

# ANNUAL PROGRESS REPORT

(April-2018-March-2019)

## APR SUMMARY

### 1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	67	1094	246	1340
Rural youths	17	135	40	175
Extension functionaries	18	450	90	540
Sponsored Training	02	100	00	100
Vocational Training	03	30	00	30
<b>Total</b>	<b>107</b>	<b>1809</b>	<b>376</b>	<b>2185</b>

### 2. Frontline demonstrations

Enterprise	No. of Farmers	Area(ha)	Units/Animals
Oilseeds	105	42	-
Pulses	155	62	-
Cereals	25	06	-
Vegetables	10	02	-
Other crops (Commercial)	-	-	-
Hybrid crops	-	-	-
<b>Total</b>	<b>295</b>	<b>112</b>	<b>-</b>
Livestock & Fisheries	35	-	70
Other enterprises	-	-	-
<b>Total</b>	<b>35</b>	<b>-</b>	<b>70</b>
<b>Grand Total</b>	<b>330</b>	<b>112</b>	<b>70</b>

### 3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
<b>Technology Assessed</b>			
Crops	09	30	30
Livestock	02	55	55
Various enterprises	-	-	-
<b>Total</b>	<b>11</b>	<b>85</b>	<b>85</b>
<b>Technology Refined</b>			
Crops	-	-	-
Livestock	-	-	-
Various enterprises	-	-	-
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Grand Total</b>	<b>11</b>	<b>85</b>	<b>85</b>

### 4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	293	5521
Other extension activities	6154	-
<b>Total</b>	<b>6447</b>	<b>5521</b>

5. **Mobile Advisory Services: N.A.**

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

6. **Seed & Planting Material Production**

	Quintal/Number	Value Rs.
Seed (q)	298.49	-
Planting material (No.)	40590	-
Bio-Products (kg)	13200	-
Livestock Production (No.)	-	-
Fishery production (No.)	-	-

7. **Soil, water & plant Analysis**

Samples	No. of Beneficiaries	Value Rs.
Soil 351	163	52650
Water -	-	-
Plant -	-	-
<b>Total 351</b>	<b>163</b>	<b>52650</b>

8. **HRD and Publications**

Sr. No.	Category	Number
1	Workshops	02
2	Conferences	03
3	Meetings	01
4	Trainings for KVK officials	02
5	Visits of KVK officials	10
6	Book published	-
7	Training Manual	-
8	Book chapters	-
9	Research papers	05
10	Lead papers	01
11	Seminar papers	02
12	Extension folder	04
13	Proceedings	02
14	Award & recognition	03
15	On going research projects	05

# KVK-SHAHJAHANPUR

## ANNUAL PROGRESS REPORT

(April 2018 to March 2019)

### 1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone (O)	FAX(PP)	E mail
KVK Niyamatpur, Shahjahanpur	-	-	shahjahanpurkvk@gmail.com

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

Address	Telephone		E mail
	Office	FAX	
Vice Chancellor, S.V.P.U.A. & T., Meerut	0121-2411503	2411505	vc.svpuat@gmail.com

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Narendra Prasad	-	9450416956	<a href="mailto:narendraprasadkvk@gmail.com">narendraprasadkvk@gmail.com</a>

#### 1.4. Year of sanction:F.No 5(I)/93-KVK (F-II) Date 31.March 1993

### 1.5. Staff Position (as on 30<sup>th</sup> March, 2018)

S. N.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale (Rs.)	Present basic (Rs.)	Date of joining	Permanent /Temporary	Cate-gory	Mobile No	Age	Email ID
1	Programme Co-ordinator	Dr. L.B.Singh*	Head/Sr. Scientist	Agril Extension	37400-67000	55440.00 6 <sup>th</sup> pay	16.10.08	Permanent	Gen	9450155766	51	dr.lbsingh@gmail.com
2	Professor	Dr. Nutan Verma**	Professor	Plant Pathol.	37400-67000	67490.00 6 <sup>th</sup> pay	07.06.96	Permanent	Gen	9450444487	52	vermanutan65@gmail.com
3	SMS/Assitt Prof.	Dr. Narendra Prasad	Scientist	Agril. Extn.	37400-67000	58830.00 6 <sup>th</sup> pay	10.01.01	Permanent	OBC	9450416956	50	narendraprasadkvk@gmail.com
4	SMS/Assitt Prof.	Km. Vidya Gupta	Scientist	Home Science	15600-39100	32230.00 6 <sup>th</sup> pay	16.12.03	Permanent	OBC	9415366111	50	vidyaguptakvk@gmail.com
5	SMS/Assitt Prof.	Dr. S.K. Verma	Scientist	Horticulture	15600-39100	32980.00 6 <sup>th</sup> pay	24.06.08	Permanent	SC	9450234406	41	vermasant@gmail.com
6	SMS/Assitt Prof.	Dr. T.B.Yadav	Scientist	Animal Sci.	15600-39100	33840.00 6 <sup>th</sup> pay	28.06.08	Permanent	OBC	9411287939	54	drtbyadav16@gmail.com
7	SMS/Assitt Prof.	Dr. K.M.Singh	Scientist	Agronomy	15600-39100	32980.00 6 <sup>th</sup> pay	09.07.08	Permanent	Gen	9307015439	45	dhakrekms@rediffmail.com
8	Programme Assistant	Dr. Chandrapal	Programme Assistant (A.V.Aids)	Agril.Extn	9300-34800 (GP 4800)	74300.00 7 <sup>th</sup> pay	20.12.95	Permanent	Gen	9415482746	47	cpdeepali@gmail.com
9	Computer Programmer	Dr Manoj Kr. Mishra	Computer Programmer	Computer Science	9300-34800 (GP 4800)	70000.00 7 <sup>th</sup> pay	28.10.99	Permanent	Gen	9412423526	44	dr_mishra@in.com
10	Prog. Asstt / Farm Manager	Pushpraj Yadav	Programme Assistant (Soil/F.M.)	Soil Science	9300-34800 (GP 4600)	60400.00 7 <sup>th</sup> pay	15.12.04	Permanent	OBC	9452215713	45	pushpraj.y@gmail.com
11	Farm Manager	Anoop Singh	Programme Assistant (Farm Manager)	Agronomy	9300-34800 (GP 4200)	49000 7 <sup>th</sup> pay	31.07.07	Permanent	Gen	9458078489	42	anups671@gmail.com
12	Accountant / Superintendent	Naresh Singh Rathore	Accountant/O.S	-	9300-34800 (GP 4200)	50500 7 <sup>th</sup> pay	19.11.07	Permanent	OBC	8765649746	44	n.s.rathore8605@gmail.com
13	Stenographer	Sandeep Saxena	Jr.Steno	-	5200-20200 (GP 4200)	55200 7 <sup>th</sup> pay	02.09.95	Permanent	Gen	9450443210	47	-
14	Driver	Sonu Gupta	Driver/Mechanic	-	5200-20200 (GP 1900)	29600 7 <sup>th</sup> pay	27.07.07	Permanent	OBC	9411986427	42	-
15	Supporting Staff	Shubham Kumar Sagar	Office Attendant	-	5200-20200 (GP 1800)	19100 7 <sup>th</sup> pay	21.03.17	Permanent	SC	8874594581	20	-
16	Supporting Staff	Dinesh Kumar	Office Attendant	-	5200-20200 (GP 1800)	19100 7 <sup>th</sup> pay	24.03.17	Permanent	SC	9917260166	26	-

\* Appointed as a professor in deptt at SVPDAT., Meerut. \*\* Research scientist attached with K.V.K.

**1.6. Total land with KVK (in ha) : 18.314 :**

S. No.	Item	Area (ha)
1	Under Buildings	0.600
2.	Under Demonstration Units	0.016
3.	Under Crops	4.000
4.	Orchard/Agro-forestry	10.00
5.	Others (Specify)	3.698

**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	March 2000	0.600	2647000	-	-	Completed
2.	Farmer's Hostel	ICAR	Sept 06	0.300	2289916	-	-	Completed
3.	Staff Quarters (6)	ICAR	-	0.040	2671000	“	-	Completed
4.	Demonstration Units (2)	ICAR	-	0.016	1104974	“	-	Completed
5	Fencing	ICAR	-	2000R/M	3843000	“	-	Completed
6	Rain Water harvesting system	ICAR	-	0.400	50000	“	-	Completed
7	Threshing floor	ICAR	-	0.030	230000	“	-	Completed
8	Farm godown	ICAR	-	0.006	362539	“	-	Completed

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Bolero jeep UP27G-0138	June, 2009	5.07 Lac	163965	Condemn
Hero Honda Super Splender UP27G-0146	April ,10	46159.00	35871	Working order

**C) Equipments& AV aids**

<b>Name of the equipment</b>	<b>Year of purchase</b>	<b>Cost (Rs.)</b>	<b>Present status</b>
Daree – 05	2002	2010.00	Working order
Kirloskar Diesel Engine Model Ks-10 with Acess.	2003	21210.00	-----do-----
Spade – 02	2003	140.00	-----do-----
Zero tillage Cum Bed Planter - 2	2003	11900.00	-----do-----
Office Chair- 10 No.	2003	3564.00	-----do-----
Dice	2003	1800.00	-----do-----
Steel Book Shelf -2	2003	6261.84	Working order
Harrow	2004	16800.00	-----do-----
Lavellor	2004	4250.00	-----do-----
Daree – 04	2004	2010.00	-----do-----
Heat Convactor - 2	2004	850.00	-----do-----
Home Science Material (Bartan)	2004	4589.75	-----do-----
Home Science Material (Oth. Material)	2004	8996.00	-----do-----
Gas Cylinder - Two	2004	2074.72	-----do-----
Television	2004	10490.00	-----do-----
D.V.D Player	2004	11990.00	-----do-----
Office Table With One Side drawer 9	2004	12222.00	-----do-----
Office Table With Two Side drawer	2004	8028.00	-----do-----
Computer Table	2004	3450.00	-----do-----
Office Chair Can Seat & Back -80	2004	28640.00	-----do-----
Computer Chair	2004	1575.00	-----do-----
Ex. Rev. Chair	2004	2859.00	-----do-----
Rack - 2 (Covered Side Rack)	2004	1500.00	-----do-----
Steel Rack - 1	2004	1617.00	-----do-----
Scanner	2004	3700.00	Not Working
Library book - 40 No.	2004		Working order
Library book - 6 No.	2004	1064.00	-----do-----
Steel Book Shelf -2	2004	6579.28	-----do-----
Chair donlup cushion	2004	12360.00	-----do-----
Invertor Battery	2004	11200.00	-----do-----
Generator - 5 KVA	2004	3700.00	-----do-----
Photo copier G1508	2004	61240.00	Not working
Stabilizer 5 KVA	2004	5000.00	Working order
Slide Projector	2004		-----do-----
Over hade Projector	2004		-----do-----
Soil Science Unit Grinder, Sale Willy Mill Chamalur	2005	23252.40	-----do-----
Conductivity Meter - 1	2005	8750.00	-----do-----
Mechanical Shaper - 1	2005	5270.00	-----do-----
Cooler	2005	5670.00	-----do-----
Office Table With Two Side drawer	2005	1950.00	-----do-----
Ex. Rev. Chair	2005	2800.00	-----do-----
Steel Rack - 1	2005	1464.48	-----do-----
Steel Rack - 2	2005	2713.92	-----do-----
Book Case - 1	2005	2933.00	-----do-----
Book Shelf	2005	5586.00	-----do-----
Ex. Table	2005	4215.00	-----do-----
Printer	2005	2900.00	Not working
Library book - 13 No.	2005	1483.00	Working order
Library book - 6 No.	2005	1782.00	-----do-----
Library book - 3 No.	2005	1098.00	-----do-----
Library book - 2 No.	2005	168.00	-----do-----
Chemical Balance	2005	87000.00	-----do-----

Oven	2005	14500.00	-----do-----
Refrigerator With Stabilizer	2005	12000.00	-----do-----
Microscope	2005	4600.00	-----do-----
Kejeldal Digestion Unit For Six Slash - 2	2005	13400.00	-----do-----
Kejeldal Distillation Unit for 6 Slash - 2	2005	30000.00	-----do-----
Spectrophotometer	2005	106500.00	-----do-----
Flame Photometer	2005	33430.00	-----do-----
PH Meter	2005	10350.00	Working order
Hot Plate	2005	8200.00	-----do-----
Water Distillation Unit	2005	85000.00	-----do-----
Soil Science Unit (Others Materials)	2005	15179.00	-----do-----
Physical Balance	2005	11990.00	-----do-----
Phawara - 6	2005	780.00	-----do-----
Khurpi – 12	2005	300.00	-----do-----
Laboratory Tray- 4	2005	2200.00	-----do-----
Sieves Brass - 5	2005	2480.00	-----do-----
Tube well Boring - 1	2005	9850.00	-----do-----
Diesel Suction Pump	2005	3278.70	-----do-----
Reading Cum Conference Table	2006	9850.00	-----do-----
Stabilizer 6 KVA	2006	5500.00	-----do-----
Grinder/milling machine with motor	31.03.11	18850.00	-----do-----
Humidityfier	31.03.11	17800.00	-----do-----
Electronic polybag sealing machine	31.03.11	4300.00	-----do-----
Physical Scale	31.03.11	3500.00	-----do-----
Electronic scale	31.03.11	46200.00	-----do-----
Steplizer	31.03.11	2622.00	-----do-----
BOD incubator	31.03.11	46075.00	-----do-----
Steplizer	31.03.11	4218.00	-----do-----
laminar flow bench with access table with manome	31.03.11	44460.00	-----do-----
Steplizer	31.03.11	19665.00	-----do-----
Corcyra cages	31.03.11	42750.00	-----do-----
microscope binocular	31.03.11	32219.00	-----do-----
Manual weighing machine	31.03.11	712.00	-----do-----
Hygrometer	31.03.11	1425.00	-----do-----
Medium duty stirrer	31.03.11	10412.00	-----do-----
Hot air oven	31.03.11	10500.00	-----do-----
Hot plate with regulator	31.03.11	1850.00	-----do-----
Vaccum cleaner	31.03.11	9000.00	-----do-----
Double Distillation apparatus	31.03.11	48780.00	-----do-----
Deep freezer	31.03.11	29500.00	Working order
Autoclave	31.03.11	44000.00	-----do-----
Mixer cum grinder	31.03.11	10500.00	-----do-----
Fridge	29.02.12	16770.00	-----do-----
Hot air oven, Digital control	31.03.12	34000.00	-----do-----
Air circulating fan	31.03.12	2400.00	-----do-----
testube stand aluminium	31.03.12	3700.00	-----do-----
Aorkborer ,machine	31.03.12	3560.00	-----do-----
Haemo cytometer	31.03.12	6208.00	-----do-----
Inoculation/UV chamber	31.03.12	19475.00	-----do-----
B.O.D. Incubator With Accessories	31.03.12	104857.00	-----do-----
Office Table	31.03.12	8320.00	-----do-----
Office Chair	31.03.12	6448.00	-----do-----
Computer Table	31.03.12	5200.00	-----do-----
Computer Chair	31.03.12	2808.00	-----do-----
Visitor chair	31.03.12	3640.00	-----do-----

Stool	31.03.12	1976.00	-----do-----
Almira	31.03.12	15600.00	-----do-----
Book Case	31.03.12	11440.00	-----do-----
Rack	31.03.12	7700.00	-----do-----
Lab Table Steel Fram 8x2x	31.03.12	24960.00	-----do-----
Capboard Steel Fram	31.03.12	7488.00	Working order
Inverter	31.03.12	6900.00	-----do-----
Battery	31.03.12	20764.00	-----do-----
Cooker	22.03.13	1400.00	-----do-----
Rice chalni	22.03.13	650.00	-----do-----
Jug	22.03.13	450.00	Working order
Bhagona With Dhakan	22.03.13	1900.00	Working order
Piller	22.03.13	180.00	-----do-----
Spoon	22.03.13	150.00	-----do-----
Souce Pain	22.03.13	535.00	-----do-----
Air condition	20.05.11		-----do-----
computer Desktop with assessorry& Monitor	19.03.10	29000.00	-----do-----
Fax machine	19.03.10	6500.00	-----do-----
Raised bed multi crop planter	20.11.10	57500.00	-----do-----
Paddy harrow	20.03.2017	19000.00	-----do-----
Rotavator	16.03.2017	97832.00	-----do-----
16 disc harrow	16.03.2017	33220.00	-----do-----
Winnowing fan	16.03.2017	2516.00	-----do-----
Tractor	01.03.2017	520863.00	-----do-----
Mridaparishak unit	24.03.2017	86000.00	-----do-----
Submersible Tube well	29.03.2017	125000.00	-----do-----
Steel Stool (Small-02)	08.02.2018	1208.00	-----do-----
Filling Cabinet	08.02.2018	9252.00	-----do-----
Steel Almirah	08.02.2018	9504.00	-----do-----

### 1.8. A). Details SAC meeting conducted in the year

Date: - 15.03.2019

S. No.	Salient Recommendations	Action Taken
1.	Training programme should be organized on scientifically harvesting of paddy.	Training programme on scientifically harvesting of paddy and crop residue management has been included in action plan 2019.
2.	For training on nutritional kitchen garden according to farm family size and year planner should be prepared.	It will be included in training on nutritional kitchen garden in Action Plan 2019.
3.	Training programme on scientific cultivation of karonda should be organized.	Karonda cultivation technology is included in training on production of minor fruits.
4.	Use of decomposer should be popularized among farmers for management of crop residue.	It is being popularized from training, demonstration and farmers goshti.
5.	Seed production of latest high yielding varieties of crops should be promoted.	It is being promoted among farmers.
6.	In sugarcane intercropping, most economic intercrop should be selected and be popularized for intercropping.	Most economic intercrop will be selected through demonstration and will be popularized among the farmers.



7.	Training programme on floriculture should be organised.	Training has been given on marigold cultivation technology and also included in Action Plan 2019.
8.	Goatry +mentha cultivation farming system should be popularized as goat don't eat mentha.	Goatry + mentha farming system will be popularized via training, demonstration and kisangosthi.
9.	Use of cow dung and cow urine in crop production should be popularised.	It will be popularized in training, demonstration and kisangosthi.
10.	For minimizing residual toxicity in agro-chemicals in crop products and for safe environment cultural and biological control methods should be performed and more popular among the farmers for management of major insect pest and diseases.	Farmers are being motivated to adopt cultural and bio control methods for management of diseases and insect pest through training, demonstration and kisangosthi.

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

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

S. No	Farming system/enterprise
1	Crop production system
2	Crop production and livestock production system
3	Fruits / Vegetable /Floriculture /farming
4	Fisheries, Poultry, Mushroom production and Goetry

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

S. No	Agro-climatic Zone	Characteristics
1	Mid Western plain zone	Alluvial, Calcareous , Clay , Saline Alkaline Annual rainfall 807 mm

S. No	Agro-ecological situation	Characteristics
1	AES-1 (PowayanTehsil ) Block 1. Sindhauli 2. Powayan 3. Banda 4. Khutar	1. Productive plain land under canal and tube well irrigation 2. Main cropping system rice wheat sugar cane & potato. 3. Soil type – Loam ,Clay loam , Sandy loam,
2	AES-2 (Sadar and TilharTehsil ) Block- 1. Bhawalkhera 2. Dadraul 3. Negohi 4. Khudaganj 5. Tilhar	1. Plain and water logged under canal and tube well irrigation 2. Major crops grown i.e. Rice, Wheat, S.Cane.Toria, Potato, Lentil, Urd&Til 3. Soil type loam,clay loam.
3	AES-3 (Jalalabad Tehsil ) Block- 1. Jalalabad 2 Kant 3. Madnapur	1. Rainfed and tube well irrigated cultivable land 2. Major crop – Jowar , Bajra , Til , Ground Nut, maize, Mustard ,

	4. Kalan 5. Mirjapur 6. Jaitipur	Lentile ,Urd , Wheat ,S.Cane , Paddy. 3. Soil type – Sandy /sandy loam
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### 2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1	Sandy soil	About 50% sand in this soil mostly rain fed farming	157677
2	Loam /Clay loam	Irrigated land & all crop grown	208899
3	Loam	In this soil paddy wheat and other oil seed and pulses crops are grown	60818

### 2.4. Area, Production and Productivity of major crops cultivated in the district (2017-18)

S. No.	Crop	Area (ha)	Production (qt.)	Productivity (qt. /ha)
1	Rice	304931	667870	32150
2	Maize	40	120	30.02
3	Jowar	1108	1115	10.07
4	Bajra	3383	5264	15.56
5	Pulses (Kharif)	4306	2830	5.35
6	Urd	13266	8981	6.75
7	Moong	39	15	3.97
8	Ground nut	4711	71120	15.1
9	Sesum (Til)	3867	5712	14.77
10	Soybean	18	100	5.61
11	Wheat	247700	989801	39.96
12	Barley	258	734	28.46
13	Gram	189	198	10.48
14	Pea	182	1914	23.57
15	Lentil	19543	19504	9.98
16	Linseed	0	0	0
17	Mustard/Toria	14441	17734	12.28
18	Sugarcane	72466	42879000	591.72

### 2.5. Weather data

Month	Rainfall (mm)	Temperature 0 C		Relative Humidity (%)
		Maximum	Minimum	
April 2018	11.4	36.2	20.9	45
May	-	38.6	24.3	48
June	67.0	38.3	27.3	56
July	612.8	33.2	26.3	83
August	324.4	31.8	25.9	87
September	102.6	32.5	24.5	81
October	-	32.5	17.8	65
November	1.2	28.0	12.6	67
December	-	22.5	6.3	67
January -2019	2.6	21.5	7.5	71
February	26.0	22.6	10.7	73
March	9.8	29.0	14.6	56

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

Category	Population	Production	Productivity
Cattle			
<i>Crossbreed/Indigenous</i>	15663	-	-
Buffalo	228183	-	-
Sheep+Goats	277953	-	-
Pigs	24384	-	-
Rabbits	287	-	-
<b>Poultry</b>			

Hens	114247	-	-
Desi	28436	-	-
Horse	2807	-	-
Dog	75759	-	-

Category	Area (ha.)	Production (Mt.)	Productivity (kg/ha)
Fish	1910.285	5865.56	370.0
Marine	-	-	-
Inland	-	-	-
Prawn	-	-	-
Scampi	-	-	-
Shrimp	-	-	-

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

Sl No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1-	Sadar	Bhawalkhera, Madnapur, Kant, Dadraul	Tiulak, Pena Bujurg, Mahumahesh, Daulatpur, Badavan, Daudpur, Niyampur, Tikri, Madnapur, Chndokha, Khaikhera, Mathana, Satwankhurd, Roshannagar, Guwari, Rampur Barkatpur, Basak, Kakrakalan, Daulatpur, Niwari, Khutaria, Kapsara, Shahbajnagar, Gumta, Kuriyan, Kalan and Akra-Rasulpur,	Rice, Wheat, Sugarcane, Ground nut, Potato, Urd, Lentil, Toria, Mustard / Mushroom production, Vermi-compost, Seed production, Animal husbandry, Vegetable production, Soil and water conservation, preservation of fruits and vegetable	1. Non use of HYV seeds 2. Non use of balance fertilizers 3. Non use of PP measures 4. Non use of sulphur and boron in oilseed crop	1. Need to enhance productivity by HYV of crops 2. Need to promote INM and IPM 3. Need to adopt organic farming 4. Need to promote agro based activities like Mushroom cultivation and value addition
	Powayan, Jalalabad, Tilhar	Sindhauli, Powayan, Jalalabad, Tilhar, Nigohi, Jaitipur, Banda, Khutar, Khudaganj, Mirzapur and Kalan	Jewa, Mudia, Kumiat, Bangwan, Barapur, Moorchha, Karnapur, Chak, Kanhau, Painakhurd, Siklapur, Mudiya, pawar, Nagariya, Nahil, Puraina, Dakia, Hameednagar, Razau, Chadari, Benipur, Dahar, Mirzapur, Muria, Kurmiyat, Mahuwa Pathak, Rautapur, Rajanpur, Dahar, Jallapur and Majhil	Rice, Wheat, Sugarcane, Ground nut, Potato, Urd, Lentil, Toria, Mustard / Mushroom production, Vermi-compost, Seed production, Animal husbandry, Vegetable production, Soil and water conservation, preservation of fruits and vegetable	1. Non use of HYV seeds 2. Non use of balance fertilizers 3. Non use of PP measures 4. Non use of sulphur and boron in oilseed crop	1. Need to enhance productivity by HYV of crops 2. Need to promote INM and IPM 3. Need to adopt organic farming 4. Need to promote agro based activities like Mushroom cultivation and value addition

### 2.8 Priority/thrust areas

Crop/Enterprise	Thrust area
Rice	IPM, IDM, IWM and Integrated Nutrient Management
Wheat	Integrated Weed Management and Nutrient Management
Sugarcane	Intercropping, IPM, IWM and INM
Pulses	IPM, IWM & INM
Oilseeds	Use of sulphur and IWM
Vegetable	INM & IPM, Protective vegetable cultivation

**2.9 Intervention/ Programmes for the doubling the farmers income – during 2018-19**

**Demonstrations**

<b>Before Interventions</b>	<b>Main crop Yield(q/ha)</b>	<b>Inter crop Yield(q/ha)</b>	<b>Equivalent Yield(q/ha)</b>	<b>Cost of cultivation(Rs /ha)*</b>	<b>Net income (Rs/ha)</b>	<b>B.C: Ratio</b>	<b>Remark if any</b>
Sugarcane+ Toria	530	5.7	604.1	98700	100653	2.02	Sugarcane space-75 cm Toria- Broadcasted Flood irrigation
Sugarcane+ Lentil	580	5.8	662.2	99200	119326	2.20	Sugarcane space-75 cm Lentil- Broadcasted Flood irrigation
Sugarcane+ late mustard	510	5.3	580.7	97900	93731	1.96	Sugarcane space-75 cm late mustard - Broadcasted Flood irrigation
Sugarcane+ potato	600	170	1053.3	171600	175989	2.03	Sugarcane space-75 cm potato – One row Flood irrigation
Sugarcane+ Gram	590	5.0	673.3	97200	124989	2.29	Sugarcane space-75 cm Gram - Broadcasted Flood irrigation
Sugarcane+ Vegetable pea	680	160	733.3	124100	117889	1.95	Sugarcane space-75 cm Vegetable pea - Broadcasted Flood irrigation
Sugarcane+Urd	650	5.2	640.1	98500	112733	2.14	Sugarcane space-75 cm Urd - Broadcasted Flood irrigation
Sugarcane+ Moong	540	4.9	623.3	97900	107789	2.10	Sugarcane space-75 cm Moong - Broadcasted Flood irrigation
Sugarcane+ Mentha oil	540	0.65	713.3	132600	102789	1.78	Sugarcane space-75 cm Mentha – Two lines Flood irrigation

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

<b>After Interventions</b>	<b>Main crop Yield(q/ha)</b>	<b>Inter crop Yield(q/ha)</b>	<b>Equivalent yield(q/ha)</b>	<b>Cost of cultivation (Rs/ha)*</b>	<b>Net income (Rs/ha)</b>	<b>B.C: Ratio</b>	<b>Remark if any</b>
Sugarcane+ Toria	730	8.5	840.5	103910	173455	2.66	Sugarcane trench method Toria- Two rows Irrigation in trench
Sugarcane+ Lentil	710	8.6	831.8	106600	263834	2.57	Sugarcane trench method Lentil - Two rows Irrigation in trench
Sugarcane+ late mustard	700	7.2	809.3	102750	164319	2.60	Sugarcane trench method late mustard - Two rows Irrigation in trench
Sugarcane+ potato	750	225	1350	185600	259900	2.40	Sugarcane trench method potato - Two rows Irrigation in trench
Sugarcane+ Gram	710	6.50	818.3	99700	170335	2.71	Sugarcane trench method Gram - Two rows Irrigation in trench
Sugarcane+ Vegetable pea	720	225	1136.7	135700	239411	2.76	Sugarcane trench method Vegetable pea - Two rows Irrigation in trench
Sugarcane+Urd	720	7.90	856.7	102500	180211	2.76	Sugarcane trench method Urd- Two rows Irrigation in trench
Sugarcane+ Moong	710	6.50	802.5	99980	164845	2.65	Sugarcane trench method Moong - Two rows Irrigation in trench
Sugarcane+ Mentha oil	650	0.78	858	138200	144940	2.05	Sugarcane trench method Mentha - Two rows Irrigation in trench

**Discussion:** Irrigation, Fertilizers, Labour, Land Preparation, Seed, Plant protection (Weed, Pest, disease) \*  
Sugarcane rate @ Rs 330/qt

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Note- Same format may be used for OFT.



### **3. TECHNICAL ACHIEVEMENTS**

#### **3.A. Details of target and achievements of mandatory activities by KVK during 2018-19**

<b>OFT (Technology Assessment and Refinement)</b>				<b>FLD (Oilseeds, Pulses, Cotton, Other Crops/Enterprises)</b>			
<b>1</b>				<b>2</b>			
<b>Number of OFTs</b>		<b>Total no. of Trials</b>		<b>Area in ha</b>		<b>Number of Farmers</b>	
<b>Targets</b>	<b>Achievement</b>	<b>Targets</b>	<b>Achievement</b>	<b>Targets</b>	<b>Achievement</b>	<b>Targets</b>	<b>Achievement</b>
<b>12</b>	<b>11</b>	<b>56</b>	<b>51</b>	<b>112</b>	<b>112</b>	<b>330</b>	<b>330</b>

<b>Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)</b>					<b>Extension Activities</b>			
<b>3</b>					<b>4</b>			
<b>Number of Courses</b>			<b>Number of Participants</b>		<b>Number of activities</b>		<b>Number of participants</b>	
<b>Clientele</b>	<b>Targets</b>	<b>Achievement</b>	<b>Targets</b>	<b>Achievement</b>	<b>Targets</b>	<b>Achievement</b>	<b>Targets</b>	<b>Achievement</b>
Farmers	68	67	<b>1360</b>	<b>1340</b>	<b>260</b>	<b>293</b>	<b>5200</b>	<b>5521</b>
Rural youth	17	17	<b>175</b>	<b>175</b>				
Extn. Functionaries	18	18	<b>540</b>	<b>540</b>				
Sponsored	04	02	<b>200</b>	<b>100</b>				
<b>Total</b>	<b>107</b>	<b>104</b>	<b>2275</b>	<b>2155</b>				

<b>Seed Production (Qtl.)</b>			<b>Planting material (Nos.)</b>		
<b>5</b>			<b>6</b>		
<b>Target</b>	<b>Achievement</b>	<b>Distributed to no. of farmers</b>	<b>Target</b>	<b>Achievement</b>	<b>Distributed to no. of farmers</b>
200	298.49	-	20000	40590	75

## I.A TECHNOLOGY ASSESSMENT

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

Thematic areas	Crop	Name of the technology assessed	No. of trials	No. of farmers
Integrated Nutrient Management	-	-	-	-
	-	-	-	-
Varietal Evaluation	Basmati Rice	Varietal evaluation of Basmati	03	03
	Timely Wheat	Varietal evaluation of timely shown wheat	03	03
	Late Wheat	Varietal evaluation of late shown wheat	03	03
	Marigold	Varietal evaluation of Marigold	03	03
	Pumpkin	Varietal evaluation of pumpkin	03	03
Integrated Pest Management	Sugarcane	Management of top borer	03	03
	-	-	-	-
	-	-	-	-
Integrated Crop Management	Sugarcane Intercropping	Intercropping in sugarcane with mustard	04	04
	Paddy	Management of Sheath blight	03	03
Small Scale Income Generation Enterprises	Value addition	Value addition of mango	05	05
Weed Management				
Resource Conservation Technology				
Farm Machineries				
Integrated Farming System				
Seed / Plant production				
Post Harvest Technology / Value addition				
Drudgery Reduction				
Storage Technique				
Others (Pl. specify)- Household Food Security				
<b>Total</b>			<b>30</b>	<b>30</b>

### Summary of technologies assessed under livestock by KVKs

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Disease(disorder) Management	Buffalo	Receptol	15	15
Evaluation of Breeds	-	-	-	-
Feed and Fodder management	-	-	-	-
Nutrition Management	Buffalo	Mineral mixture supplement	40	40
Production and Management	-	-	-	-
Others (Pl. specify)	-	-	-	-
<b>Total</b>			<b>55</b>	<b>55</b>

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

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

**I. B. TECHNOLOGY REFINEMENT**

**Summary of technologies refined under various crops by KVKs- NA**

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

**Summary of technologies refined under various livestockby KVKs-NA**

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

## Summary of technologies refined under various enterprises by KVKs -NA

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

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

### Varietal Evaluation

#### 1. Problem definition: Continuous use of old variety

**Technology Assessed:** Varietal evaluation of timely sown wheat

KVK, Shahjahanpur, Uttar Pradesh conducted on-farm trial to assess the use of timely sown variety WH 1105, HD 3086 of Wheat to compare with old variety PBW 343.

**Table: Use of recent and old timely shown varieties of wheat**

Technology Option	No. of trials	Yield (t/ha)	Net Returns (Rs in lakh/ha)
T1- PBW 343 (Old variety)	03	4.19	0.39
T2- WH 1105		4.48	0.45
T3- HD 3086		4.58	0.46

#### 2. Problem definition: Continuous use of old variety

**Technology Assessed:** Varietal evaluation of late sown wheat

KVK, Shahjahanpur, Uttar Pradesh conducted on-farm trial to assess the use of late sown variety WH 1124, DBW 71 of Wheat to compare with old variety PBW 226.

**Table: Use of recent and old late shown varieties of wheat**

Technology Option	No. of trials	Yield (t/ha)	Net Returns (Rs in lakh/ha)
T1- PBW 226 (Old variety)	03	2.61	0.13
T2- WH 1124		3.29	0.26
T3- DBW 71		2.95	0.19

#### 3. Problem definition: Low Yield due to heavy blast and Continuous use of old/traditional variety

**Technology Assessed:** Varietal evaluation of Basmati Rice

KVK, Shahjahanpur, Uttar Pradesh conducted on-farm trial to assess the use of Pusa Basmati 1509, Pusa Sugandha of Basmati Rice to compare with old variety Pusa 1121.

**Table: Use of recent and old variety of Basmati Rice.**

Technology Option	No. of trials	Yield (t/ha)	Net Returns (Rs in lakh/ha)
T1- Pusa 1121 (Old variety)	03	2.89	0.60
T2- Pusa 1509		4.53	0.76
T3- Pusa Sugandha (2511)		3.15	0.33

#### 4. Problem definition: Low productivity of marigold due to use of local variety

**Technology Assessed:** Use of high yielding varieties of marigold.

KVK, Shahjahanpur, Uttar Pradesh conducted on-farm trial to assess the use of high yielding varieties Pusa Narangi and Pusa Basanti of marigold to compare with local variety Hawaii Orange.

**Table: Production of local and high yielding varieties of marigold**

<b>Technology Option</b>	<b>No. of trials</b>	<b>Yield (t/ha)</b>	<b>Net Returns (Rs in lakh/ha)</b>
T1- Hawaii Orange(Local)	03	12.34	1.31
T2-Pusa Narangi		18.74	2.30
T3- PusaBasanti		17.81	2.12

**5. Problem definition:** Low productivity of pumpkin due to use of local variety

**Technology Assessed:** Use of high yielding variety of pumpkin.

KVK, Shahjahanpur, Uttar Pradesh conducted on-farm trial to assess the use of high yielding variety Kashi Harit of pumpkin to compare with local variety CO-1.

**Table: Production of local and hybrid varieties of pumpkin**

<b>Technology Option</b>	<b>No. of trials</b>	<b>Yield (t/ha)</b>	<b>Net Returns (Rs in lakh/ha)</b>
T1- CO-1 (Local)	03	23.8	1.05
T2- Kashi Harit		34.2	2.24

## **Integrated Crop Management**

**6. Problem definition:** Lower income from sugarcane monocrop

**Technology Assessed:** Intercrop of sugarcane

KVK, Shahjahanpur, Uttar Pradesh conducted on-farm trial to assess the effect of intercropping on net return in sugarcane. The intercropping system of planting of sugarcane as paired row at 3 ft spacing and growing late mustard between two pair had realized the net return of Rupees 8.5 Lakh/ha as compared to recommended practice with intercropping. Net return of Rs. 8.5 lakh/ha (100% increase in net return / ha)

**Table: Performance of late mustard as intercrop in sugarcane-2017-18**

<b>Technology Option</b>	<b>No. of trials</b>	<b>Yield (t/ha)</b>	<b>Net Returns (Rs in lakh/ha)</b>
T1- Sugarcane sole crop	04	00	00
T2- Sugarcane + Mustard		1.20	0.35

\* Sugarcane crop presently standing in the field.

## **PEST AND DISEASE MANAGEMENT**

**7-Problem definition:** Low yield of paddy due to incidence of Sheath Blight.

**Technology Assessed:** Management of Sheath Blight seed treatment and spray chemical.

Paddy is an important cereal crop of mid western plane zone of U.P. However, the productivity of paddy is badly affected by incidence and severity of Sheath Blight disease in distt. Shahjahanpur. To assess the performance of management technology of the problem and OFT was conducted at three locations of farmer's field in 1.20 ha area. The performance of OFT conducted revealed that management technology used can increase by 32.78% yield over farmer's practice.

**Table: Effect of Soil application, Seed Treatment and spray chemical on incidence and severity of Sheath Blight diseases in paddy**

<b>Technology Option</b>	<b>No. of trials</b>	<b>Disease Incidence (%)</b>	<b>Yield (q/ha)</b>	<b>% Increase in yield</b>	<b>Cost of cultivation (Rs./ha)</b>	<b>Gross Return (Rs./ha)</b>	<b>Net Return (Rs./ha)</b>	<b>B:C Ratio</b>
T1-Farmers Practices Carbendazim @ 1.0 kg/ha foliar spray	03	10.5	42.4	-	45700	74200	28500	1.62
T2- Seed Treatment Carbendazim @ 2.5 gm/kg seed + two Spray Propiconazole @ 1.0 lit /ha		2.5	56.30	32.78	46850	98525	51675	2.10

**8- Problem definition:** Low yield of Sugarcane due to infestation of TopBorer.

**Critical Input:** Cartap hydro chloride 4G @ 25 kg/ha +Trichocard 5X3 /ha

**Technology Assessed:** Sugarcane is an important cash crop of mid western plain zone of U.P. IndisttShahjahanpurinfestation of Top Borer badly affect the productivity of Sugarcane. To assess the performance of management technology of the problem an OFT was taken at farmer's field at three locations (1.20 ha area). The performance of OFT conducted revealed that the use of cartop 4g and trichocardcan increase 31.01% yield over farmers practice

**Table: Effect of Cartap 4g and Ttrichocard on infestation of top borer in sugarcane.**

<b>Technology Option</b>	<b>No. of trials</b>	<b>Top borer infestation NMC (%)</b>	<b>Yield (q/ha)</b>	<b>% Increase in yield</b>	<b>Cost of cultivation (Rs./ha)</b>	<b>Gross Return (Rs./ha)</b>	<b>Net Return (Rs./ha)</b>	<b>B:C Ratio</b>
T1-Farmers Practices (Chloropyriphos @ 3.5 lit/ha + Phorate @ 25 kg./ha)	03	12.0	977	-	97500	322410	224910	3.30
T2-Cartap hydro chloride 4G @ 25 kg/ha +Trichocard 5X3 /ha		1.0	1280	31.01	100025	422400	322375	4.22

## 9. Value Addition

**Problem definition:** Low income of farm women due to no value addition of mango commercially.

**Technology Assessed:** Assessment of mango squash, mango papad and amchour making and its marketing for gradational income. Women in rural areas knew only to prepare pickle and chatani from mango. The do not knew how to prepare squash, aampapad and amchour. An OFT on no value addition of mango was design and conducted.The performance of OFT revealed that the value addition of mango can double the family income of rural women.

**Critical Input:**Preservatives

**Table 9: Assessment of value addition of mango**

<b>Technology Option</b>	<b>No. of trials</b>	<b>Product Kg/qt</b>	<b>Gross Cost Rs.</b>	<b>Gross Return Rs.</b>	<b>Net Returns Rs.</b>	<b>% increase in net return</b>	<b>B:C Ratio</b>
T1-Farmers Practices (Mango pickle only)	05	138	3864	4830	966	-	1.25

T2-							
a. Preparation of mango squash		192	9216	17280	8064	735	1.88
b. AamPapad		19	2736	4720	1984	105	1.73
c. Amchour		19	1428	3522	2094	117	2.47

## LIVESTOCK ENTERPRISES

### OFT: 10 ON REPEAT BREEDING

**Problem definition:** Higher incidence of repeat breeding in buffaloes resulting lower productivity and profitability of dairying.

**Technology assessed or refined (as the case may be):** Assessment of clinical and non-clinical remedies in controlling repeat breeding in buffaloes in District: Shahjahanpur

KVK, conducted trial to find out suitable control measure for repeat breeding in buffaloes as the recommended practice could not stop recurrence of repeat breeding to the desired level. The technology recommended was fine tuned by including Receptol injection for the control of repeat breeding.

**Table Effect of Receptol injection in the control of repeat breeding.**

Technology Option	No. of trials	Per cent incidence of repeat breeding
Use choker (Farmers practice)	15	73
Use concentrate @ 2.5kg & mineral mixture @ 50g/day/animal up to 45 day (recommended practice)		13
Use concentrate @ 2.5kg & mineral mixture @ 50g/day/animal up to 45 day + Receptol 5 ml ( 72-96 hrs before AI or Natural breeding) recommended practice		Nil

### OFT: 11 ON NUTRIENT MANAGEMENT

**Problem definition:** Higher age at first calving in buffaloes due to mineral deficiency.

**Technology assessed or refined (as the case may be):** Use of mineral mixture provided by Department of animal nutrition, I.V.R.I. Bareilly (PI- Dr.Narayan Dutta) supplementation in buffalo heifers.

KVK, Shahjahanpur conducted on-farm trial to find out the effect of mineral mixture supplementation on buffalo heifers not responding/responding but not conceived. ( age group between 3 year to 5.5 year) The **assessed** practice of mineral mixture supplementation @ 50 gram/day/animal ( heifers) for 100 days was found that 72.5 % heifers are conceived.

**Table Effect of mineral mixture supplementation in enhancing conception rate and fertility in buffalo heifers.**

Technology Option	No. of trials	Responding Rate %	Conception rate %	Repeating Rate%
<b>T1:</b> Use of choker and common salt (Farmers Practice)	40	-	-	-
<b>T1+</b> mineral mixture supplementations @ 50g/day/heifers for 100 days. (Recommended Practice)		87.50	72.50	15.00

## II. FRONTLINE DEMONSTRATION

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

List of technologies demonstrated during previous year and popularized during 2018-19 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	Sesamum Kharif - 2018	ICM	HYV Seed(GT 03) @ 5 kg/ha carbendazim@ 0.50kg/ha Bentonite Sulphur @ 25kg/ha, Micronutrient @ 12.5 kg/ha, Mancozeb+ carbendazim @ 0.50kg/ha Quanalphose @ 1.25 kg/ha,	Training, Demonstraion, Field day, Field visit, Print and Electronic media,	10	25	10.00
2	Groundnut Kharif - 2018	ICM	HYV (GT-03), Imizathyphur @ 2.5 Unitr/ha Mancozeb+carbendazim @ 1.250kg/ha Trichoderma- 5 kg/ha	Training, Demonstraion, Field day, Field visit, Print and Electronic media,	03	25	10.00
3	Mustard Rabi 2018-19	ICM	HYV Seed(CS 56) 5.0 kg/ha B.Sulphur @ 25 Kg/ha., Mancozeb+carbendazim @ 1.250kg/ha Imidachloprid @ 0.25L/ha	Training, Demonstraion, Field day, Field visit, Print and Electronic media,	22	50	20.00
4	Blackgram Kharif - 2018	ICM	HYV (PU 31)seed @ 15 kg/ha, Imizathyphur @ 2.5 Unitr/ha B.Sulphur @ 25 Kg/ha., Imidachloprid @ 0.250 L/ha, Quanalphose @ 2.5 L/ha	Training, Demonstraion, Field day, Field visit, Print and Electronic media,	14	25	10
5.	Greengram Kharif 2018	ICM	HYV Seed (IPM 02-03) @ 20 kg/ha, B. Sulphur @ 25 kg/ha, Imizathyphur @ 2.5 Unit/ha, Micronutrient 12.5 kg/ha,Imidachlorprid @ 0.25 L/ha	Training, Demonstraion, Field day, Field visit, Print and Electronic media,	10	25	10.00
6.	Lentil Rabi 2018-19	ICM	HYV Seed (PL-08)35 kg/ha Carbendazim+Mancozeb @ 1.250 kg/ha Imidachloprid @ 0.250 L/ha Sulpher @ 2.5 kg/ha	Training, Demonstraion, Field day, Field visit, Print and Electronic media,	32	100	40



<b>FLD Other Than</b>							
7	Paddy (AZ-6444 gold)	ICM	Bispyrabic Sodium +MSM	Training, Demonstraion, Field day, Field visit, Print and Electronic media,	05	05	2.00
8	Paddy (PR-113)	IPM (BPH)	Thiophenate methyl 25% WG @ 500g/ha	Training, Demonstraion, Field day, Field visit, Print and Electronic media	03	05	2.00
9	Wheat (HD 2967)	ICM	Clodinaphof+MSM	Training, Demonstraion, Field day, Field visit, Print and Electronic media	04	05	2.00
10	Sugar Cane+ Pulse (Lentil)	ICM	Inter crop Seed (PL-08) @ 20 kg/ha, Carbendazim @ 0.250 kg/ha	Training, Demonstraion, Field day, Field visit, Print and Electronic media	03	05	2.00
11	Sugar cane+ Oilseed (Torja)	ICM	Inter crop Seed (CS 56) @ 1.0 kg/ha, Carbendazim @ 0.25 kg/ha	Training, Demonstraion, Field day, Field visit, Print and Electronic media	04	05	2.00
12	Brinjal (Kashi Sandesh-Round)	ICM	Thiophenate methyl @ 1.0 kg/ha+ Mancozeb @ 2.50 kg/ha	Training, Demonstraion, Field day, Field visit, Print and Electronic media	03	05	1.00
13	Intercropping of onion in sugarcane	ICM	Seed of onion @ 4kg/ha	Training, Demonstraion, Field day, Field visit, Print and Electronic media	4	05	1.00
14	Harvesting of paddy and wheat crop	Drudgery	Use of improved farm implements	Training, Demonstraion, Field day, Field visit,	05	10	0.1

**b. Details of FLDs implemented during 2018-19**

Sl. No.	Crop	Themati c area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Sesamum	ICM	HYV Seed(GT 03) @ 5 kg/ha carbendazim@ 0.50kg/ha Bentonite Sulphur @ 25kg/ha, Micronutrient @ 12.5 kg/ha, Mancozeb+ carbendazim@ 0.50kg/ha Quanalphose @ 1.25 kg/ha,	Kharif - 2018	10.00	10.00	02	23	25	-
2	Groundnut	ICM	HYV (GT-03), Imizathyphur @ 2.5 Unitr/ha Mancozeb+carbendazim @ 1.250kg/ha Trichoderma- 5 kg/ha	Kharif - 2018	10.00	10.00	01	24	25	-

3	Mustard	ICM	HYV Seed(CS 56) 5.0 kg/ha B.Sulphur @ 25 Kg/ha., Mancozeb+carbendazim @ 1.250kg/ha Imidachloprid @ 0.25L/ha	Rabi 2018-19	20.00	20.00	07	43	50	-
4	Blackgram	ICM	HYV (PU 31)seed @ 15 kg/ha, Imizathyphur @ 2.5 Unitr/ha B.Sulphur @ 25 Kg/ha., Imidachloprid @ 0.250 L/ha, Quanalphose @ 2.5 L/ha	Kharif - 2018	10.00	10.00	01	24	25	-
5	Greengram	ICM	HYV Seed (IPM 02-03) @ 20 kg/ha, B. Sulphur @ 25 kg/ha, Imizathyphur @ 2.5 Unit/ha, Micronutrient 12.5 kg/ha,Imidachlorprid @ 0.25 L/ha	Kharif 2018	10.00	10.00	01	24	25	-
6	Lentil	ICM	HYV Seed (PL-08) 35 kg/ha Carbendazim+Mancozeb @ 1.250 kg/ha Imidachloprid @ 0.250 L/ha Sulpher @ 2.5 kg/ha	Rabi 2018-19	50.00	50.00	09	91	100	-
<b>FLD Other Than</b>										
7	Paddy (AZ 6444 gold)	ICM	Bispyrabic Sodium +MSM	Kharif 2018	2.00	2.00	01	04	05	-
8	Paddy (PR-113)	IPM (BPH)	DDVP @ 500ml+ Imidacloprid @ 500 ml/ha	Kharif - 2018	2.00	2.00	01	04	05	-
9	Wheat (HD 2967)	ICM	Clodinaphof+MSM	Rabi 2018-19	2.00	2.00	01	04	05	-
10	Potato (K-pukhraj)	IDM	Mancozeb @ 2.5 kg /ha + Ridomil (Mancozeb 64% + Metalaxyl 4%)	Rabi 2018-19	2.00	2.00	01	04	05	-
11	Sugar Cane+ Pulse (Lentil)	ICM	Inter crop Seed (HUL-07) @ 20 kg/ha, Carbendazim @ 0.250 kg/ha	Rabi 2018-19	2.00	2.00	00	05	05	-
12	Sugar cane+ Oilseed (Toria)	ICM	Inter crop Seed (Pusa 26) @ 1.0 kg/ha,	Rabi 2018-19	2.00	2.00	01	04	05	-
13	Brinjal (Kashi Sandesh- Round)	ICM	Thiophenate methyl @ 1.0 kg/ha + Mancozeb @ 2.50 kg/ha	Kharif 2018	1.00	1.00	00	05	05	-

14	Intercropping of onion in sugarcane	ICM	Seed of onion @ 4 kg/ha Var. PusaRidhi	Rabi 2018-19	1.00	1.00	01	04	05	-
15	Harvesting of paddy and wheat crop	Drudgery reduction	Use of improved farm implements (NaveenDaranti)	Training, Demonstraion, Field day, Field visit, Print and Electronic media	0.10	0.10	04	06	10	-

#### 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					
Sesamum	Kharif - 2018	Irrigated	Sandy Loam	L	L	M	Wheat	08.07.2018 to 16.07.2018	07.10.2018 to 12.10.2018	566.8	37
Groundnut	Kharif - 2018	Irrigated	Sandy Loam	L	L	M	Wheat	05.07.2018 to 24.07.2018	18.10.2018 to 27.10.2018	22.0	04
Mustard	Rabi 2018-19	Irrigated	Sandy Loam	L	L	M	Fellow/Paddy	06.11.18 to 20.11.18	10.03.2019 to 18.03.2019	22.0	04
Blackgram	Kharif - 2018	Irrigated	Sandy Loam	L	L	M	Wheat	05.08.2018 to 12.08.2018	23.10.2018 to 30.10.2018	566.8	37
Greengram	Kharif - 2018	Irrigated	Sandy Loam	L	L	M	Paddy/GNut	05.08.2018 to 14.08.2018	18.10.2018 to 25.10.2018	566.8	37
Lentil	Rabi 2018-19	Irrigated	Sandy Loam	L	L	M	Paddy	06.11.2018 to 24.11.2018	07.03.2019 to 22.03.2019	22.0	04
<b>FLD Other Than</b>											
Paddy	Kharif- 2018	Irrigated	Sandy Loam	L	L	M	Wheat	02.07.2018 to 10.07.2018	19-28.10.18	566.8	37
Paddy (BPH Mgt.)	Kharif- 2018	Irrigated	Sandy Loam	L	L	M	Wheat	10-15.07.2018	01-05.11.2018	566.8	37
Wheat	Rabi 2018-19	Irrigated	Sandy Loam	L	L	M	Paddy	18.11.2018 to 22.11.2018	10-16.04.2019	22.0	04
Potato (late blight Mgt.)	Rabi 2018-19	Irrigated	Sandy Loam	L	L	M	Blackgram	08.11.2018 to 12.11.18	15-18.03.19	22.0	04
Sugar Cane+ Pulse (Lentil)	Rabi 2018-19	Irrigated	Sandy Loam	L	L	M	Paddy	11.11.2018 to 18.11.18	19-24.03.2019	22.0	04
Sugar cane+ Oilseed (Torja)	Rabi 2018-19	Irrigated	Sandy Loam	L	L	M	Paddy	10.11.2018 to 18.11.2018	10-13.03.2019	22.0	04

Brinjal	Kharif- 2018	Irrigated	Sandy Loam	L	L	M	Wheat	03.07.2018 to 11.07.2018	04.10.18 to 30.11.18	1041	04
Intercropping of onion in sugarcane	Rabi 2018-19	Irrigated	Sandy Loam	L	L	M	Urd	09.01.2019 to 16.01.2019	10.04.2019 to 15.04.2019	38.4	03
Harvesting of paddy crop	Kharif- 2018	Irrigated	Sandy Loam	L	L	M	Wheat	28.06.2017 to 06.07.2017	01-10.11.18	566.8	37
Harvesting of Wheat crop	Rabi 2018-19	Irrigated	Sandy Loam	L	L	M	Paddy	15.11.2018 to 10.12.18	05-15.04.19	22.0	04

#### Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	Use of sulphur and Boron increased the yield and oil content in ground nut and til.
2	In urd chemical weeding is more effective than mechanical weeding.
3	Use of PSB culture increased the yield in pulses

#### Farmers' reactions on specific technologies

S. No	Feed Back
1	The reaction was positive. Sulphur and Boron application in groundnut and til increased the yield
2	Boron and sulphur application increased the oil content.
3	Chemical weeding is more profitable than mechanical weeding.

#### Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	07	April 2018 to March 19	362	
2	Farmers Training	06	April 2018 to March 19	135	
3	Media coverage	25	April 2018 to March 19	Mass	
4	Training for extension functionaries	04	April 2018 to March 19	135	

**Performance of Frontline demonstrations**  
**Frontline demonstrations on oilseed crops**

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Groundnut																		
Sesame	ICM	HVY Seed(GT 03) @ 5 kg/ha carbendazim@ 0.50kg/ha Bentonite Sulphur @ 25kg/ha, Micronutrient @ 12.5 kg/ha, Mancozeb+ carbendazim@ 0.50kg/ha Quanalphose @ 1.25 kg/ha,	GT 03	25	10.0	7.20	5.75	6.51	4.68	39.10	18700	61845	43145	3.31	13900	44460	30560	3.19
Groundnut			GG 20	25	10.00	21.50	1580	18.90	14.30	32.16	29900	79380	49480	2.65	26500	60060	33960	2.26
Mustard	ICM	HVY Seed(CS 56) 5.0 kg/ha B.Sulphur @ 25 Kg/ha., Mancozeb+carbendazim @ 1.250kg/ha Imidachloprid @ 0.25L/ha	CS 56	50	20	22.70	15.90	19.29	13.47	43.21	26700	81018	54318	3.03	24800	56574	31774	2.28
Toria																		

Linseed																			
Sunflower																			
Soybean																			

### Frontline demonstration on pulse crops

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)				
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)	
						High	Low	Average											
Pigeonpea																			
Blackgram	ICM	HYV (PU 31)seed @ 15 kg/ha, Imizathyphur @ 2.5 Unitr/ha B.Sulphur @ 25 Kg/ha., Imidachloprid @ 0.250 L/ha, Quanalphose @ 2.5 L/ha	PU 31	25	10	15.10	11.60	13.04	8.56	52.34	28500	73024	44524	2.56	24300	47936	23636	1.97	
Greengram Kharif 2018	ICM	HYV Seed (IPM 02-03) @ 20 kg/ha, B. Sulphur @ 25 kg/ha, Imizathyphur @ 2.5 Unit/ha, Micronutrient 12.5 kg/ha,Imidachlorprid @ 0.25 L/ha	IPM 02-03	25	10.00	12.20	10.30	10.64	6.93	53.54	26700	74214	47514	2.77	22400	48337	25937	2.16	
Chickpea(Gram)																			
Fieldpea																			

Lentil	ICM	HYV Seed (PL-08) 35 kg/ha Carbendazim+Mancozeb @ 1.250 kg/ha Imidachloprid @ 0.250 L/ha Sulpher @ 2.5 kg/ha	PL-08	100	40.00	25.90	17.10	20.81	14.10	47.59	31600	93125	61525	2.95	26750	63098	36348	2.36
Horsegram																		

### FLD on Other crops

Category & Crop	Thematic Area	Name of the technology	No. of Farmers	Area (ha)	Yield (q/ha)			Check	% Change in Yield	Other Parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demo					Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Average												
<b>Cereals</b>																			
<b>Paddy</b>																			
Kharif 18 Paddy- PR-113,	IPM (BPH Management)	Thiomethex@ 25 wg @ 500 g/ha	05	2.0	57.5	55.5	56.5	44.12	28.05	% infestation 1.6	% infestation 11.5	46100	98875	52775	2.14	45500	77210	31710	1.69
<b>Blackgram</b>																			
<b>Waterlogged Situation</b>																			
<b>Coarse Rice</b>																			
Kharif 2018 (AZ 6444 Gold)	IWM	Variety- AZ6444 Gold BispyrubicSodium 2.5 unit /ha	05	02	68.78	65.50	66.97	46.37	44.43	No Weed	7-8 weed per meter	42750	117198	74448	8.74	41800	81148	39348	1.94
<b>Scented Rice</b>																			

<b>Wheat</b>	IWM	Variety-HD-2967 Chlodinaphop + MSM 2.5 unit/ha	05	2.00	48.70	43.90	45.90	33.42	37.42	No Weed	11-14 weed per meter	39400	86292	46892	2.19	37600	62829	25225	1.67
<b>Wheat Timely sown</b>																			
<b>Wheat Late Sown</b>																			
<b>Mandua</b>																			
<b>Barley</b>																			
<b>Maize</b>																			
<b>Amaranth</b>																			
<b>Millets</b>																			
<b>Jowar</b>																			
<b>Bajra</b>																			
<b>Barnyard millet</b>																			
<b>Finger millet</b>																			
<b>Vegetables</b>																			
<b>Bottlegourd</b>																			



<b>Bittergourd</b>																			
<b>Cowpea</b>																			
<b>Spongegourd</b>																			
<b>Petha</b>																			
<b>Tomato</b>																			
<b>Frenchbean</b>																			
<b>Capsicum</b>																			
<b>Chilli</b>																			
<b>Brinjal</b>																			
	ICM	Thiophenate methyl @ 1.0 kg/ha+ Mancozeb @ 2.5 kg/ha,	05	1.0	490.59	478.89	483.38	386.38	25.10	Avg no of fruits per plant 08	Avg no of fruits per plant 05	62600	290028	227428	4.63	54200	193190	138990	3.56
<b>Vegetable pea</b>																			
<b>Softgourd</b>																			
<b>Okra</b>																			

<b>Colocasia (Arvi)</b>																			
<b>Broccoli</b>																			
<b>Cucumber</b>																			
<b>Onion</b>																			
	ICM	Seed of onion 04 kg/ha, Var, PusaRidhi	05	1.0	198	188	193	140	37.86	Avg Bulb wt 80 gm	Avg Bulb wt 45 gm	39000	115800	76800	2.97	32500	84000	51500	2.58
<b>Pumpkin</b>																			
<b>Coriender</b>																			
<b>Lettuce</b>																			
<b>Cabbage</b>																			
<b>Cauliflower</b>																			
<b>Elephant fruit</b>																			
<b>Flower crops</b>																			
<b>Marigold</b>																			
<b>Bela</b>																			
<b>Tuberose</b>																			
<b>Gladiolus</b>																			

<b>Fruit crops</b>																			
<b>Mango</b>																			
<b>Strawberry</b>																			
<b>Guava</b>																			
<b>Banana</b>																			
<b>Papaya</b>																			
<b>Muskmelon</b>																			
<b>Watermelon</b>																			
<b>Spices &amp; condiments</b>																			
<b>Ginger</b>																			
<b>Garlic</b>																			
<b>Turmeric</b>																			
<b>Commercial Crops</b>																			
<b>Sugarcane</b>																			
Sugar Cane+ Pulse (Lentil) (HUL-57)	ICM	Inter crop Seed (PL-08) @ 20 kg/ha, Carbendazim @ 0.250 kg/ha	05	2.0	17.9	13.10	15.23	8.50	79.16	No of pods/plant and test wt 37/36.9	No of pods/plant and test wt 29/36.3	21600	64728	43128	2.99	19300	36125	16825	1.87

Sugar cane+ Oilseed (Torina)	ICM	Inter crop Seed (CS-56) @ 1.0 kg/ha, Carbendazim @ 0.250 kg/ha	05	2.0	14.10	11.40	12.78	8.70	46.89	No of pods/plant 76	No of pods/plant 52	17600	53676	36076	3.05	16400	36540	20140	2.23	
<b>Potato</b>																				
<b>Medicinal &amp; aromatic plants</b>																				
<b>Mentholment</b>																				
<b>Kalmegh</b>																				
<b>Ashwagandha</b>																				
<b>Fodder Crops</b>																				
<b>Sorghum (F)</b>																				
<b>Cowpea (F)</b>																				
<b>Maize (F)</b>																				
<b>Lucern</b>																				
<b>Berseem</b>																				
<b>Oat (F)</b>																				

## FLD on Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No.of Units (Animal/ Poultry/ Birds, etc)	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
<b>Cattle</b>																	
<b>Buffalo</b>																	
	Disease Mang.	Deworming (Albendazole 3g)	25	50	Nil- Worm infestation	96% Worm infestation	100	6.89 Lit./day	6.25 Lit/day	222.50	275.60	53.10	1.24	220.80	250.00	29.20	1-13
	Nutrient Management	Mineral mixture Feeding	05	10	8.10 lit/day	6.25 lit/day	29.60	6Repond. Within 120 days after parturation	1Repond. Within 120 days after parturation	229.40	324.00	94.60	1.41	222.40	250.00	27.60	1.12
Buffalo	Feed & Fodder Management	Feeding of urea treated paddy straw	05	10	Concentrate feeding Avg.4.00 kg/ani/day	Concentrate feeding Avg.5.00 kg/ani/day	25.00	<u>Milk produ.</u> 7.70 Lit/day/ animal	<u>Milk produc.</u> 7.50 Lit/day/ animal	254.80	308.00	53.20	1.21	279.20	300.00	20.80	1.07
<b>Dairy</b>																	
<b>Poultry</b>																	
<b>Sheep &amp; Goat</b>																	
<b>Vaccination</b>																	

Note- Average milk production Lit/day Concentrate price: Rs 25.00/kg

Average Cost of production Rs./day  
Milk price Rs.40 .00/Lit

### FLD on Fisheries- NA

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Common Carps	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Composite fish culture	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Feed Management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### FLD on Other enterprises- NA

Category	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.) or Rs./unit				Economics of check (Rs.) or Rs./unit				
				Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)	
Oyster Mushroom																	
Button Mushroom																	
Apiculture																	
Maize Sheller																	
Value Addition																	

Vermi Compost																			

**FLD on Women Empowerment-NA**

Category	Name of technology	No. of demonstrations	Name of observations	Demonstration	Check

**FLD on Farm Implements and Machinery**

Name of the implement	Crop	Technology demonstrated	No. of Farmer	Area (ha)	Major parameters	Filed observation (output/man hour)		% change in major parameter	Labor reduction (man days)				Cost reduction (Rs./ha or Rs./Unit etc.)					
						Demo	Check		Land preparation	Sowing	Weeding	Total	Land preparation	Labour	Irrigation	Total		

**FLD on Other Enterprise: Kitchen Gardening**

Category and Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units	Yield (Q/ha)		% 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)	

**FLD on Demonstration details on crop hybrids** *(Details of Hybrid FLDs implemented during 2018-19)*

Crop	technology demonstrated	Hybrid Variety	No. of Farmers	Area (ha)	Yield (q/ha)			% Increase in yield	Economics of demonstration (Rs./ha)			
					Demo		Check		Gross Cost	Gross Return	Net Return	
					High	Low						Average

Oilseed crop												
Pulse crop												
Cereal crop												
Vegetable crop												
Fruit crop												
Other (specify)												

**Home Science FLD other than oilseed & pulses (Year 2018-19)**

Crop/Activity	technology demonstrated	No. of Farmers	Area (ha)	Harvested area sq mt /hour		% Change	Mandays / ha		Saving of Mandays / ha	Cost reduction /ha (Rs)
				Demo	Check		Demo	Check		
Wheat cutting	Improved sickle ( Naveen )	05	0.05	98	85	15.29	12.75	14.70	2	2X250=500
Paddy cutting	Improved sickle ( Naveen )	05	0.05	116	94	23.40	10.77	13.30	2	2X250=500



### III. Training Programme

#### 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
<b>I Crop Production</b>										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/irrigation	01	17	0	17	03	0	03	20	0	20
Seed production										
Nursery management										
Integrated Crop Management	01	20	0	20	0	0	0	20	0	20
Soil & water conservatioin										
Integrated nutrient management	04	73	0	73	07	0	07	80	0	80
Production of organic inputs										
Others (pl specify)										
<b>Total</b>	<b>06</b>	<b>110</b>	<b>0</b>	<b>110</b>	<b>10</b>	<b>0</b>	<b>10</b>	<b>120</b>	<b>0</b>	<b>120</b>
<b>II Horticulture</b>										
<b>a) Vegetable Crops</b>										
Production of low value and high valume crops										
Off-season vegetables	01	14	0	14	06	0	06	20	0	20
Nursery raising	01	11	04	15	05	0	05	16	04	20
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl specify)										
<b>Total (a)</b>	<b>02</b>	<b>25</b>	<b>04</b>	<b>29</b>	<b>11</b>	<b>0</b>	<b>11</b>	<b>36</b>	<b>04</b>	<b>40</b>
<b>b) Fruits</b>										
Training and Pruning										
Layout and Management of Orchards	01	20	0	20	0	0	0	20	0	20
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards	01	16	0	16	04	0	04	20	0	20
Plant propagation techniques										
Others (pl specify)										
<b>Total (b)</b>	<b>02</b>	<b>36</b>	<b>0</b>	<b>36</b>	<b>04</b>	<b>0</b>	<b>04</b>	<b>40</b>	<b>0</b>	<b>40</b>
<b>c) Ornamental Plants</b>										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl specify)										
<b>Total (c)</b>										
<b>d) Plantation crops</b>										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
<b>Total (d)</b>										
<b>e) Tuber crops</b>										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
<b>Total (e)</b>										
<b>f) Spices</b>										
Production and Management technology										
Processing and value addition										

Others (pl specify)										
<b>Total (f)</b>										
<b>g) Medicinal and Aromatic Plants</b>										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl specify)										
<b>Total (g)</b>										
<b>GT (a-g)</b>	<b>04</b>	<b>61</b>	<b>04</b>	<b>65</b>	<b>15</b>	<b>0</b>	<b>15</b>	<b>76</b>	<b>04</b>	<b>80</b>
<b>III Soil Health and Fertility Management</b>										
Soil fertility management										
Integrated water management										
Integrated Nutrient Management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Balance use of fertilizers										
Soil and Water Testing	01	18	0	18	02	0	02	20	0	20
Others (pl specify)										
<b>Total</b>	<b>01</b>	<b>18</b>	<b>0</b>	<b>18</b>	<b>02</b>	<b>0</b>	<b>02</b>	<b>20</b>	<b>0</b>	<b>20</b>
<b>IV Livestock Production and Management</b>										
Dairy Management	02	34	01	35	2	3	05	36	04	40
Poultry Management	01	19	01	20	0	0	0	19	1	20
Piggery Management										
Rabbit Management										
Animal Nutrition Management	02	38	0	38	2	00	02	40	00	40
Disease Management	02	20	2	22	14	04	18	34	06	40
Feed & fodder technology										
Production of quality animal products										
Others (pl specify)										
<b>Total</b>	<b>07</b>	<b>111</b>	<b>04</b>	<b>115</b>	<b>18</b>	<b>07</b>	<b>25</b>	<b>129</b>	<b>11</b>	<b>140</b>
<b>V Home Science/Women empowerment</b>										
Household food security by kitchen gardening and nutrition gardening	01	0	19	19	0	01	01	0	20	20
Design and development of low/minimum cost diet	01	0	16	16	0	04	04	0	20	20
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques	01	0	18	18	0	02	02	0	20	20
Value addition										
Women empowerment	01	0	18	18	0	02	02	0	20	20
Location specific drudgery reduction technologies										
Rural Crafts										
Women and child care	01	0	17	17	0	03	03	0	20	20
Others (pl specify)										
<b>Total</b>	<b>05</b>	<b>0</b>	<b>88</b>	<b>88</b>	<b>0</b>	<b>12</b>	<b>12</b>	<b>0</b>	<b>100</b>	<b>100</b>
<b>VI Agril. Engineering</b>										
Farm Machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl specify)										
<b>Total</b>										
<b>VII Plant Protection</b>										
Integrated Pest Management	05	96	0	96	04	0	04	100	0	100
Integrated Disease Management	01	19	0	19	01	0	01	20	0	20
Bio-control of pests and diseases	01	18	0	18	02	0	02	20	0	20
Production of bio control agents and bio										

pesticides										
Others (pl specify)										
<b>Total</b>	<b>07</b>	<b>133</b>	<b>0</b>	<b>133</b>	<b>07</b>	<b>0</b>	<b>07</b>	<b>140</b>	<b>0</b>	<b>140</b>
<b>VIII Fisheries</b>										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl specify)										
<b>Total</b>										
<b>IX Production of Inputs at site</b>										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production	01	20	0	20	0	0	0	20	0	20
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom Production										
Apiculture										
Others (pl specify)										
<b>Total</b>	<b>01</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>X CapacityBuilding and Group Dynamics</b>										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
Others (pl specify)										
<b>Total</b>										
<b>XI Agro-forestry</b>										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
<b>Total</b>										
<b>GRAND TOTAL</b>	<b>31</b>	<b>453</b>	<b>96</b>	<b>549</b>	<b>52</b>	<b>19</b>	<b>71</b>	<b>505</b>	<b>115</b>	<b>620</b>

#### 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
<b>I Crop Production</b>										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/irrigation	01	19	0	19	01	0	01	20	0	20
Seed production										
Nursery management										
Integrated Crop Management	02	36	0	36	04	0	04	40	0	40

Soil & water conservation										
Integrated nutrient management	05	91	0	91	09	0	09	100	0	100
Production of organic inputs										
Others (pl specify)										
<b>Total</b>	<b>08</b>	<b>146</b>	<b>0</b>	<b>146</b>	<b>14</b>	<b>0</b>	<b>14</b>	<b>160</b>	<b>0</b>	<b>160</b>
<b>II Horticulture</b>										
<b>a) Vegetable Crops</b>										
Production of low value and high valume crops	01	10	0	10	10	0	10	20	0	20
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl specify)										
Micro irrigation in vegetable crops	01	20	0	20	0	0	0	20	0	20
<b>Total (a)</b>	<b>02</b>	<b>30</b>	<b>0</b>	<b>30</b>	<b>10</b>	<b>0</b>	<b>10</b>	<b>40</b>	<b>0</b>	<b>40</b>
<b>b) Fruits</b>										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit	01	20	0	20	0	0	0	20	0	20
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl specify) Cultivation tech. of minor fruits	01	16	03	19	01	0	01	17	03	20
<b>Total (b)</b>	<b>02</b>	<b>36</b>	<b>03</b>	<b>39</b>	<b>01</b>	<b>0</b>	<b>01</b>	<b>37</b>	<b>03</b>	<b>40</b>
<b>c) Ornamental Plants</b>										
Nursery Management	01	18	02	20	00	0	0	18	02	20
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl specify) Cultivation tech. of marigold	01	15	03	18	02	0	02	17	03	20
<b>Total (c)</b>	<b>02</b>	<b>33</b>	<b>05</b>	<b>38</b>	<b>02</b>	<b>0</b>	<b>02</b>	<b>35</b>	<b>05</b>	<b>40</b>
<b>d) Plantation crops</b>										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
<b>Total (d)</b>										
<b>e) Tuber crops</b>										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
<b>Total (e)</b>										
<b>f) Spices</b>										
Production and Management technology	01	10	0	10	10	0	10	20	0	20
Processing and value addition										
Others (pl specify)										
<b>Total (f)</b>	<b>01</b>	<b>10</b>	<b>0</b>	<b>10</b>	<b>10</b>	<b>0</b>	<b>10</b>	<b>20</b>	<b>0</b>	<b>20</b>
<b>g) Medicinal and Aromatic Plants</b>										
Nursery management										
Production and management technology										
Post harvest technology and value addition	01	16	01	17	03	0	03	19	01	20
Others (pl specify)										
<b>Total (g)</b>	<b>01</b>	<b>16</b>	<b>01</b>	<b>17</b>	<b>03</b>	<b>0</b>	<b>03</b>	<b>19</b>	<b>01</b>	<b>20</b>
<b>GT (a-g)</b>	<b>08</b>	<b>125</b>	<b>09</b>	<b>134</b>	<b>26</b>	<b>0</b>	<b>26</b>	<b>151</b>	<b>09</b>	<b>160</b>
<b>III Soil Health and Fertility Management</b>										
Soil fertility management										
Integrated water management										
Integrated Nutrient Management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Balance use of fertilizers										
Soil and Water Testing										

Others (pl specify)										
<b>Total</b>										
<b>IV Livestock Production and Management</b>										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management	01	20	0	20	0	0	00	20	0	20
Disease Management	01	20	0	20	0	0	00	20	0	20
Feed & fodder technology	01	18	0	18	2	0	02	20	0	20
Production of quality animal products										
Others (pl specify)Goat Management	01	20	00	20	0	0	0	20	0	20
<b>Total</b>	<b>04</b>	<b>78</b>	<b>00</b>	<b>78</b>	<b>2</b>	<b>0</b>	<b>02</b>	<b>78</b>	<b>02</b>	<b>80</b>
<b>V Home Science/Women empowerment</b>										
Household food security by kitchen gardening and nutrition gardening	01	0	19	19	0	01	01	0	20	20
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet	01	0	16	16	0	04	04	0	20	20
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques	01	0	18	18	0	02	02	0	20	20
Value addition	03	0	60	60	0	0	0	0	60	60
Women empowerment										
Location specific drudgery reduction technologies										
Rural Crafts										
Women and child care										
Others (pl specify)										
<b>Total</b>	<b>06</b>	<b>0</b>	<b>113</b>	<b>113</b>	<b>0</b>	<b>07</b>	<b>07</b>	<b>0</b>	<b>120</b>	<b>120</b>
<b>VI Agril. Engineering</b>										
Farm Machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl specify)										
<b>Total</b>										
<b>VII Plant Protection</b>										
Integrated Pest Management	03	45	0	45	15	0	15	60	0	60
Integrated Disease Management	01	18	0	18	02	0	02	20	0	20
Bio-control of pests and diseases	02	39	0	39	01	0	01	40	0	40
Production of bio control agents and bio pesticides										
Others (pl specify)										
<b>Total</b>	<b>06</b>	<b>102</b>	<b>0</b>	<b>102</b>	<b>18</b>	<b>0</b>	<b>18</b>	<b>120</b>	<b>0</b>	<b>120</b>
<b>VIII Fisheries</b>										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl specify)										
<b>Total</b>										
<b>IX Production of Inputs at site</b>										

Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production	01	18	0	18	02	0	02	20	0	20
Organic manures production	03	44	0	44	16	0	16	60	0	60
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom Production										
Apiculture										
Others (pl specify)										
<b>Total</b>	<b>04</b>	<b>62</b>	<b>0</b>	<b>62</b>	<b>18</b>	<b>0</b>	<b>18</b>	<b>80</b>	<b>0</b>	<b>80</b>
<b>X Capacity Building and Group Dynamics</b>										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
Others (pl specify)										
<b>Total</b>										
<b>XI Agro-forestry</b>										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
<b>Total</b>										
<b>GRAND TOTAL</b>	<b>36</b>	<b>513</b>	<b>122</b>	<b>635</b>	<b>78</b>	<b>07</b>	<b>85</b>	<b>589</b>	<b>131</b>	<b>720</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>										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/irrigation	02	36	0	36	04	0	04	40	0	40
Seed production										
Nursery management										
Integrated Crop Management	03	56	0	56	04	0	04	60	0	60
Soil & water conservatioin										
Integrated nutrient management	09	164	0	164	16	0	16	180	0	180
Production of organic inputs										
Others (pl specify)										
<b>Total</b>	<b>14</b>	<b>256</b>	<b>0</b>	<b>256</b>	<b>24</b>	<b>0</b>	<b>24</b>	<b>280</b>	<b>0</b>	<b>280</b>
<b>II Horticulture</b>										
<b>a) Vegetable Crops</b>										
Production of low value and high valume crops	01	10	0	10	10	0	10	20	0	20
Off-season vegetables	01	14	0	14	06	0	06	20	0	20
Nursery raising	01	11	04	15	05	0	05	16	04	20
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl specify) Micro irrigation in vegetable crops	01	20	0	20	0	0	0	20	0	20
<b>Total (a)</b>	<b>04</b>	<b>55</b>	<b>04</b>	<b>59</b>	<b>21</b>	<b>0</b>	<b>21</b>	<b>76</b>	<b>04</b>	<b>80</b>
<b>b) Fruits</b>										
Training and Pruning										

Layout and Management of Orchards	01	20	0	20	0	0	0	20	0	20
Cultivation of Fruit	01	20	0	20	0	0	0	20	0	20
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards	01	16	0	16	04	0	04	20	0	20
Plant propagation techniques										
Others (pl specify) cultivation of minor fruits	01	16	03	19	01	0	01	17	03	20
<b>Total (b)</b>	<b>04</b>	<b>72</b>	<b>03</b>	<b>75</b>	<b>05</b>	<b>0</b>	<b>05</b>	<b>77</b>	<b>03</b>	<b>80</b>
<b>c) Ornamental Plants</b>										
Nursery Management	01	18	02	20	0	0	0	18	02	20
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl specify) Advanced cultivation of marigold	01	15	03	18	02	0	02	17	03	20
<b>Total (c)</b>	<b>02</b>	<b>33</b>	<b>05</b>	<b>38</b>	<b>02</b>	<b>0</b>	<b>02</b>	<b>35</b>	<b>05</b>	<b>40</b>
<b>d) Plantation crops</b>										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
<b>Total (d)</b>										
<b>e) Tuber crops</b>										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
<b>Total (e)</b>										
<b>f) Spices</b>										
Production and Management technology	01	10	0	10	10	0	10	20	0	20
Processing and value addition										
Others (pl specify)										
<b>Total (f)</b>	<b>01</b>	<b>10</b>	<b>0</b>	<b>10</b>	<b>10</b>	<b>0</b>	<b>10</b>	<b>20</b>	<b>0</b>	<b>20</b>
<b>g) Medicinal and Aromatic Plants</b>										
Nursery management										
Production and management technology										
Post harvest technology and value addition	01	16	01	17	03	0	03	19	01	20
Others (pl specify)										
<b>Total (g)</b>	<b>01</b>	<b>16</b>	<b>01</b>	<b>17</b>	<b>03</b>	<b>0</b>	<b>03</b>	<b>19</b>	<b>01</b>	<b>20</b>
<b>GT (a-g)</b>	<b>12</b>	<b>186</b>	<b>13</b>	<b>199</b>	<b>41</b>	<b>0</b>	<b>41</b>	<b>227</b>	<b>13</b>	<b>240</b>
<b>III Soil Health and Fertility Management</b>										
Soil fertility management										
Integrated water management										
Integrated Nutrient Management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Balance use of fertilizers										
Soil and Water Testing	01	18	0	18	02	0	02	20	0	20
Others (pl specify)										
<b>Total</b>	<b>01</b>	<b>18</b>	<b>0</b>	<b>18</b>	<b>02</b>	<b>0</b>	<b>02</b>	<b>20</b>	<b>0</b>	<b>20</b>
<b>IV Livestock Production and Management</b>										
Dairy Management	02	34	01	35	2	3	05	36	04	40
Poultry Management	01	19	01	20	0	0	0	19	01	20
Piggery Management										
Rabbit Management										
Animal Nutrition Management	03	58	00	58	2	0	02	60	00	60
Disease Management	03	38	02	40	16	04	20	54	06	60
Feed & fodder technology	01	18	0	18	02	0	02	20	0	20
Production of quality animal products										
Others (pl specify)Goat Management	01	20	0	20	0	0	0	20	00	20
<b>Total</b>	<b>11</b>	<b>187</b>	<b>04</b>	<b>191</b>	<b>22</b>	<b>07</b>	<b>29</b>	<b>209</b>	<b>11</b>	<b>220</b>
<b>V Home Science/Women empowerment</b>										
Household food security by kitchen gardening and nutrition gardening	02	0	38	38	0	02	02	0	40	40
Design and development of low/minimum cost diet	01	0	16	16	0	04	04	0	20	20

Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques	02	0	36	36	0	04	04	0	40	40
Value addition	03	0	60	60	0	0	0	0	60	60
Women empowerment	01	0	18	18	0	02	02	0	20	20
Location specific drudgery reduction technologies										
Rural Crafts										
Women and child care	01	0	17	17	0	03	03	0	20	20
Others (pl specify)Minimization of nutrient loss in techniques	01	0	20	20	0	0	0	0	20	20
<b>Total</b>	<b>11</b>	<b>0</b>	<b>205</b>	<b>205</b>	<b>0</b>	<b>15</b>	<b>15</b>	<b>0</b>	<b>220</b>	<b>220</b>
<b>VI Agril. Engineering</b>										
Farm Machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl specify)										
<b>Total</b>										
<b>VII Plant Protection</b>										
Integrated Pest Management	08	141	0	141	19	0	19	160	0	160
Integrated Disease Management	02	37	0	37	03	0	03	40	0	40
Bio-control of pests and diseases	03	57	0	57	03	0	03	60	0	60
Production of bio control agents and bio pesticides										
Others (pl specify)										
<b>Total</b>	<b>13</b>	<b>235</b>	<b>0</b>	<b>235</b>	<b>25</b>	<b>0</b>	<b>25</b>	<b>260</b>	<b>0</b>	<b>260</b>
<b>VIII Fisheries</b>										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl specify)										
<b>Total</b>										
<b>IX Production of Inputs at site</b>										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production	01	20	0	20	0	0	0	20	0	20
Vermi-compost production	01	18	0	18	02	0	02	20	0	20
Organic manures production	03	44	0	44	16	0	16	60	0	60
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom Production										
Apiculture										
Others (pl specify)										
<b>Total</b>	<b>05</b>	<b>82</b>	<b>0</b>	<b>82</b>	<b>18</b>	<b>0</b>	<b>18</b>	<b>100</b>	<b>0</b>	<b>100</b>
<b>X Capacity Building and Group Dynamics</b>										



Leadership development											
Group dynamics											
Formation and Management of SHGs											
Mobilization of social capital											
Entrepreneurial development of farmers/youths											
WTO and IPR issues											
Others (pl specify)											
<b>Total</b>											
<b>XI Agro-forestry</b>											
Production technologies											
Nursery management											
Integrated Farming Systems											
Others (pl specify)											
<b>Total</b>											
<b>GRAND TOTAL</b>		<b>36</b>	<b>513</b>	<b>122</b>	<b>635</b>	<b>78</b>	<b>7</b>	<b>85</b>	<b>591</b>	<b>129</b>	<b>720</b>

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	01	10	0	10	0	0	0	10	0	10
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production	02	17	0	17	03	0	03	20	0	20
Production of organic inputs	02	15	0	15	05	0	05	20	0	20
Planting material production	01	09	0	09	01	0	01	10	0	10
Vermi-culture										
Mushroom Production	02	22	0	22	03	0	03	25	0	25
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition	01	0	08	08	0	02	02	0	10	10
Small scale processing	01	0	07	07	0	03	03	0	10	10
Post Harvest Technology										
Tailoring and Stitching	01	0	09	09	0	01	01	0	10	10
Rural Crafts	01	0	09	09	0	01	01	0	10	10
Production of quality animal products										
Dairying	01	09	0	09	01	0	01	10	0	10
Sheep and goat rearing	01	08	0	08	2	0	02	10	0	10
Quail farming										
Piggery										
Rabbit farming										
Poultry production	01	7	0	07	03	00	03	10	0	10
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify) Fodder production and Preservation technology	02	17	0	17	03	0	03	20	0	20
<b>TOTAL</b>	<b>17</b>	<b>114</b>	<b>33</b>	<b>147</b>	<b>21</b>	<b>07</b>	<b>28</b>	<b>135</b>	<b>40</b>	<b>175</b>

**Training for Rural Youths 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
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
<b>TOTAL</b>										

**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
Nursery Management of Horticulture crops	01	10	0	10	0	0	0	10	0	10
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production	02	17	0	17	03	0	03	20	0	20
Production of organic inputs	02	15	0	15	05	0	05	20	0	20
Planting material production	01	09	0	09	01	0	01	10	0	10
Vermi-culture										
Mushroom Production	02	22	0	22	03	0	03	25	0	25
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										

Value addition	01	0	08	08	0	02	02	0	10	10
Small scale processing	01	0	07	07	0	03	03	0	10	10
Post Harvest Technology										
Tailoring and Stitching	01	0	09	09	0	01	01	0	10	10
Rural Crafts	01	0	09	09	0	01	01	0	10	10
Production of quality animal products										
Dairying	01	09	0	09	01	0	01	10	0	10
Sheep and goat rearing	01	08	0	08	2	0	02	10	0	10
Quail farming										
Piggery										
Rabbit farming										
Poultry production	01	7	0	07	03	00	03	10	0	10
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify) Fodder production and Preservation technology	02	17	0	17	03	0	03	20	0	20
<b>TOTAL</b>	<b>17</b>	<b>114</b>	<b>33</b>	<b>147</b>	<b>21</b>	<b>07</b>	<b>28</b>	<b>135</b>	<b>40</b>	<b>175</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
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify)										

#### 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
Productivity enhancement in field crops	04	110	0	110	10	0	10	120	0	120
Integrated Pest Management	02	50	0	50	10	0	10	60	0	60
Integrated Nutrient management										
Rejuvenation of old orchards	01	26	0	26	04	0	04	30	0	30
Protected cultivation technology	01	24	0	24	06	0	06	30	0	30
Production and use of organic inputs	03	75	0	75	15	0	15	90	0	90
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care	01	0	26	26	0	04	04	0	30	30

Low cost and nutrient efficient diet designing	01	0	22	22	0	08	08	0	30	30
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals	03	75	00	75	15	00	15	90	00	90
Livestock feed and fodder production	01	23	00	23	07	00	07	30	00	30
Household food security	01	0	24	24	0	06	06	0	30	30
Any other (pl.specify)										
<b>TOTAL</b>	<b>18</b>	<b>383</b>	<b>72</b>	<b>455</b>	<b>67</b>	<b>18</b>	<b>85</b>	<b>450</b>	<b>90</b>	<b>540</b>

**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	04	110	0	110	10	0	10	120	0	120
Integrated Pest Management	02	50	0	50	10	0	10	60	0	60
Integrated Nutrient management										
Rejuvenation of old orchards	01	26	0	26	04	0	04	30	0	30
Protected cultivation technology	01	24	0	24	06	0	06	30	0	30
Production and use of organic inputs	03	75	0	75	15	0	15	90	0	90
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care	01	0	26	26	0	04	04	0	30	30
Low cost and nutrient efficient diet designing	01	0	22	22	0	08	08	0	30	30
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals	03	75	00	75	15	00	15	90	00	90
Livestock feed and fodder production	01	23	00	23	07	00	07	30	00	30
Household food security	01	0	24	24	0	06	06	0	30	30
Any other (pl.specify)										
<b>TOTAL</b>	<b>18</b>	<b>383</b>	<b>72</b>	<b>455</b>	<b>67</b>	<b>18</b>	<b>85</b>	<b>450</b>	<b>90</b>	<b>540</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
<b>Crop production and management</b>										
Increasing production and productivity of crops	02	81	-	81	19	-	19	100	-	100
Commercial production of vegetables										
<b>Production and value addition</b>										
Fruit Plants										
Ornamental plants										
Spices crops										
Soil health and fertility management										
Production of Inputs at site										
Methods of protective cultivation										
Others (pl. specify)										
<b>Total</b>										
<b>Post harvest technology and value addition</b>										
Processing and value addition										
Others (pl. specify)										
<b>Total</b>										
<b>Farm machinery</b>										
Farm machinery, tools and implements										
Others (pl. specify) F.T.T.										
<b>Total</b>										
<b>Livestock and fisheries</b>										
Livestock production and management										
Animal Nutrition Management										
Animal Disease Management										
Fisheries Nutrition										

Fisheries Management										
Others (pl. specify)										
<b>Total</b>										
<b>Home Science</b>										
Household nutritional security										
Economic empowerment of women										
Drudgery reduction of women										
Others (pl. specify)										
<b>Total</b>										
<b>Agricultural Extension</b>										
Capacity Building and Group Dynamics										
Others (pl. specify)FTT										
<b>Total</b>										
<b>GRAND TOTAL</b>	<b>02</b>	<b>81</b>	<b>-</b>	<b>81</b>	<b>19</b>	<b>-</b>	<b>19</b>	<b>100</b>	<b>-</b>	<b>100</b>

**Name of sponsoring agencies involved**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>Crop production and management</b>										
Commercial floriculture										
Commercial fruit production										
Commercial vegetable production										
Integrated crop management										
Organic farming										
Others (pl. specify)										
<b>Total</b>										
<b>Post harvest technology and value addition</b>										
Value addition										
Others (pl. specify)										
<b>Total</b>										
<b>Livestock and fisheries</b>										
Dairy farming	01	09	0	09	01	0	01	10	0	10
Composite fish culture										
Sheep and goat rearing	01	08	0	08	2	0	02	10	0	10
Piggery										
Poultry farming	01	7	0	07	03	00	03	10	0	10
Others (pl. specify)										
<b>Total</b>	<b>03</b>	<b>24</b>	<b>00</b>	<b>24</b>	<b>6</b>	<b>00</b>	<b>6</b>	<b>30</b>	<b>00</b>	<b>30</b>
<b>Income generation activities</b>										
Vermicomposting										
Production of bio-agents, bio-pesticides, bio-fertilizers etc.										
Repair and maintenance of farm machinery and implements										
Rural Crafts										
Seed production										
Sericulture										
Mushroom cultivation										
Nursery, grafting etc.										
Tailoring, stitching, embroidery, dying etc.										
Agril. para-workers, para-vet training										
Others (pl. specify)										
<b>Total</b>										
<b>Agricultural Extension</b>										
Capacity building and group dynamics										
Others (pl. specify)										
<b>Total</b>										
<b>Grand Total</b>	<b>03</b>	<b>24</b>	<b>00</b>	<b>24</b>	<b>6</b>	<b>00</b>	<b>6</b>	<b>30</b>	<b>00</b>	<b>30</b>

#### IV. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	-	-	-	-
Diagnostic visits	26	196	10	206
Field Day	07	345	17	362
Group discussions	45	512	0	512
KisanGhoshi	28	442	18	460
Film Show	35	515	12	527
Self -help groups	14	135	08	143
Kisan Mela	01	682	80	762
Exhibition	01	682	80	762
Scientists' visit to farmers field	125	1010	15	1025
Plant/animal health camps	-	-	-	-
Farm Science Club	-	-	-	-
Ex-trainees Sammelan	02	58	0	58
Farmers' seminar/workshop	-	-	-	-
Method Demonstrations	-	-	-	-
Celebration of important days	05	512	15	527
Special day celebration	02	84	05	89
Exposure visits	02	88	0	88
Others (pl. specify)	-	-	-	-
<b>Total</b>	<b>293</b>	<b>5261</b>	<b>260</b>	<b>5521</b>

#### Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	0
Extension Literature	6000
News paper coverage	122
Popular articles	18
Radio Talks	05
TV Talks	09
Animal health camps (Number of animals treated)	-
Others (pl. specify) –Training Manual-03	-
<b>Total</b>	<b>6154</b>

#### Mobile Advisory Services

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

### V. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS

Number of KVKs organised Technology Week	Types of Activities	No. of Activities	Number of Participants	Related crop/livestock technology
	Gosthies			
	Lectures organised			
	Exhibition			
	Film show			
	Fair			
	Farm Visit			
	Diagnostic Practicals			
	Distribution of Literature (No.)			
	Distribution of Seed (q)			
	Distribution of Planting materials (No.)			
	Bio Product distribution (Kg)			
	Bio Fertilizers (q)			
	Distribution of fingerlings			
	Distribution of Livestock specimen (No.)			
	Total number of farmers visited the technology week			

### VI. PRODUCTION OF SEED/PLANTING MATERIAL AND BIO-PRODUCTS

#### Production of seeds by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Quantity of seed (q)	Value (Rs)	Number of farmers
Cereals						
Kharif 2018	Paddy	PR-113	Foundation	142.0		
Rabi 2017-18	Wheat	HD-2967	Certified	156.49		
Oilseeds						
Pulses						
Commercial crops						
Vegetables						
Flower crops						
Spices						
Fodder crop seeds						
Fiber crops						
Forest Species						
Others						
<b>Total</b>					<b>298.45</b>	

### Production of planting materials by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Commercial						
Vegetable seedlings	Tomato	Pusa Hybrid-8	F1	4753	-	08
		Arka Vishal	F1	5240	-	12
	Brinjal	Kashi Sandesh	F1	5075	-	10
		Pusa Hybrid-6	F1	5000	-	11
	Chilli	ArkaMeghana	F1	4520	-	06
		Kashi Anmol	F1	4800	-	10
	Onion	Pusa Red	F1	11200	-	18
Fruits						
Ornamental plants						
Medicinal and Aromatic						
Plantation						
Spices						
Tuber						
Fodder crop saplings						
Forest Species						
Others						
<b>G. Total</b>				<b>40590</b>	<b>-</b>	<b>75</b>

### Production of Bio-Products

Bio Products	Name of the bio-product	Quantity	Value (Rs.)	No. of Farmers
		Kg		
Bio Fertilisers				
Bio-pesticide				
Bio-fungicide				
Bio Agents				
Others (Vermi Compost)		1200	-	-
NADEP Compost		12000	-	-
<b>Total</b>		<b>13200</b>	<b>-</b>	<b>-</b>



**Table: Production of livestock materials**

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

## VII. DETAILS OF SOIL, WATER AND PLANT ANALYSIS

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)
Soil	344	130	63	52650.0
Water	-	-	-	-
Plant	-	-	-	-
Manure	-	-	-	-
Others (pl. specify)	-	-	-	-
<b>Total</b>	344	130	63	52650.0

## VIII. SCIENTIFIC ADVISORY COMMITTEE

Name of KVK	Number of SACs conducted
KVK Shahjahanpur	01

## IX. NEWSLETTER

Name of News letter	No. of Copies printed for distribution

## X. PUBLICATIONS

Category	Number
Research Paper	05
Technical bulletins	-
Technical reports	04
Others (pl. specify) Training Manual	-
<b>Total</b>	<b>09</b>

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

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

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

Introduction of alternate crops/varieties: N.A.

Crops/cultivars	Area (ha)	Extent of damage	Recovery of damage through KVK initiatives if any
-	-	-	-
-	-	-	-
<b>Total</b>	-	-	-

Major area coverage under alternate crops/varieties

Crops	Area (ha)	Number of beneficiaries
Oilseeds	-	-
Pulses	-	-
Cereals	-	-
Vegetable crops	-	-
Tuber crops	-	-
<b>Total</b>	-	-

Farmers-scientists interaction on livestock management

Livestock components	Number of interactions	No.of participants
-	-	-
-	-	-
<b>Total</b>	-	-

Animal health camps organised

Number of camps	No.of animals	No.of farmers
	-	-
	-	-
<b>Total</b>	-	-

Seed distribution in drought hit states:

Crops	Quantity (qtl)	Coverage of area (ha)	Number of farmers
	-	-	-
	-	-	-
<b>Total</b>	-	-	-

Large scale adoption of resource conservation technologies

Crops/cultivars and gist of resource conservation technologies introduced	Area (ha)	Number of farmers
-	-	-
-	-	-
<b>Total</b>		

Awareness campaign

	Meetings		Gosthies		Field days		Farmers fair		Exhibition		Film show	
	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>												

### XIII. DETAILS ON HRD ACTIVITIES

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

Name of the SAU	Title of the training programmes	No of programmes	No. of Participants	No. of KVKs involved
	-	-	-	-
<b>Total</b>	-	-	-	-

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

Title of the training programmes	No of programmes	No. of Participants	No. of KVKs involved
	-	-	-
<b>Total</b>	-	-	-

## **XIV. CASE STUDY**

### **Scientific dairy farming change the farmer lifestyle**

Livestock are valuable assets of the rural and are critical in supporting their livelihoods particularly during unfavorable times. Mr. Pramod Mishra s/o Shri Ram Ashrey Mishra age 45 years is a resident of village & post of Satawan Bujurg, Tah- Powayan Dist-Shahjahanpur is a small and traditional dairy farmer for the last twenty years. He possesses about 3 acre of land which includes his house and cattle shed. He was struggling to fulfill the needs of his family members including the education of his children as he was getting only Rs. 3000/- per month as an income from traditional rearing of buffaloes and cows. This income was also not regular, as buffaloes were not in milk throughout the year.

One day, he came in contact with the Scientists of KVK, Niyamatpur, Shahjahanpur and was advised to attend a training program on dairy farming. He subsequently attended a one-week training program in 2015 organised by KVK.

#### **Innovative approach of the farmer:**

After joining the training program under the guidance of Krishi Vigyan Kendra, Shahjahanpur, Mr. Mishra sold his low producer buffaloes as 15 numbers and for that earning to purchase six high yielding murrah buffaloes and one Sahiwal cow, he started his dairy farm adopting scientific practices:-

- Strict vaccination schedules
- Regular deworming and dipping
- Scientific feeding and watering
- Storing medicines for emergency use
- Artificial insemination technique
- Producing clean milk
- Cultivation of fodder crops- Hybrid jowar fodder + fodder miize during kharif and Berseem / Lucerne + oat during rabi.

He is maintaining continuous contact with KVK, Dept. of Animal Husbandry officials for seeking advisory services and benefit of schemes.

#### **Fruits of his efforts**

He purchased six more high yielding Murrah buffaloes and one cross bred cow out of resource generated by selling milk.

#### **Income generated from dairy farm (Output)**

Before joining KVK training, the production of his buffaloes was very poor as he was getting only 4-5 liter of milk/buffalo/day and his expenditure was more on animal health. He is now getting 10-12 liter of milk per buffalo/day. He is selling about 80 liter milk per day and keeping milk of cow for family consumption.

Addition of new high yielding buffaloes increased his milk production from 40-45 lit/day to 85-90 lit/day. He currently supplying milk to nearby Powayan market @Rs.40.00/lit His monthly gross income is

Rs.96, 000/-. Besides increased milk yield, he is also benefitted by the KVK in getting scientific guidance on feeding and management of buffalo and cows, receipt, preventive health care, first aid for his animals and feed supplements.

**Initiative to motivate other farmers of adjoining area (Outcome):**

Two rural youth of his village established dairy farming due to his motivation and 9 milk producing farmers from surrounding villages joined him to guidance.

**His expectations:**

Now he is extending his efforts to register this group as a co-operative society. KVK is providing its all possible support to make this endeavor successful. To fetch remunerative prices for their produce, this group is looking forward to open their own outlet in Powayan.

**Impact:-**

Now, Mr. Mishra maintains 12 adult buffaloes, 2 cows and their followers in his herd and ensures that at least 7-9 buffaloes are in milk throughout the year. Additional income has helped him to convert a temporary shed in to a permanent tiled roof house with sufficient space for each animal. His family is also enjoying a good socio-economic status in the village and they are all leading a comfortable life.

His whole family feels indebted to KVK Shahjahanpur for bringing happiness and change in their life. Mr Mishra has become a live example and role model for a number of unemployed youths. Many farmers like Mr. Mishra in Shahjahanpur district are enjoying benefits of dairy farming on scientific lines under KVK guidance.



#### 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-Shahjhanpur	SVPUA&T, Meerut	Dr. S.K. Verma

##### B. Details on Farmer's visit

S. No	Purpose of visit	Number of farmer's visited
01	Technology Information	225
02	Technology Products	25
03	Others if any pl. specify	-

##### C. Facilities in the ATIC which are in operation

S. No	Particulars	Availability (Please $\checkmark$ mark)	Number of ATICs
01	Reception counter		
02	Exhibition / technology museum	$\checkmark$	
03	Touch screen Kiosk		
04	Cafeteria	$\checkmark$	
05	Sales counter		
06	Farmer's feedback register	$\checkmark$	
07	Others if any (please specify)		

##### 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	01	225	25	32	27	14	12	11	15
02	Video shows		121	11	36	29	12	06	11	13
03	Letters received									
04	Letters replied									
05	Training to farmers / technocrats / students									
06	Others pl. specify									

## D.2 . Publications (Print & Electronic media)

S. No	Particulars	Number sold	Revenue generated in Rs.	Number of farmers benefited
01	Books			
02	Technical bulletins			
03	Technology Inventory			
04	CDs			
05	DVDs			
06	Video films			
07	Audio CDs			
08	Others if any (please specify)	-	-	300

## E. Technology Products provided

S. No	Particulars	Quantity	Unit of quantity	Value in Rs.	Number of farmers benefited
01	Seeds	298.49	Quintal	-	-
02	Planting materials	40588	Numbers	-	75
03	Livestock		Numbers		
04	Poultry birds		Numbers		
05	Bio-products		Quintals		
06	Others pl. specify				

## F. Technology services provided

S. No	Particulars	Number of farmers benefited
01	Soil and water testing	130
02	Plant diagnostics	
03	Details about the services to line Departments	
04	Others if any (please specify)	

## XV. TECHNOLOGICAL BACKSTOPPING BY DIRECTORATES OF EXTENSION

States covered:

Number of Directorates of Extension:

### A. Details on Directors of Extension

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

### B. Workshops / meetings organized

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

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

S. No.	Particulars	Number of visits
01	SAC meetings	01
02	Field days	35
03	Workshops / seminars	07
04	Technology week	
05	Training programmes	
06	Others pl. specify	

### D. Overseeing of KVKs activities

S. No.	Particulars	Number of fields visited	Major observations / remarks	Major suggestions given
01	On Farm Trials			
02	Front Line Demonstration	30	OK	
03	Others pl. specify			

### E. Publication on Technology inventory

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



**F. Technological Products provided to KVKs**

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

**XXXXXXXXXX**