitable for sugarcane grower to have additional income.

#### Farmers' reactions on specific technologies

S. No	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	Mustard cultivation provided farmers to ensure to fulfill their domestic consumption and suitable to existing cropping system.
4	Farmers found that the implements are working better in paddy field rather than sugarcane field.
5	The irrigation water scarcity may be encountered with the use of bed planting system which also provided an option of intercropping with.
6	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	2	31-08-2018 22-09-2018	28 35	
2	Farmers/Women Farmer Training	8	01-04-2018 03-05-2018 30-05-2018 23-08-2018 22-09-2018 17-10-2018 20-01-2019 05-03-2019	20 21 22 21 22 22 21 21	

3	Media coverage	10	03-05-2018 20-05-2018 14-08-2018 20-09-2018 05-12-2018 24-12-2018 24-02-2019 29-02-2019 07-03-2019 24-03-2019	mass	
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### Performance of Frontline demonstrations

#### Frontline demonstrations on oilseed crops





Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Mustard																		
	Integrated Crop Management	Improved variety of mustard i.e. RH-749	RH-749	22	12.5	21.75	18.0	18.63	15.6	19.4	15280	59520	44240	3.8	16280	48640	32360	2.9



**Rate:-** Mustard @ Rs. 3200/Qtl

# Frontline demonstration on pulse crops

## Cluster frontline demonstration of pulses under NFSM :

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																		
	Integrated Crop Management	Improved variety PU-31 (Kharif-18)	PU-31	46	20.0	10.65	8.4	9.5	7.2	31.94	18500	42750	24250	2.31	18500	32400	13900	1.75
Greengram																		
	Integrated Crop Management	Improved variety IPM 2-3 (Kharif-2018)	PM-2-3	29	10.0	9.8	8.1	8.9	7.5	30.6	18500	49000	30500	2.64	18500	37500	19000	2.02
Pegion pea																		
	Integrated Crop Management	Improved variety Pant - 291 (Kharif -2018)	Pant -291	28	10.0	13.65	11.4	12.5	10.2	22.54	24500	56250	31750	2.26	23800	45900	22100	1.92
Lentil																		
	Integrated Crop Management	Improved variety PL 08 (Rabi 2018-19)	PL 08	66	20.0			12.1	9.5	28.0	16580	46585	30005	2.8	19585	37537	18952	1.9
<div></div>																		

**Rate:** Rate: Greengram @ Rs. 5000 / Qtl, Blackgram @ Rs. 4500 / Qtl and Pegionpea @ Rs. 4500/Qtl

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

### FLD on Other crops

Category & Crop	Thematic Area	Name of the technology	No. of Farm ers	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												
Flower																			
Marigold																			
	Varietal evaluation	Demonstration of improved variety marigold i.e. Pusa narangi	5	0.4	250	200	175	150	15	Floweri ng (45-50 days)	Floweri ng (60-65 days)	32500	175000	142500	5.3	32000	50000	118000	4.6
Vegetable																			
Radish																			
	Varietal evaluation	Improved variety of radish i.e. Pusa Chetki	8	0.8	350	300	325	250	30	Maturity (30-35 days)	Maturity (40-45 days)	25000	195000	170000	7.9	28000	150000	122000	5.3
Cauliflower																			
	Varietal evaluation	Improved variety of cauliflower i.e. Pusa hybrid	12	1.2	300	250	275	200	25	Maturity (40-45 days)	Maturity (55-60 days)	55000	550000	495000	10.0	53500	400000	346500	7.9

**Rate:-** Marigold @ Rs. 1000/qlt, Radish @ Rs. 600/qlt, Cauliflower @ Rs. 2000/qlt

**FLD on Livestock : Nil**

**FLD on Fisheries : 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)			
					Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Crop (Zaid , Kharif& Rabi)	Food security	Growing of seasonal vegetables and fruits	10	10	405	110	268	<ul style="list-style-type: none"> <li>Duration days – 338</li> <li>Saving – Rs. 12250 per annum</li> </ul>	<ul style="list-style-type: none"> <li>Duration days – 137</li> <li>Saving – Rs. 3300 per annum</li> </ul>	1720	12150	104458	1:7.1	900	3300	2400	1:3.6





### FLD on Other Enterprise: Drudgery Reduction

Enterprise	Crop	Name of Technology Demonstrated	No. of Farmers	Major parameters	Field observations		% Change in parameter
					Demon.	Local	
Revolving stool	-	Use of revolving stool in milking of an animals	10	<ul style="list-style-type: none"> <li>• Time saving</li> <li>• Drudgery (pain in leg and knee)</li> <li>• Acceptability</li> </ul>	<ul style="list-style-type: none"> <li>• 6.5 min per animal</li> <li>• No drudgery perceived</li> </ul>	<ul style="list-style-type: none"> <li>• 9 min per animal</li> <li>• Drudgery prone practice</li> </ul>	<ul style="list-style-type: none"> <li>• 27% time is saved,</li> <li>• 100% drudgery free,</li> <li>• 100% acceptable</li> </ul>





**FLD on Women Empowerment: Nil**

## FLD on Farm Implements and Machinery

[illegible]

### III. Training Programme

#### Farmers' Training including sponsored training programmes (on campus)

Thematic area	No. of courses	Participants								
		Others			SCST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>I Crop Production</b>										
Integrated Crop Management	3	47	6	53	7	0	7	54	6	60
Seed Production	3	57	0	57	3	0	3	60	0	60
<b>Total</b>	<b>6</b>	<b>104</b>	<b>6</b>	<b>110</b>	<b>10</b>	<b>0</b>	<b>10</b>	<b>114</b>	<b>6</b>	<b>120</b>
<b>II Soil Health and Fertility Management</b>										
Soil fertility management	1	20	0	20	0	0	0	20	0	20
<b>Total</b>	<b>1</b>	<b>20</b>	<b>0</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>0</b>	<b>20</b>
<b>III Home Science/Women empowerment</b>										
Processing and cooking	1	0	23	23	0	0	0	0	23	23
Value addition	1	0	29	29	0	3	3	0	32	32
Women and child care	1	0	17	17	0	3	3	0	20	20
<b>Total</b>	<b>3</b>	<b>0</b>	<b>69</b>	<b>69</b>	<b>0</b>	<b>6</b>	<b>6</b>	<b>0</b>	<b>75</b>	<b>75</b>
<b>IV Horticulture</b>										
(a) Ornamental Plants										
Export potential of ornamental plants	1	20	0	20	0	0	0	20	0	20
(b) Medicinal & aromatic plants										
Other (Bee keeping of self employment)	1	20	0	20	0	0	0	20	0	20
<b>Total</b>	<b>2</b>	<b>40</b>	<b>0</b>	<b>40</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>40</b>	<b>0</b>	<b>40</b>
<b>GRAND TOTAL</b>	<b>12</b>	<b>164</b>	<b>75</b>	<b>239</b>	<b>10</b>	<b>6</b>	<b>16</b>	<b>174</b>	<b>81</b>	<b>255</b>



#### Farmers' Training including sponsored training programmes (off campus)

Thematic area	No. of courses	Participants								
		Others			SCST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>I Crop Production</b>										
Integrated nutrient management	4	76	0	76	07	0	7	83	0	83
Resource Conservation Technologies	2	38	0	38	02	0	2	40	0	40
Nursery management	1	17	0	17	03	0	3	20	0	20
Integrated Crop Management	4	71	0	71	11	0	11	82	0	82
Seed production	2	40	0	40	0	0	0	40	0	40
<b>Total</b>	<b>13</b>	<b>242</b>	<b>0</b>	<b>242</b>	<b>23</b>	<b>0</b>	<b>23</b>	<b>265</b>	<b>0</b>	<b>265</b>
<b>II Soil Health and Fertility Management</b>										
Soil fertility management	4	80	0	80	0	0	0	80	0	80
<b>Total</b>	<b>4</b>	<b>80</b>	<b>0</b>	<b>80</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>80</b>	<b>0</b>	<b>80</b>

<b>III Home Science/Women empowerment</b>										
Design and development of low cost diet	1	0	20	20	0	0	0	0	20	20
Drudgery reduction	2	0	40	40	0	0	0	0	40	40
Women & child care	2	0	51	51	0	0	0	0	51	51
Value addition	3	0	60	60	0	0	0	0	60	60
Grain storage	1	0	20	20	0	0	0	0	20	20
<b>Total</b>	<b>9</b>	<b>0</b>	<b>191</b>	<b>191</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>191</b>	<b>191</b>
<b>IV Horticulture</b>										
(a) Vegetable										
Production technique	2	40	0	40	0	0	0	40	0	40
(b) Medicinal & aromatic plants										
Other (Bee keeping of self employment)	1	20	0	20	0	0	0	20	0	20
<b>Total</b>	<b>3</b>	<b>60</b>	<b>0</b>	<b>60</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>60</b>	<b>0</b>	<b>60</b>
<b>V Agril. Engineering</b>										
Farm Machinery and its maintenance	6	120	0	120	0	0	0	120	0	120
Repair and maintenance of farm machinery and implements	3	60	0	60	0	0	0	60	0	60
<b>Total</b>	<b>9</b>	<b>180</b>	<b>0</b>	<b>180</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>180</b>	<b>0</b>	<b>180</b>
<b>GRAND TOTAL</b>	<b>38</b>	<b>562</b>	<b>191</b>	<b>753</b>	<b>23</b>	<b>0</b>	<b>23</b>	<b>585</b>	<b>191</b>	<b>776</b>



#### 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
<b>I Crop Production</b>										
Integrated nutrient management	4	70	6	76	7	0	7	83	0	83
Resource Conservation Technologies	2	38	0	38	2	0	2	40	0	40

Nursery management	1	17	0	17	3	0	3	20	0	20
Integrated Crop Management	7	124	6	130	18	0	18	136	6	142
Seed production	5	97	0	97	3	0	3	100	0	100
<b>Total</b>	<b>19</b>	<b>346</b>	<b>6</b>	<b>352</b>	<b>33</b>	<b>0</b>	<b>33</b>	<b>379</b>	<b>6</b>	<b>385</b>
<b>II Soil Health and Fertility Management</b>										
Soil fertility management	5	100	0	100	0	0	0	100	0	100
<b>Total</b>	<b>5</b>	<b>100</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>100</b>
<b>III Home Science/Women empowerment</b>										
Processing and cooking	1	0	23	23	0	0	0	0	23	23
Value addition	4	0	89	89	0	3	3	0	92	92
Women and child care	3	0	68	68		3	3	0	71	71
Design & development of low cost diet	1	0	20	20	0	0	0	0	20	20
Drudgery reduction	2	0	40	40	0	0	0	0	40	40
Grain storage	1	0	20	20	0	0	0	0	20	20
<b>Total</b>	<b>12</b>	<b>0</b>	<b>260</b>	<b>260</b>	<b>0</b>	<b>6</b>	<b>6</b>	<b>0</b>	<b>266</b>	<b>266</b>
<b>IV Horticulture</b>										
(a) Vegetable										
Production technique	2	40	0	40	0	0	0	40	0	40
(b) Ornamental Plants										
Export potential of ornamental plants	1	20	0	20	0	0	0	20	0	20
(c) Medicinal & aromatic plants										
Other (Bee keeping of self employment)	2	40	0	40	0	0	0	40	0	40
<b>Total</b>	<b>5</b>	<b>100</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>100</b>
<b>V Agril. Engineering</b>										
Farm Machinery and its maintenance	6	120	0	120	0	0	0	120	0	120
Repair and maintenance of farm machinery and implements	3	60	0	60	0	0	0	60	0	60
<b>Total</b>	<b>9</b>	<b>180</b>	<b>0</b>	<b>180</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>180</b>	<b>0</b>	<b>180</b>
<b>GRAND TOTAL</b>	<b>50</b>	<b>726</b>	<b>266</b>	<b>992</b>	<b>33</b>	<b>6</b>	<b>39</b>	<b>759</b>	<b>272</b>	<b>1031</b>

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

Area of training	No. of Courses	No. of Participants								
		General			SCST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Seed Production	1	6	0	6	4	0	4	10	0	10
Value addition (Fruit and vegetable preservation)	1	0	8	8	0	2	2	0	10	10
Farm machinery and its maintenance	1	10	0	10	0	0	0	10	0	10
Nursery raising	1	10	0	10	0	0	0	10	0	10
<b>TOTAL</b>	<b>4</b>	<b>26</b>	<b>8</b>	<b>34</b>	<b>4</b>	<b>2</b>	<b>6</b>	<b>30</b>	<b>10</b>	<b>40</b>



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
Seed Production	1	6	0	6	4	0	4	10	0	10
Fruit and vegetable preservation	1	0	8	8	0	2	2	0	10	10
Farm machinery and its maintenance	1	10	0	10	0	0	0	10	0	10
Nursery raising	1	10	0	10	0	0	0	10	0	10
<b>TOTAL</b>	<b>4</b>	<b>26</b>	<b>8</b>	<b>34</b>	<b>4</b>	<b>2</b>	<b>6</b>	<b>30</b>	<b>10</b>	<b>40</b>

**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
Crop Management	1	9	0	9	6	0	6	15	0	15
<b>TOTAL</b>	<b>1</b>	<b>9</b>	<b>0</b>	<b>9</b>	<b>6</b>	<b>0</b>	<b>6</b>	<b>15</b>	<b>0</b>	<b>15</b>

**Training programmes for Extension Personnel including sponsored training programmes (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
Women and Child care	1	0	40	40	0	5	5	0	45	45
Flower production	1	15	0	15	0	0	0	15	0	15
Farm machinery and its maintenance	1	10	0	10	0	0	0	10	0	10
<b>TOTAL</b>	<b>3</b>	<b>25</b>	<b>40</b>	<b>65</b>	<b>0</b>	<b>5</b>	<b>5</b>	<b>25</b>	<b>45</b>	<b>70</b>

**Training programmes for Extension Personnel including sponsored training programmes (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
Crop Management	1	9	0	9	6	0	6	15	0	15
Women and Child care	1	0	40	40	0	5	5	0	45	45
Flower production	1	15	0	15	0	0	0	15	0	15
Farm machinery and its maintenance	1	10	0	10	0	0	0	10	0	10
<b>TOTAL</b>	<b>4</b>	<b>34</b>	<b>40</b>	<b>74</b>	<b>6</b>	<b>5</b>	<b>11</b>	<b>40</b>	<b>45</b>	<b>85</b>



**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
Increasing production and productivity of crops (FTT)	04	140	10	150	28	22	50	168	32	200
<b>GRAND TOTAL</b>	<b>04</b>	<b>140</b>	<b>10</b>	<b>150</b>	<b>28</b>	<b>22</b>	<b>50</b>	<b>168</b>	<b>32</b>	<b>200</b>



#### IV. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	1260	1260	46	1306
Diagnostic visits	05	260	12	272
Field Day	03	143	06	149
Group discussions	14	271	12	383
Kisan Ghoshti	14	3515	40	3555
Film Show	05	284	10	294
Self –help groups	0	0	0	0
Kisan Mela (organized)	02	460	12	472
Kisan Mela (attended)	03	mass	mass	mass
Exhibition	03	mass	mass	mass
Scientists' visit to farmers field	57	117	0	117
Farmers' visit to KVK	300	300	25	325
Plant/animal health camps	01	82	02	84
Farm Science Club	0	0	0	0
Ex-trainees Sammelan	0	0	0	0
Farmers' seminar/workshop	02	100	0	100
Method Demonstrations	08	167	12	179
Celebration of important days	02	156	05	161
Special day celebration	01	2160	107	2267
Exposure visits	08	405	03	408
Others (pl. specify)	0			
Swachta Pakhwada	01	98	0	98
Kisan Pathsala training	01	138	05	143
World Honey Bee Day	01	46	04	50
Marda Swasth Diwas	01	50	01	51
PPV&FR programme	01	100	04	104
<b>Total</b>	<b>1693</b>	<b>10112</b>	<b>306</b>	<b>10518</b>





### Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	0
Extension Literature	5
News paper coverage	47
Popular articles	1
Radio Talks	1
TV Talks	7
Animal health camps (Number of animals treated)	82
Others (Success Story, Book Published)	0
<b>Total</b>	<b>143</b>

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Marke-ting	Aware-ness	Other enter prise	
	Text only	10	-	-	-	-	-	10
	Voice only	-	-	-	-	-	-	-
	Voice & Text both	-	-	-	-	-	-	-
	<b>Total Messages</b>	<b>10</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>10</b>
	<b>Total farmers Benefitted</b>	<b>2500</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2500</b>

### Other Extension Activities:

#### 1. World Honey Bee Day celebrated at KVK, Baghpat on 18 to 21 May, 2018



#### 2. Gram Swaraj Abhiyan programme organized at KVK, Baghpat on 2<sup>nd</sup> May, 2018

Gram Swaraj Abhiyan programme was celebrated at block level on the occasion of Dr. Bhim Rao Ambedkar Jayanti during 14 April to 05 May, 2018. On this occasion Kisan Kalyan Karyasala was organized on 02nd May, 2018 with the collaboration of Agriculture Department at Krishi Vigyan



kendra, Baghpat. programme was inaugurated by chairman Zila Panchayat Smt. Renu Dhama. During the programme 206 farmers were present from various villages of block Khekra.



### 3. “Webcast of the event of two way interaction of Hon’ble Prime Minister with farmers” on 20<sup>th</sup> June, 2018 at KVK, Baghpat

Total 105 farmers and farm women from various villages Sankrod, Basi, Mavi Kalan, Daha, Fazullapur, Dola, Lehchauda, Silana, Pali, Katha etc. participated in the programme.







#### 4. Session of farm women through video conferencing on 12<sup>th</sup> July, 2018 at KVK, Baghpat

Total 32 farm women from various villages Sankrod, Mavi Kalan, Nurpur and Khekra participated in the programme.





## 5. Swachta Pakhwada celebrated 16 Sept. to 02 Oct., 2018



## 6. Kisan Samman Diwas celebrated 23 December, 2018

- Occasion- Birth Day of former Prime Minister, Ch Charan Singh
- Chief guest - Hon'ble District Magistrate,
- Venue- Baghpat

### Progressive farmers honored:

Total numbers of 05 progressive farmers under the jurisdiction of KVK Baghpat have been honored for their remarkable efforts in various agricultural activities on the occasion of kisan samman divas with the following details.





## 7. Mrada Swasth Diwas celebrated on 05 December, 2018

- Date of organization- 05<sup>th</sup> December 2018
- Venue- Collectrate campus Baghpat
- No. of participants -50



## 8. District level Kharif Kisan mela/Gosthi

- Date of organization- 15, June 2018
- Venue- - KVK, Baghpat
- Chief Guest- Hon'ble District Magistrate



### 9- K.V.K. monitoring Programme

- Date of organization- 14, June 2018
- Venue- - KVK, Baghpat
- Chief Guest- Hon'ble M.P

### 10- Farmers visited C.P.C. Doordarshan Kendra, New Delhi

- Date of visit - 25<sup>th</sup> September 2018
- No. of farmers- 05
- Visit palace - C.P.C. Doordarshan Kendra, New Delhi



### 8. Celebration of International Rural Women Day

- Date of organization- 15<sup>th</sup> October 2018
- Venue- Katha village
- No. of participants -50

### 9. Kisan Pathshala training

- Date of organization- 2.06.18, 01.12.08, 06.12.18
- Venue- Baghpat
- No. of participants -46x 03=138





## 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	395968.00	Supply to NSC, Meerut
Commercial crops	Mustard	RH-749	-	36.80	119600.00	Krishi Utpadan Mandi Samiti, Khekra
	Jowar	local	-	0	114375.00	Auctioned
<b>Total</b>				<b>252.00</b>	<b>629943.00</b>	

### Production of planting materials by the KVKs: NIL

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Vegetables seedlings	Tomato	Pusa hybrid -1	HYV	100 Plant	50.00	01 farmer
	Brinjal	Black Beauty Mohit	HYV	350 Plant	350.00	02 farmers
				100 Plant	50.00	01 farmer
	Cauliflower	Pusa Snow ball	Improved	500 Plant	400.00	02 farmers
	Chilli	Pusa Sadabahar	HYV	500 Plant	250.00	02 farmers
Ornamental plants	Marigold	Indian Chief		1500	450.00	For Campus
<b>Total</b>				<b>3050</b>	<b>1100.00</b>	

### Production of Bio-Products:

Bio Products	Name of the bio-product	Quantity	Value (Rs.)	No. of Farmers
		(kg)		
Bio Fertilisers				
	Vermicompost	100000	60000	At KVK farm (produced in IFS unit)
<b>Total</b>		<b>100000</b>	<b>60000</b>	



### 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	536	536	16	32000.00
<b>Total</b>	<b>536</b>	<b>536</b>	<b>16</b>	<b>32000.00</b>

## VIII. SCIENTIFIC ADVISORY COMMITTEE

Name of KVK	Number of SACs conducted	Date of SAC
KVK, Baghpat	01	19-03-2019

## IX. NEWSLETTER/MAGAZINE: Nil

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

## X. PUBLICATIONS

Category	Number
Research Paper	1
Technical bulletins	6
Technical reports	22
Book	0
Abstract	0

## 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
<b>Total</b>	-	01	20	13

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

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

**XIV. AGRICULTURAL TECHNOLOGY INFORMATION CENTRE****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	1	10	1	1	1	2	1	1	0
02	Video shows	1	25	2	1	2	1	1	1	0
03	Letters received	1	0	0	0	0	0	0	0	0
04	Letters replied	1	0	0	0	0	0	0	0	0
05	Training to farmers / technocrats / students	1	0	0	0	0	0	0	0	0

**D.2 . Publications (Print & Electronic media): Nil****E. Technology Products provided : Nil****F. Technology services provided**

S. No	Particulars	Number of farmers benefitted
01	Soil and water testing	536
02	Plant diagnostics	272
03	Details about the services to line Departments	3555

**XV. TECHNOLOGICAL BACKSTOPPING BY DIRECTORATES OF EXTENSION: Nil**



**XVI. Awards and recognition: Nil****Financial year 2018-19**

S.N.	Particular	Grant Sanction For 2018-19	Grant Received for 2018-19	Actual Expenditure 2018-19	Variation		Reason for variation
					(+) Saving	(-) Excess	
1	2	3	5		5	6	7
<b>A.</b>	<b>Recurring Items</b>						
1	Pay and Allowances	13100000.00	13100000.00	13080914.00	19086.00		
2	Travelling Allowances	100000.00	100000.00	95220.00	4780.00		
3	HRD	30000.00	30000.00	19559.00	10441.00		
4	Contingency						
	(a) Office Running	150000.00	150000.00	147652.00	2348.00		
	(b) POL	120000.00	120000.00	95084.00	24916.00		
	(c) Vocation Training						
	i) Training Meals	60000.00	60000.00	37100.00	22900.00		
	ii) Training Material	30000.00	30000.00	22515.00	7485.00		
	(d) F.L.D. other than (O& P)	80000.00	80000.00	52083.00	27917.00		
	(e) On Farm Trial	50000.00	50000.00	28250.00	21750.00		
	(f) Trg. Extn. Functionaries	45000.00	45000.00	22960.00	22040.00		
	(g) Library	5000.00	5000.00	3047.00	1953.00		
	(h) Farmer Fairs	0	0	0	0		
	(i) IFS	0	0	0	0		
	(j) Info, Tech, Unit	0	0	0	0		
	<b>Total A</b>	<b>13770000.00</b>	<b>13770000.00</b>	<b>13604384.00</b>	<b>165616.00</b>		
<b>B</b>	<b>Non-Recurring</b>						
1	Works						
	i) Equipment	0	0	0	0		
	ii) Works	0	0	0	0		
	iii) Library books	0	0	0	0		
	iv) Vehicles	0	0	0	0		
	<b>Total B</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		
<b>C</b>	<b>Revolving fund</b>	0	0	0	0		
	<b>Total C</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		
<b>D</b>	<b>TSP</b>						
	(a) General contingency	350000.00	350000.00	102138.00	247862.00		
	(b) capital	0	0	0	0		
	<b>Total D</b>	<b>350000.00</b>	<b>350000.00</b>	<b>102138.00</b>	<b>247862.00</b>		
	<b>Total (A+B+C+D)</b>	<b>14120000.00</b>	<b>14120000.00</b>	<b>13706522.00</b>	<b>413478.00</b>		

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