

# PROFORMA FOR PREPARATION OF ANNUAL REPORT (April-2017-March-2018)

## APR SUMMARY

### 1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & Farm women	72	1235	203	1438
Rural youths	12	102	30	132
Extension functionaries	22	201	30	231
Sponsored Training	--	--	--	--
Vocational Training	--	--	--	--
<b>Total</b>	<b>106</b>	<b>1538</b>	<b>263</b>	<b>1801</b>

### 2. Frontline demonstrations

Enterprise	No. of Farmers	Area(ha)	Units/Animals
Oilseeds	30	8.0	--
Pulses	50	20.0	--
Cereals	127	29.0	--
Vegetables	18	3.1	--
Other crops	98	28.3	--
Hybrid crops	10	2.0	--
<b>Total</b>	<b>333</b>	<b>90.4</b>	<b>--</b>
Livestock & Fisheries	--	--	--
Other enterprises	--	--	--
<b>Total</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>Grand Total</b>	<b>333</b>	<b>90.4</b>	<b>--</b>

### 3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
<b>Technology Assessed</b>			
Crops	11	40	40
Livestock	--	--	--
Various enterprises	--	--	--
<b>Total</b>	<b>11</b>	<b>40</b>	<b>40</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>40</b>	<b>40</b>

### 4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	468	22697
Other extension activities	67	--
<b>Total</b>	<b>535</b>	<b>22697</b>

## 5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Market- ing	Aware- ness	Other enterprise	
Nagina (Bijnor)	Text only	50	-	-	-	10	-	60
	Voice only	100	-	-	-	15	-	115
	Voice & Text both	-	-	-	-	-	-	-
	<b>Total messages</b>	<b>150</b>	-	-	-	<b>25</b>	-	<b>175</b>
	<b>Total farmer benefitted</b>	<b>200</b>	-	-	-	<b>50</b>	-	<b>250</b>

## 6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	335.00	-
Planting material (No.)	-	-
Bio-Products (kg)	-	-
Livestock Production (No.)	-	-
Fishery production (No.)	-	-

## 7. Soil, water & plant Analysis

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

## 8. HRD and Publications

SN	Category	Number
1	Workshops	05
2	Conferences	03
3	Meetings	03
4	Trainings for KVK officials	09
5	Visits of KVK officials	--
6	Book published	02
7	Training Manual	02
8	Book chapters	--
9	Research papers	06
10	Lead papers/ Invites lecture	01
11	Seminar papers/Abstract	06
12	Extension folder	05
13	Proceedings	--
14	Award & recognition	02
15	Ongoing research projects	--

# DETAIL REPORT OF APR (2017-2018)

## 1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		Email
	Office	FAX	
Krishi Vigyan Kendra, Nagina (Bijnor) (U.P.) - 246762	01343-250489	01343-250489	bijnorkvk@gmail.com

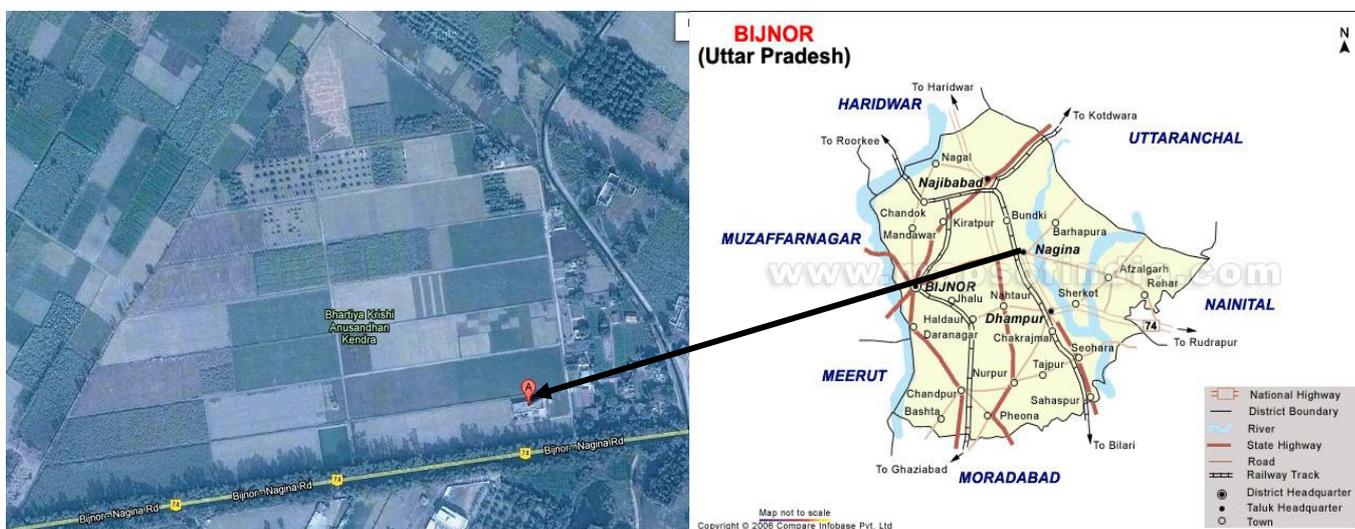
### 1.2. Name and address of host organization with phone, fax and e-mail

Address	Telephone		Email
	Office	FAX	
S.V.P. Univ. of Agri. & Tech., Meerut (U.P.) 250110	0121-2411511	0121- 2411511, 2411505	deesvpuat2014@gmail.com

### 1.3. Name of the Head with phone & mobile No

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. D.P. Singh	--	9720974900	dpsingh0107@gmail.com

**1.4. Year of sanction** : FN5 (108)/90 KVK date 22.04.92  
FNNo. 15(22)/92 Agr. Ext. -1/do Jan. 93



### 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	Category (SC/ST/OBC/ Others)	Mobile	Age	Email-Id
1	Sr. Scientist & Haed	Dr. D.P. Singh	Professor & Head	Horticulture	37400-67000	61,750	11.08.08	Permanent	OBC	9720974900	51	dpsingh0107@gmail.com
2	Subject Matter Specialist	Dr. A.V. Singh	Professor	Plant Protection	37400-67000	67,830	21.11.00	Permanent	Others	8765649806	58	--
3	Subject Matter Specialist	Dr. Balraj Singh	Professor	Agro forestry	37400-67400	60,600	22.02.05	Permanent	Others	9837662343	60	balrsjsingh55@gmail.com
4	Subject Matter Specialist	Dr. Shakuntala Gupta	Asstt. Prof.	Home Science	15600-39100	36,580	23.06.08	Permanent	Others	9412356736	52	shakuntalaguptakvk@gmail.com
5	Subject Matter Specialist	Dr. K.K. Singh	Asstt. Prof.	Plant Breeding	15600-39100	29,960	10.07.08	Permanent	Others	8979101113	41	krishna.singh1976@gmail.com
6	Subject Matter Specialist	Dr. Narendra Singh	Asstt. Prof.	Agronomy	15600-39100	29280	15.01.09	Permanent	Others	9457168051	42	gnarendra1976@gmail.com
7	Computer Programmer	Er. S.K. Yadav	Prog. Asstt.	Computer Science	9300-34800	68,000	21.10.99	Permanent	OBC	9412117844	43	shailendrayadav31@gmail.com
8	Farm Manager	Dr. Rakesh Kumar	Prog . Asstt.	Plant Breeding	9300-34800	46,200	24.07.08	Permanent	Others	7599151951	50	rakeshnagina@gmail.com
9	Accountant / OS	Mr. Rajpal Singh	OS/Acctt.	--	9300-34800	46,200	26.02.08	Permanent	SC	9411078113	57	--
10	Stenographer	Mr. Abdul Gaffar	Jr. Steno	--	5200-20200	53,600	29.08.95	Permanent	Others	9412452148	50	agkhan1970@rediffmail.com
11	Driver	Mr. Anil Kumar	Driver	--	5200-20200	27,600	30.07.07	Permanent	SC	9359218476	43	--
12	Attendant	Mr. Satish Chandra Maurya	Attendant	--	5200-20200	33,300	01.07.98	Permanent	OBC	9410860550	53	--
13	Attendant	Mrs. Neelam Sharma	Attendant	--	5200-20,200	18,000	18.03.17	Permanent	Others		40	--

**1.6. Total land with KVK (in ha) : 13.35 ha**

SN	Item	Area (ha)
1	Under Buildings	0.40
2	Under Demonstration Units	1.70
3	Under Crops	9.80
4	Orchard	1.20
5	Fish Pond	0.247

**1.7. Infrastructural Development :  
(A) Buildings**

SN	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	1999	550	--	--	--	--
2	Farmers Hostel	ICAR	2006	300	--	--	--	--
3	Staff Quarters (6)	ICAR	--	400	--	Nov. 2006	--	Completed
4	Demo. Units (2)	ICAR	--	160	--	Nov. 2006	--	Completed
5	Fencing/Boundary wall	ICAR	--	500 rm	--	Feb. 2007	--	Completed
6	Threshing floor	ICAR	Completed	300	--	Nov. 2006	--	Completed
7	Farm godown	ICAR	--	60	--	June 2006	--	Completed
8	Irrigation Channel	ICAR	--	1000 rm	--	May 2007	--	Completed

**(B) Vehicles**

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Jeep	2009	600000.00	--	Good
Motor Cycle	2010	46500.00	--	Good
Tractor	1995	--	--	Poor

**(C) Equipments & AV aids**

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Diesel engine pump set	1995	--	Poorly working
Zero till ferti seed drill	1998	11,255.00	Poorly working
	1999	11,300.00	Working
	2010	19,500.00	Working
Cultivator	1995	6,000.00	Poorly working
Disc harrow	1995	4,700.00	Poorly working
	2008	22,000.00	Working
Bund maker	1995	3,400.00	Working
Labeller	1995	47,500.00	Working
Tractor trolley	1995	46,000.00	Poorly working
Sugarcane cutter planter	2000	--	Poorly working
Bed Planter	2010	57,500.00	Working
Thresher	1995	17,000.00	Poorly working
Computer	2003	--	Poorly working
LCD	2007	--	Working
ERNET setup (05 Computer, 01 Server & 01 VSAT)	2009	--	Computer working, VSAT not working

**1.8. A). Detail of SAC meeting conducted in the year :**
**Date: 13.03.2018**

Name and Designation	Salient Recommendations	Action taken
Dr. S K Sachan Director, Extension, SVPUA&T, Meerut	Trench method of sugarcane should be more popularize with suitable intercrops by KVK scientist	04 training programme of trench method with suitable intercrops including 01 OFT (04 farmers) and 04 FLD programme are conducted during the year 2016-17 and also planned such programme next upcoming year 2017-18.
	Suggested for training on awareness about burning of crop residue and also published related literature	Scientist Plant Breeding and Scientist Agronomy conducted 02 training programme on management of crop residues during 2017-18 and also planned programme next upcoming year 2018-19.
	Suggested for more programme about popularization of pulses production techniques in farmers field	KVK scientists are conducted 04 training programme and 110 demonstrations (50 demon. on Urd during Zaid 2018) for the popularization of pulses production between district farmers.
	Suggested promoting Newly released varieties of crops p in district.	KVK scientists already conducted such programme during whole year on main crops of the district.
Dr. Gopal Singh Joint Director Extension SVPUA&T, Meerut	KVK scientists should be develop literature based on modern agricultural technologies for farmers purpose	Modern agro technological literature developed by the KVK Scientist based on district and farmers demand during the whole year.
	Suggested for promoting newly varieties in district for better adaption and yield performance.	KVK scientists conducting FLD & OFT programme only newly released varieties.
Smt. Poonam Chaudhary, SAC Member	Programme should be promoted on Women's empowerment	Training, Demo. & OFT is designed in annual action plan on women's empowerment
Sh. Sharad Kumar, Farmer	Suggested inclusion of IPM technology in major crops	Such programme has been plant during upcoming year.

## 2. DETAILS OF DISTRICT (2017-18)

### 2.1 Major farming systems/enterprises

SN	Farming system/enterprise
1	Integrated agriculture farming systems
2	Integrated crop-livestock-fish farming systems
3	Dairy farming systems
4	Agro-forestry systems

### 2.2 Description of Agro-climatic Zone & major agro ecological situations

SN	Agro-climatic Zone	Characteristics
1	Mid Western Plain Zone	<ul style="list-style-type: none"> <li>The soils are coarse to medium in texture, moderately well drained, consistently deep and neutral to slightly alkaline in nature</li> <li>Climate of the zone in general is subtropical type</li> <li>The maximum temperature of the district was 41<sup>0</sup>C while minimum was found to be 0.6<sup>0</sup>C</li> <li>Total rain fall of the district is 898.5 mm</li> <li>The fertilizer consumption of the area is 143 kg/ha 83% farmers are having less than 2 ha land, 8% farmers are having 2-4 ha land, while the rest 9% have more than 4 ha land</li> <li>The crops of the zone are sugarcane, rice, wheat, mustard, groundnut, field pea, gram, fodder sorghum etc.</li> </ul>
2	Tarai & Bhabar Zone	<ul style="list-style-type: none"> <li>A part of the district falls under this zone</li> <li>The highest temperature is recorded in May, June and the lowest in Dec., Jan.</li> <li>The average rainfall is 1400 mm. Eighty three percent of rains are received from south- west monsoon from June to September</li> <li>The soils are low to medium in available phosphorus, medium to high in organic carbon</li> </ul>

#### b) Topography

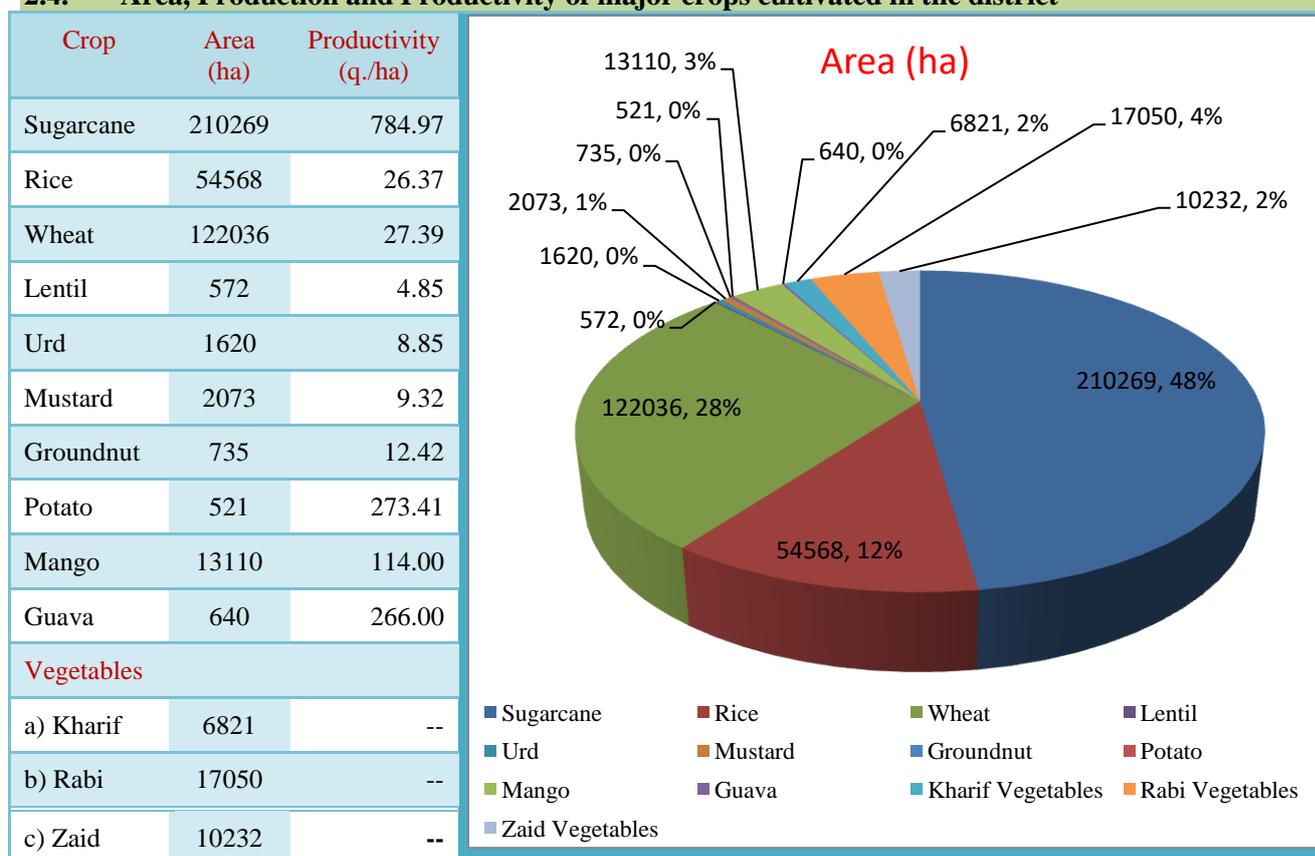
The Topography of Bijnor district is mainly a plain. The district has a pleasing climate with cool and foggy winter and generally hot and humid summer. The wet session starts from July to October during which the district receives rainfall. The temperature of the district is varies from 48<sup>0</sup>C in summer and 3<sup>0</sup>C in winter. These districts have the highest density of population which gives the lowest per capita land. The other two regions, the central and the western are comparatively better with a well-developed irrigation system.

SN	Agro ecological Situation	Characteristics
1	AES-1	Irrigated Sandy Loam, Loam (S.cane predominant)
2	AES-2	Irrigated Loam, Clay Loam soils

### 2.3 Soil type/s

SN	Soil type	Characteristics	Area in ha
1	Clay loam	Fine-grained minerals, organic matter medium, variable range of water content, clay minerals polar attraction.	179652
2	Sandy loam	Fertile soil with rich nutrient, organic matter medium to high suitable for all arable crops	172428
3	Sandy	Low organic matter content, high porosity, contains large particles, usually light in color. stay loose and allow moisture to penetrate easily	84272

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



## 2.5. Weather data

Month	Rainfall (mm)	Rainy Days	Temperature °C		Relative Humidity (%)	
			Maximum	Minimum	0716	1416
April, 17	3.2	1	35.1	18.3	72	29
May, 17	23.6	2	38.3	23.0	71	35
June, 17	193.2	5	36.2	24.7	82	52
July, 17	197.6	12	33.0	26.0	92	72
August, 17	297.3	9	32.8	25.2	93	73
September, 17	162.6	4	32.6	24.1	95	67
October, 17	0.0	0	31.7	17.1	94	51
November, 17	0.0	0	26.0	9.2	96	50
December, 17	7.2	2	22.8	7.2	97	58
January, 18	8.0	1	12.2	3.3	99	64
February, 18	10.2	2	25.1	7.6	94	46
March, 18	0.0	0	30.2	11.6	87	37

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

Category	Population	Production (LMT)	Productivity (kg/day/animal)
<b>Cattle</b>			
<i>Crossbred</i>	41490	--	3.0
<i>Indigenous</i>	223258	--	1.5
<b>Buffalo</b>	526188	127.56	4.3
<b>Cow</b>	223258	33.52	2.5
<b>Sheep</b>			
<i>Crossbred</i>	8286	--	--
<i>Indigenous</i>	5599	--	--
<b>Goats</b>	104429	10.93	0.729
<b>Pigs</b>			
<i>Crossbred</i>	5427	--	--
<i>Indigenous</i>	24938	--	--
<b>Rabbits</b>	495	--	--
<b>Poultry</b>	152327	--	--

Category	Area	Production (qt.)	Productivity (qt./ha)
Fish	1306.60 ha	45404.35	34.75

## 2.7 Details of Operational Area /Villages (2017-18)

SN	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Kotwali	Harvanshpur Dhaaram, Khanpur, Saidkheri, Rajpura, Purani, Nejawali Gamdi, Fulsandha Karandachodher, Patpura and Vishoniwala etc.	Sugarcane, Rice, Wheat, French bean, Okra, Mustard, Groundnut, Urd, Moong, Mango and Guava	<ul style="list-style-type: none"> <li>• Insect &amp; Diseases</li> <li>• Old variety seed</li> <li>• Excessive and Imbalanced use of pesticides &amp; fertilizers</li> <li>• No seed treatment,</li> <li>• Poor Management of orchards</li> <li>• No application of micronutrients</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction and Popularization of HYV</li> <li>• Promotion of IPNM, IPM, IDM, ICM</li> <li>• Popularization of intercropping</li> <li>• Promotion of self-help group of farmers</li> <li>• Encouragement of Oilseed and Pulses</li> <li>• Rejuvenation of old orchards</li> </ul>
2	Allahapur (Dhampur)	Nayagoan and Norangabad	Sugarcane, Rice Wheat, Mustard, Vegetables	<ul style="list-style-type: none"> <li>• Insect &amp; Diseases attack</li> <li>• Excessive and imbalanced use of pesticides &amp; fertilizers</li> <li>• No seed treatment</li> <li>• Reliability of the farmers on chemicals</li> </ul>	<ul style="list-style-type: none"> <li>• Discriminative use of pesticides</li> <li>• Promotion of IPNM, IPM, IDM, ICM</li> <li>• Improving technological skills of fruits farmers</li> <li>• Promotion of self-help group of farmers</li> </ul>
3	Najibabad	Jattiwalla and Raipur	Vegetable, Fruits, Rice, Wheat and Sugarcane	<ul style="list-style-type: none"> <li>• Unavailability of quality seed of vegetable</li> <li>• Insect &amp; Diseases attack</li> <li>• No seed treatment</li> <li>• Poor management of orchards</li> <li>• No application of micronutrients</li> </ul>	<ul style="list-style-type: none"> <li>• Promotion of suitable and HYV of vegetables</li> <li>• Discriminative use of pesticides</li> <li>• Promotion of IPNM, IPM, IDM, ICM</li> <li>• Improving technological skills of fruits farmers</li> <li>• Promotion of self-help group of farmers</li> </ul>
4	Nehtaur	Kokapur, Begrajpur and Sarayaashnra etc.	Sugarcane, Rice Wheat, Mustard, Vegetables	<ul style="list-style-type: none"> <li>• Insect &amp; Diseases attack</li> <li>• Excessive and imbalanced use of pesticides &amp; fertilizers</li> <li>• No seed treatment</li> <li>• Reliability of the farmers on chemicals</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction and Popularization of HYV</li> <li>• Promotion of IPNM, IPM, IDM, ICM</li> <li>• Popularization of intercropping</li> <li>• Promotion of self-help group of farmers</li> <li>• Encouragement of Oilseed and Pulses</li> <li>• Rejuvenation of old orchards</li> </ul>
5	Kiratpur	Akbrabad and Sadipur	Vegetable, Fruits, Rice, Wheat and Sugarcane	<ul style="list-style-type: none"> <li>• Unavailability of quality seed of vegetable</li> <li>• Insect &amp; Diseases attack</li> <li>• Excessive and imbalanced use of pesticides &amp; fertilizers</li> <li>• No seed treatment</li> <li>• Poor management of orchards</li> <li>• No application of micronutrients</li> </ul>	<ul style="list-style-type: none"> <li>• Promotion of suitable and HYV of vegetables</li> <li>• Adequate package and practices of vegetables and fruits</li> <li>• Discriminative use of pesticides</li> <li>• Promotion of IPNM, IPM, IDM, ICM</li> <li>• Improving technological skills of fruits farmers</li> <li>• Promotion of self-help group of farmers</li> </ul>

6	Seohara	Jamapur, JatNagla and Budhanpur	Rice, Wheat, Sugarcane and orchard	<ul style="list-style-type: none"> <li>• Delayed sowing of sugarcane and wheat</li> <li>• Improper management of pests</li> <li>• Sowing of old varieties seeds</li> <li>• Imbalanced use of pesticides &amp; fertilizers</li> <li>• Poor management of orchards</li> <li>• No application of micronutrients</li> </ul>	<ul style="list-style-type: none"> <li>• Promotion of suitable and HYV of vegetables</li> <li>• Adequate package and practices of fruits</li> <li>• Discriminative use of pesticides</li> <li>• Promotion of IPNM, IPM, IDM, ICM</li> <li>• Improving technological skills of sugarcane and rice farmers</li> <li>• Promotion of self-help group of farmers</li> </ul>
7	Afjalgarh	Jamanwala and Muraliwala	Sugarcane, Rice, Wheat, Mustard, Groundnut, Urd, Moong, Mango and Guava	<ul style="list-style-type: none"> <li>• Insect &amp; Diseases</li> <li>• Old variety seed</li> <li>• Excessive and Imbalanced use of pesticides &amp; fertilizers</li> <li>• No seed treatment,</li> <li>• Poor Management of orchards</li> <li>• No application of micronutrients</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction and Popularization of HYV</li> <li>• Promotion of IPNM, IPM, IDM, ICM</li> <li>• Popularization of intercropping</li> <li>• Promotion of self-help group of farmers</li> <li>• Encouragement of Oilseed and Pulses</li> <li>• Rejuvenation of old orchards</li> </ul>
8	Nehtaur	Kokapur, Begraipur and Sarayaashnra etc.	Sugarcane, Rice Wheat, Mustard, Vegetables	<ul style="list-style-type: none"> <li>• Insect &amp; Diseases attack</li> <li>• Excessive and imbalanced use of pesticides &amp; fertilizers</li> <li>• No seed treatment</li> <li>• Reliability of the farmers on chemicals</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction and Popularization of HYV</li> <li>• Promotion of IPNM, IPM, IDM, ICM</li> <li>• Popularization of intercropping</li> <li>• Promotion of self-help group of farmers</li> <li>• Encouragement of Oilseed and Pulses</li> <li>• Rejuvenation of old orchards</li> </ul>
9	Jalilpur	Bhwanipur and Laddupura	Sugarcane, Rice Wheat, Mustard, Vegetables	<ul style="list-style-type: none"> <li>• Insect &amp; Diseases attack</li> <li>• Excessive and imbalanced use of pesticides &amp; fertilizers</li> <li>• No seed treatment</li> <li>• Reliability of the farmers on chemicals</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction and Popularization of HYV</li> <li>• Promotion of IPNM, IPM, IDM, ICM</li> <li>• Popularization of intercropping</li> <li>• Promotion of self-help group of farmers</li> <li>• Encouragement of Oilseed and Pulses</li> <li>• Rejuvenation of old orchards</li> </ul>

## 2.8 Priority Thrust areas

SN	Thrust area
1	Introduction/ development of new techniques in crops for better income
2	Maintenance of soil productivity through IPNM
3	Promoting resource conservation techniques in crops
4	Promoting export quality Basmati production
5	Popularizing IPM technologies for management of insect pests
6	Promoting Group Approach of Extension through FIG
7	Diversification in orchard management
8	Promoting seed production at farmer's field
9	Women empowerment through popularization of food preservation technique
10	Weed management in crops
11	Integrated crop management

## 2.9 Intervention/Programmes for the doubling the farmers income – during 2017-18

### Demonstrations

Before Interventions	Main crop Yield (q/ha)	Inter crop Yield (q/ha)	Equivalent Yield (q/ha)	Cost of cultivation (Rs/ha)*	Net income (Rs/ha)	B:C Ratio	Remark if any
Sole cropping of sugarcane	1115	--	--	123524.00	227701.00	2.84	--
--	Mango Squash	--	--	Market available product mango Squash	126.00 (750 ml)	--	--

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

After Interventions	Main crop Yield(q/ha)	Inter crop Yield (q/ha)	Equivalent yield (q/ha)	Cost of cultivation (Rs/ha)*	Net income (Rs/ha)	B:C Ratio	Remark if any
Intercropping System (Autumn Sugarcane)							
Sugarcane + Potato*	1275	156.25	1671.83	178754.00	347871.00	2.95	--
Sugarcane + Lentil	1080	11.20	1279.11	136353.70	263416.30	2.95	--
Sugarcane + Mustard	1090	10.40	1241.87	135870.60	252169.43	2.88	--
Assessment of income generating activity value addition and capacity building	Value addition of mango product	--	--	1120.00	1400.00	1.25	--

\*Net profit depends on selling price; sometimes farmers get more profit and sometimes less profit

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

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

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

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

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

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

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

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

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

Before Interventions	Main crop Yield (q/ha)	Inter crop Yield (q/ha)	Equivalent yield (q/ha)	Cost of cultivation (Rs/ha)*	Net income (Rs/ha)	B:C Ratio	Remark if any
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 2017-18

OFT (Technology Assessment and Refinement)				FLD (Oilseeds, Pulses, Cotton, Other Crops/Enterprises)			
1				2			
Number of OFTs		Total no. of Trials		Area in ha		Number of Farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
11	11	40	40	101.4	90.4	308	333

Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)					Extension Activities			
3					4			
Number of Courses			Number of Participants		Number of activities		Number of participants	
Clientele	Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
PF	70	72	1400	1438	450	468	20000	22697
RY	12	12	120	132				
EF	22	22	220	231				
Skill trg.	--	--	--	--				
<b>Total</b>	<b>104</b>	<b>106</b>	<b>1740</b>	<b>1801</b>				

Seed Production (Q.)			Planting material (Nos.)		
5			6		
Target	Achievement	Distributed to no. of farmers	Target	Achievement	Distributed to no. of farmers
200	335	--	--	--	--

## Technology Demonstrated and disseminated through Technology Park

Crop	Technology /Variety
Wheat (Varietal)	HD-2967, HD-3086, DBW-88, HD-3043, PBW-621, PBW-550, DBW-17, PBW-590, DBW-71, DBW-90 and HD-3059
Wheat(Weed Management)	Isoproturan 75 WP @ 1.5 kg/ha, Sulfosulfuran 75% + Metsulfuron 5% @ 40 gm/ha, Mesosulfuranmethyal 3% + Idosulfuranmethyal 0.6% at 400 gm/ha and Clodinofof 15% WP + Metsulfuron 20% @ 40 gm/ha
Wheat(Disease & Insect Management)	Propiconazol 1ml/lit water, Tebuconazol 1ml/lit water
Paddy (Varietal)	HKR-127, NDR-359, NDR-2008, NDR-2064, PR-113, NB-3,PR-111, HKR-97, SuskSamrat.Arize 6444 Gold, PAC-801, VNR-2335, NPH-150, TEJ Gold, Swift Gold, Prima,VNR-2245, Pusa Basmati-2511, Pusa Basmati-1612,Pusa Basmati-1121, Pusa Basmati-01, PB-1509 T-21, Sharbati (Local grown) and Chandan-21
Paddy (Weed Management)	Bispyribac sodium 10%SC 250 ml/ha, Pretilachlor 2.0 lit/ha and Oxadiagril 112.5gm/ha
Paddy (Disease & Insect Management)	Validamycin 400gm + Carbendazim 200gm/ha, Tricyclazole 120gm/ha, Copper Oxichliride 500gm + Streptomycin 15gm/ha Corazen 150 ml/ha and Fipronil18 kg/ha
Poplar	G-48, Uday, Pant poplar-5, W-32, W-22, STC-15, PH-1, PH-2, PH-4, PH-5, FRI-A, FRI-B, FRI-C, FRI-D, FRI-E, FRI-F, FRI-G, FRI-H, FRI-I, FRI-J and FRI-K
<b>Total technology demonstrated</b>	<b>70</b>
<b>No of farmers visited</b>	<b>4000</b>

## 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
Resource Conservation Technology	Sugarcane	Intercrops with sugarcane (Lentil, potato and mustard)	01	04
Integrated Crop Management	Sugarcane	Impact of nursery plantation under late sown condition on sugarcane yield	01	03
Varietal Evaluation	Paddy	Evaluation of newly released high yielding rice varieties	01	05
	Wheat	Evaluation of newly released high yielding Timely sown wheat variety	01	05
	Shimla Mirch	Evaluation of hybrids of Shimla Mirch	01	03
	Shimla Mirch	Evaluation of hybrids of Shimla Mirch	01	03
	Okra	Evaluation of Okra varieties	01	03
Integrated Pest Management	Paddy	Stem borer management in Rice	01	03
Integrated Disease Management	Paddy	Blast disease management in Rice	01	03
Integrated Farming System	Guava	Evaluation of high density planting systems in guava	01	03
Value Addition	Mango	Value addition in mango squash increase prices as well as it shelf life	01	05
<b>Total</b>			<b>11</b>	<b>40</b>

Summary of technologies assessed under **livestock** by KVKs : Nil  
 Summary of technologies assessed under various **enterprises** by KVKs : Nil

## I.B. TECHNOLOGY REFINEMENT

Summary of technologies refined under various **crops** by KVKs : Nil  
 Summary of technologies refined under various **livestock** by KVKs : Nil  
 Summary of technologies refined under various **enterprises** by KVKs : Nil

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

### RESOURCE CONSERVATION TECHNOLOGY

**OFT- 1 (Agronomy) under Advisory service Season - Kharif Year: 2016-17**

**Problem definition:** Low productivity and profitability under sugarcane wheat cropping system.

**Technology Assessed:** To assess the intercrops in sugarcane for increasing the system productivity and profitability.

Sugarcane is a major crop in the Bijnor district about 70 % of cropping area are covered by sugarcane. Due to continuous follow of sugarcane - wheat cropping system and delayed sowing of both crops the productivity of these crops are very low. During the year farmers feel financial crises, due improper cash payment of sugarcane by sugar factories, long duration of sugarcane crop, etc. Keeping in mind those facts KVK, Nagina, Bijnor was tested three intercropping system i.e. Sugarcane + Potato, Sugarcane + Lentil, Sugarcane + Mustard and sugarcane sole as check. The results revealed that all the intercrops gave higher net return as comparison to sole cropping. The technical and economical data are as given below:

Technology Option	No. of trials	Intercrop yield (qt./ha)	Cane Yield (qt./ha)	CEY (qt./ha)	Cost of cultivation (Rs./ha)	Net Return (Rs./ha)	B:C Ratio
T <sub>1</sub> = Farmers Practice (sugarcane sole )	01 (04 farmers field)	-	1115	1115.00	123524.00	227701.00	2.84
T <sub>2</sub> = Sugarcane + Potato		156.25	1275	1671.83	178754.00	347871.00	2.95
T <sub>3</sub> = Sugarcane + Lentil		11.20	1080	1279.11	136353.70	263416.30	2.95
T <sub>3</sub> = Sugarcane + Mustard		10.40	1090	1241.87	135870.60	252169.43	2.88



**Selling price** (Rs.) = Sugarcane = 315/ quintal, Lentil = 5600/ quintal, Potato = 800/ quintal, Mustard = 4600/ quintal (According to 2017 market rate)

## INTEGRATED CROP MANAGEMENT

OFT- 2 (Agronomy)

Season - Rabi

Year: 2017-18

**Problem definition:** Due to late sowing of sugarcane farmers get low yield

**Technology Assessed:** Impact of nursery plantation under late sown condition on sugarcane yield.

Sugarcane is a major crop of Bijnor district and most of the farmers follow sugarcane – wheat cropping system. Due to adoption of sugarcane – wheat cropping system the sowing of both crops are depend on harvesting of subsequent crop consequently sowing of both crops are delayed and productivity affected directly and same situation are coming in autumn sowing, because sowing of sugarcane are done after harvesting of paddy crop so low temperature affected germination percent and tillering. To short out the problem KVK scientist designed this trial. The details are given below:

Technology Option	No. of trials	Yield (qt./ha)	Increase in yield (%)	Cost of cultivation (Rs./ha)	Net Return (Rs./ha)	B:C Ratio
T <sub>1</sub> - FP (Normal sowing)	01 (03 farmers field)	Result awaited				
T <sub>2</sub> - (Nursery planting)						



## VARIETAL EVALUATION

OFT- 3 (Plant Breeding)

Season – Kharif

Year: 2017

**Problem definition:** Low Productivity of Rice

**Technology Assessed:** Evaluation of newly released high yielding Rice varieties against disease resistance.

The KVK Bijnor conducted On-farm trial on Rice varieties to find out suitable high yielding rice varieties for better yield with disease resistance, crop duration and lodging also at farmer's field situation. The varieties tested were PR-123, NDR-3112 and PR-113 as check. The transplanting dates of these varieties are 20 to 25 November 2017 with 11 to 15 April 2017 harvesting dates also. The results revealed that yield increase of rice varieties ranged between 9.74 to 17.37 percent over farmers practice. The variety PR-123 gave highest yield of 69.25 qt. per ha with net return of Rs. 80795.00 and BCR of 3.04. The others technical data as given below:

- Variety PR-123 takes more or less same crop duration as comparison NDR-3112 and PR-113
- The lodging in PR-123 is none in comparison NDR-3112 (2-7) and PR-113 (14-22%)
- Disease incidence in PR-123 is none while it is about 10-15% in PR-113.

### Evaluation of newly released high yielding variety

Technology Option	No. of trials	Yield (qt./ha)	Increase in yield (%)	Lodging (%)	Disease incidence (%)	Net Return (Rs./ha)	B:C Ratio
T <sub>1</sub> - Local (PR-113)	01 (05 farmers field)	59.00	--	14-22	10-15	60410.00	2.46
T <sub>2</sub> - PR-123		69.25	17.37	0	0	80795.00	3.04
T <sub>3</sub> - NDR-3112		64.75	9.74	2-7	0-3	72215.00	2.82



### OFT- 4 (Plant Breeding)

Season – Rabi

Year: 2017-18

**Problem definition:** Low Productivity of Timely Sown Wheat

**Technology Assessed:** Evaluation of newly released high yielding Timely sown wheat variety against disease resistance

The KVK Bijnor conducted On-farm trial on Timely sown wheat varieties to find out suitable high yielding Timely sown wheat varieties for better yield with disease resistance, crop duration and lodging also at farmer's field situation. The varieties tested were WB-02, WH-1105 and DBW-17 as check. The sowing dates of these varieties are 20 to 25 November 2017 with 08 to 14 April 2018 harvesting dates also. The results revealed that yield increase of Timely sown wheat varieties ranged between 14.03 to 18.70 percent over farmers practice. The variety WB-02 gave highest yield of 53.30 qt. per ha with net return of Rs. 76665.50 and BCR of 2.68. The others technical data as given below:

- Variety WB-02 takes more or less same crop duration as comparison to WH--1105 and DBW-17.
- The lodging in WB-02 is none (0-3%) in comparison WH-1105 (4-7) and DBW-17 (11-17%)
- Yellow rust incidence in WB-02-1105 is none while it is about 7-13% in DBW-550.

### Evaluation of newly released high yielding variety

Technology Option	No. of trials	Yield (qt./ha)	Increase in yield (%)	Net Return (Rs./ha)	B:C Ratio
T <sub>1</sub> - Local (DBW-17)	01 (05 farmers field)	44.90	-	57031.50	2.17
T <sub>2</sub> - WB-02		53.30	18.70	76665.50	2.68
T <sub>3</sub> - WH-1105		51.20	14.03	72092.00	2.54



**OFT- 5 (Agro-Forestry/Horticulture) Season - Rabi Year: 2016-17**

**Problem definition:** Low yield of Shimla Mirach

**Technology Assessed:** Evaluation of hybrids of Shimla Mirch

KVK, Bijnor conducted on farm trial on hybrids of Shimla Mirach in Rabi 2016-17 due to low yield of Shimla Mirach. In this trial three hybrids were taken i.e. India, NCCH-705 and Bharat (Farmer Practice). Above hybrids were shown on 20.09.2016 and pickings were done between 26.12.2016 to 09.06.2017.

- Indira gave highest yield 415 q/ha and maximum net return Rs. 3,76,500/- with the B:C ratio 1:1.53.

**Performance of hybrids of Shimla Mirch**

Technology Option	No. of trials	Yield (qt./ha)	Increase in yield (%)	Disease incidence	Net Return (Rs./ha)	B:C Ratio
T <sub>1</sub> - Famer Practice (Bharat)	01 (03 farmers field)	305	--	12	252900	1.24
T <sub>2</sub> - NCCH-705		340	11.5	8	298600	1.41
T <sub>3</sub> - Indira		415	36.0	--	376500	1.53



**OFT- 6 (Agro-Forestry/Horticulture) Season - Rabi Year: 2017-18**

**Problem definition:** Low yield of Shimla Mirach

**Technology Assessed:** Evaluation of hybrids of Shimla Mirch

KVK, Bijnor conducted on farm trial on hybrids of Shimla Mirach in Rabi 2017-18 due to low yield of Shimla Mirach. In this trial three hybrids were taken i.e. India, NCCH-705 and Bharat (Farmer Practice). Above hybrids were shown on 01.09.2017.

**Performance of hybrids of Shimla Mirch**

Technology Option	No. of trials	Yield (qt./ha)	Increase in yield (%)	Disease incidence	Net Return (Rs./ha)	B:C Ratio
T <sub>1</sub> - Famer Practice (Bharat)	01 (03 farmers field)	Result awaited				
T <sub>2</sub> - NCCH-705						
T <sub>3</sub> - Indira						

**OFT- 7 (Agro-Forestry/Horticulture) Season - Zaid Year: 2018**

**Problem definition:** Low yield of Okra

**Technology Assessed:** Evaluation of Okra varieties

KVK, Bijnor conducted on farm trial on okra varieties in zaid 2018 due to low yield of okra. In this trial two okra varieties were taken i.e. 040 (Farmer Practice) and Arka Anaimka. Above varieties were shown on 07.03.2018.

**Performance of Okra varieties**

Technology Option	No. of trials	Yield (qt./ha)	Increase in yield (%)	Disease incidence	Net Return (Rs./ha)	B:C Ratio
T <sub>1</sub> - Famer Practice (040)	01 (03 farmers field)	Result awaited				
T <sub>2</sub> - Arka Anaimka						

## INTEGRATED PEST MANAGEMENT

**OFT- 8 (Plant Protection)**

**Season - Kharif**

**Year: 2017**

**Problem definition:** Heavy infestation of stem borer in Rice

**Technology Assessed :** Stem borer management in Rice

The KVK Bijnor conducted On-farm trial on management of Stem borer in rice to find out suitable insecticide against Stem borer in rice for better yield with less insect incidence at farmers field. The three insecticides were tested i.e. Chlorentaniliprol, Fipronil and Foret as check. These insecticides were sprayed from 15 August to 15 September, 2017 and crop was harvested 25-30 October, 2017. The results revealed that yield increase in treated plot is treated plot was 22.18 percent over farmers practice. The insecticides Chlorentaniliprol gave highest yield of 47.18 qt. per ha. The others technical data as given below:

- Stem borer incidence in Chlorentaniliprol treated plot was 0-8%, while it is about 15-18% in local check.

**Effect of insecticides in Rice**

Technology Option	No. of trials	Yield (qt./ha)	% Increase in yield over farmer's practice	Less incidence of Shem borer	Net Return (Rs./ha)	B:C Ratio
T <sub>1</sub> -Farmer Practice (Foret-10G @ 25 kg/ha)	01	38.38	--	15-18	60,988.00	2.52
T <sub>2</sub> -Chlorentaniliprol 0.4% @ 10 kg/ha		47.18	22.18	0-8	79,732.00	2.87
T <sub>3</sub> -Fipronil 0.3GR @ 18 kg/ha		42.20	9.98	10-12	68,880.00	2.66



## INTEGRATED DISEASE MANAGEMENT

**OFT- 9 (Plant Protection)**

**Season - Kharif**

**Year: 2017**

**Problem definition:** Heavy infestation of Blast disease in Rice

**Technology Assessed :** Blast disease management in Rice

The KVK Bijnor conducted On-farm trial on management of Blast disease in rice to find out suitable fungicides against Blast disease in rice for better yield with less disease incidence at farmers field. The three fungicides were tested i.e. Propiconazole, Tabuconazole and Carbandazim as check. These fungicides were sprayed from 10 August to 20 September, 2017 and crop was harvested 25-30 October, 2017. The results revealed that yield increase in Tabuconazole treated plot was 26.13 percent followed by Propiconazole (13.38%) over farmers practice. The fungicides Tabuconazole gave highest yield of 48.90 qt./ha. The others technical data as given below:

- Blast disease incidence in Tabuconazole treated plot was 0-3% and 10-15%, respectively.

### Effect of Tabuconazole in Rice

Technology Option	No. of trials	Yield (qt./ha)	% Increase in yield over farmer's practice	Less diseases incidence	Net Return (Rs./ha)	B:C Ratio
T <sub>1</sub> -Farmer Practice (Carbandazim 50% WP @ 2 gm/lit)	01	38.77	--	10-15	61,540.00	2.51
T <sub>2</sub> - Propiconazole 25EC @ 1 ml/lit.		43.96	13.38	5-8	73,304.00	2.78
T <sub>3</sub> - Tabuconazole 25EC @ 1ml/lit.		48.90	26.13	0-3	83,860.00	2.97



### INTEGRATED FARMING SYSTEM

**OFT- 10 (Agro-Forestry)**

**Season - Kharif**

**Year: 2016**

**Problem definition:** Low yield in guava due to higher spacing planting system.

**Technology Assessed :** Evaluation of high density planting systems in guava.

The KVK Bijnor conducted On-farm trial on high density planting systems in guava.

#### Evaluation of high density planting systems

Technology Option	No. of trials	Yield (kg/ha)	% Increase in yield	Net Return	B:C Ratio
T <sub>1</sub> -Farmer Practice (6 X 6 m)	01(03 Farmer Fields)	Result awaited			
T <sub>2</sub> -Spacing of 6 X 3 m (555 plants per ha.)					
T <sub>3</sub> -Spacing of 3 X 3 m (1111 plants per ha.)					



**VALUE ADDITION****OFT- 11 (Home Science)****Season - Kharif****Year: 2017****Problem definition:** Low income of farm women due to preservation and value addition**Technology Assessed:** Value addition in mango squash increase prices as well as its shelf life.

The KVK Bijnor conducted On-farm trial on Assessment of mango squash making and its marketing for addition income. Farm women provided with elaborative and view of making mango squash found to be safe for about four months. In demonstration the amount of potassium meta bi sulphate and sugar was taken in accurate amount the attack of mould get reasoned. It was also found that the farm women while making the mango squash con not take the chemical substance sugar in right proportion a result. They approved to problem & mould attack.

Crop	No. of Demonstration	Parameter	Storage Period (Month)			
			I	II	III	IV
Mango squash	05	Potassium meta bi sulphate	Safe	Safe	Safe	Safe

## II. FRONTLINE DEMONSTRATION

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

List of technologies demonstrated during previous year and popularized during 2016-17 and recommended for large scale adoption in the district

SN	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	Paddy	Basmati Rice	Pusa Basmati-1509	FLD, Training, Field day, electronic/print media	850	3220	7200
		Hybrid Rice	Arize 6444 Gold	FLD, Training, Field day, electronic/print media	50	360	550
		Weed management	Bispyribac Sodium 10% SC @250 ml /ha	FLD, Training, Field day, electronic/print media	250	2000	10500
		Weed management	Oxadigryl 80% W.P @ 112.5 gm /ha	FLD, Training, Field day, electronic/print media	50	500	2000
2	Wheat	Timely sown	DBW-88	FLD, Training, Field day, electronic/print media	650	2800	12500
		Late sown	DBW-90	FLD, Training, Field day, electronic/print media	180	755	3200
		Weed management	Clodinafop 15% WP + Metsulfuron methyl 20% WP	FLD, Training, Field day, electronic/print media	350	2500	10000
3	Mustard	Varietal development	Variety - YSH - 0401	FLD, Training, Field day, electronic/print media	100	250	500
		Nutrient management	Sulphur @ 40 kg/ha and Boron @ 1.5 kg/ha	FLD, Training, Field day, electronic/print media	100	250	500
4	Sugarcane	Integrated Crop Management	Trench method of sugarcane sowing	FLD, Training, Field day, electronic/print media	650	55000	46000
		Weed management	Halosulfuron methyl 75% WG @ 90gm / ha	FLD, Training, Field day, electronic/print media	20	20	50
<b>Total</b>					<b>3250</b>	<b>67655</b>	<b>93000</b>

**b. Details of FLDs implemented during 2017-18**

SN	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demon.			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Sugarcane (Participatory)	ICM	Trench method of sugarcane sowing (30-120-30 cm spacing)	Rabi 2016-17	8.0	8.0	02	18	20	--
2	Sugarcane	Weed Management	Halosulfuron methyl 75% WG	Spring 2017	4.0	4.0	0	10	10	--
3	Sugarcane	IPM	Chlorantraniliprole 4% GR @ 20 kg/ha	Zaid 2017	2.0	2.0	--	10	10	--
4	Sugarcane	IPM	Imidacloprid 40% + Fipronil 40% (80 WG) @ 250 gm/ha	Zaid 2017	2.0	2.0	--	10	10	--
5	Hybrid Rice	Varietal Demonstration	ARIZE-6444 Gold	Kharif 2017	5.0	2.0	--	10	10	--
6	Basmati Rice	Varietal Demonstration	Pusa Basmati 1509	Kharif 2017	5.0	5.0	03	21	24	--
7	Paddy	IDM	Validamycin @ 1.0 lit./ha	Kharif 2017	2.0	2.0	--	10	10	--
8	Paddy	IDM	Tricyclazole @ 500 gm/ha	Kharif 2017	2.0	2.0	--	10	10	--
9	Paddy	IPM	Buprofezin @ 1.0 lit./ha	Kharif 2017	2.0	2.0	--	10	10	--
10	Paddy	Weed management	Bispyribac Sodium 10% SC @250 ml /ha	Kharif 2017	4.0	4.0	04	16	20	--
11	Paddy	Weed management	Oxadigryl 80% W.P @ 112.5 gm /ha	Kharif 2017	4.0	4.0	02	08	10	--
12	Burma Neem/ Dreak	Varietal Demonstration	Megha	Kharif 2017	100 trees	100 trees	--	10	10	--
13	Papaya	Varietal Demonstration	Vinayak	Kharif 2017	0.15	0.15	--	05	05	--
14	Sugarcane (Participatory)	Integrated Crop Management	Trench method of sugarcane sowing (30-120-30 cm spacing)	Rabi 2017-18	10.0	10.0	05	20	25	--
15	Mustard	Nutrient management	Sulphur @ 40 kg/ha and Boron @ 1.5 kg/ha	Rabi 2017-18	4.0	4.0	02	08	10	--
16	Mustard	Varietal Demonstration	To demon. the yield potential of Mustard variety PYS-01	Rabi 2017-18	4.0	4.0	--	20	20	--
17	Wheat	Varietal Demonstration	DBW-88	Rabi 2017-18	5.0	2.0	--	12	12	--
18	Wheat	Varietal Demonstration	HD-3059	Rabi 2017-18	5.0	2.0	--	10	10	--
19	Wheat	IDM	Propiconazole 25EC @ 500 ml/ha	Rabi 2017-18	2.0	2.0	--	10	10	--
20	Wheat	Weed management	Clodinafop 15% W.P + Metsulfuron methyl 20 % W.P	Rabi 2017-18	4.0	4.0	01	09	10	--
21	Cauliflower	IPNM	Boran	Rabi 2017-18	1.2	1.2	--	06	06	--
22	French Bean	IPNM	Zinc	Rabi 2017-18	0.936	0.936	--	06	06	--

23	Sugarcane	Weed management	Halosulfuron methyl 75% WG	Spring 2017-18	4.0	2.0	0	05	05	Lack of funds
24	Okra	IPNM	Zinc	Zaid 2018	0.936	0.936	--	06	06	--
25	Sugarcane + Chilli	Inter cropping	Chilli (078)	Zaid 2018	0.15	0.15	--	03	03	--
26	Urd (NFSM)	ICM	Seed, Zinc sulphate and liquid bio-fertilizer	Zaid 2018	20.00	20.00	6	44	50	--
	<b>Total</b>				<b>101.4</b>	<b>90.4</b>	<b>25</b>	<b>308</b>	<b>333</b>	

### 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					
Sugarcane (Co-0238)	Rabi 2016-17	Irrigated	Loam	L	M	L	Dhaincha	15-30.09.2016	10-20.11.2017	--	--
Sugarcane (Co-0238)	Spring 2017	Irrigated	Loam	L	M	L	Mustard	20-28.03.2017	10-28.02.2018	--	--
Sugarcane	Zaid 2017	Irrigated	Loam	L	M	L	Wheat	25-30.04.2017	24.02.2018-05.03.2018	--	--
Sugarcane	Zaid 2017	Irrigated	Loam	L	M	L	Wheat	25-30.04.2017	25.02.2018-10.03.2018	--	--
Hybrid Rice	Kharif 2017	Irrigated	Loam	L	M	L	Wheat	12-16.07.2017	20-26.10.2017	--	--
Basmati Rice	Kharif 2017	Irrigated	Loam	L	M	L	Wheat	07-10.07.2017	01-07.10.2017	--	--
Paddy	Kharif 2017	Irrigated	Loam	L	M	L	Wheat	05.07.2017	25-30.10.2017	--	--
Paddy	Kharif 2017	Irrigated	Loam	L	M	L	Wheat	08.07.2017	22-30.10.2017	--	--
Paddy	Kharif 2017	Irrigated	Loam	L	M	L	Wheat	06.07.2017	20-25.10.2017	--	--
Paddy	Kharif 2017	Irrigated	Loam	L	M	L	Wheat	28 May to 15 June 2017	10-22.10.2017	--	--
Paddy	Kharif 2017	Irrigated	Loam	L	M	L	Wheat	23 May to 15 June 2017	08-18.10.2017	--	--
Burma Neem/ Dreak	Kharif 2017	Irrigated	Loam	L	M	L	Wheat	01.08.2017	--	--	--
Papaya	Kharif 2017	Irrigated	Loam	L	M	L	Wheat	03.08.2017	--	--	--
Sugarcane (Participatory)	Rabi 2017-18	Irrigated	Loam	L	M	L	Dhaincha	10-25.09.2017	--	--	--
Mustard	Rabi 2017-18	Irrigated	Loam	L	M	L	Rice	20-25.10.2016	01-05.03.2018	--	--
Mustard	Rabi 2017-18	Irrigated	Loam	L	M	L	Paddy	15-25.10.2017	05-12.03.2018	--	--
Wheat	Rabi 2017-18	Irrigated	Loam	L	M	L	Rice	21-25.11.2017	07-14.04.2018	--	--

Wheat	Rabi 2017-18	Irrigated	Loam	L	M	L	Sugarcane	20-26.12.2017	07-14.04.2018	--	--
Wheat	Rabi 2017-18	Irrigated	Loam	L	M	L	Paddy	25.11.2017	10-15.04.2018	--	--
Wheat	Rabi 2017-18	Irrigated	Loam	L	M	L	Rice	17-25.11.2017	10-14.04.2018	--	--
Cauliflower	Rabi 2017-18	Irrigated	Loam	L	M	L	Cauliflower	07.10.2017	10-30.01.20018	--	--
French Bean	Rabi 2017-18	Irrigated	Loam	L	M	L	Paddy	02.11.2017	01.03.201- 15.04.2018	--	--
Sugarcane	Spring 2017	Irrigated	Loam	L	M	L	Mustard	2-10 .3.2018	--	--	--
Okra	Zaid 2018	Irrigated	Loam	L	M	L	Sugarcane	06.02.2018	--	--	--
Sugarcane + Chilli	Zaid 2018	Irrigated	Loam	L	M	L	Cauliflower	06.02.2018	--	--	--
Urd (NFSM)	Zaid 2018	Irrigated	Loam	L	M	L	Sugarcane & Mustard	12-25.3.2018	--	--	--

### Technical Feedback on the demonstrated technologies

SN	Crop/Technology	Feed back
1	Sugarcane - Trench Method	<ul style="list-style-type: none"> <li>Trench method found superior against traditional method in case of productivity and resource optimization.</li> </ul>
2	Sugarcane - IWM (Halosulfuron methyl 75% WG)	<ul style="list-style-type: none"> <li>It is control Cyprus rotendus effectively and farmers save Rs.10000 -12000 cost of cultivation. Therefore more popularity is required.</li> </ul>
3	Sugarcane - IPM	<ul style="list-style-type: none"> <li>Chlorantraniliprole 4% GR @ 20 kg/ha very effectively control borer in sugarcane.</li> </ul>
4	Sugarcane - IPM	<ul style="list-style-type: none"> <li>Imidacloprid 40% + Fipronil 40% (80 WG) @ 250 gm/ha very effectively control root borer in sugarcane.</li> </ul>
5	Hybrid Rice-(ARIZE-6444 Gold)	<ul style="list-style-type: none"> <li>Disease incidence in ARIZE-6444 Gold (0-5) is not seen while it is about 0-11% in Arize-6444</li> <li>Lodging in ARIZE-6444 Gold is less (2-5%) as comparison to Arize-6444 (12-18%)</li> </ul>
6	Basmati Rice - (PB-1509)	<ul style="list-style-type: none"> <li>Variety PB-1509 takes less crop duration (114-118) as comparison to pusa-1121 (141-146). Due to short duration PB-1509 is suitable for adverse environment condition.</li> <li>Disease incidence in PB-1509 is not seen while it is about 15-25% in Pusa-1121</li> <li>Lodging in PB-1509 is less (0-3%) as comparison to pusa-1121(17-25%) due to its short stature of plant</li> </ul>
7	Paddy-IDM	<ul style="list-style-type: none"> <li>Validamycin @ 1.0 lit./ha effectively control sheath blight in rice.</li> </ul>
8	Paddy-IDM	<ul style="list-style-type: none"> <li>Tricyclazole @ 500 gm/ha effectively control blast in rice.</li> </ul>
9	Paddy-IPM	<ul style="list-style-type: none"> <li>Buprofezin @ 1.0 lit./ha effectively control BPH in rice.</li> </ul>
10	Paddy - IWM (Bispyribac sodium 10% SC)	<ul style="list-style-type: none"> <li>Bispyribac sodium controled weeds effectively during critical stage of crop weed competition (30-60 days) consequently, yield increased 26%. Therefore more popularity is required.</li> </ul>
11	Paddy - IWM (Oxadigryl 80% W.P)	<ul style="list-style-type: none"> <li>Oxadigryl found suitable against Butachlor in case of weed resistance and cost of cultivation.</li> </ul>
12	Mustard (Sulphur and Boron)	<ul style="list-style-type: none"> <li>Sulphur and boron increase yield of mustard. Therefore popularity required among the farmers.</li> </ul>

13	Mustard (PYS-1)	<ul style="list-style-type: none"> <li>• Disease incidence in PYS-1 is not seen while it is about 8-10% in Local check</li> </ul>
14	Wheat (DBW-88)	<ul style="list-style-type: none"> <li>• Variety DBW- 88 takes more or less same crop duration as DBW-550</li> <li>• The lodging in DBW- 88 is less (0-5%) in comparison to DBW-550 (5-22%)</li> <li>• Yellow rust and blight incidence in DBW- 88 is none, while it is about 10-15% in DBW-550</li> </ul>
15	Wheat (HD-3059)	<ul style="list-style-type: none"> <li>• Variety HD-3059 takes more or less same crop duration as DBW-16.</li> <li>• The lodging in HD-3059 is less (0-6%) in comparison to DBW-16 (20-25%)</li> <li>• Yellow rust and blight incidence in HD-3059 is none, while it is about 14-18% in DBW-16.</li> </ul>
16	Wheat - IDM	<ul style="list-style-type: none"> <li>• Yellow rust effectively control through Propiconazole 25EC @ 500 ml/ha.</li> </ul>
17	Wheat (Clodinafop + Metsulfuron methyl)	<ul style="list-style-type: none"> <li>• Weeds are developed resistance against old weedicides (Isoproturon).</li> <li>• There is no any phytotoxic effect of new weedicides Clodinafop &amp; Metsulfuron methyl.</li> </ul>
18	Cauliflower	<ul style="list-style-type: none"> <li>• Application of boron increases the production of cauliflower</li> <li>• Application of boron increases curd size &amp; improve the quality of curd</li> <li>• It controls the browning disease of cauliflower</li> </ul>
19	French Bean	<ul style="list-style-type: none"> <li>• Application of zinc in French bean increases the growth and yield of French bean &amp; improve the quality of beans.</li> </ul>

### Farmers' reactions on specific technologies

SN	Crop/Technology	Feed back
1	Sugarcane - Trench Method	<ul style="list-style-type: none"> <li>• Farmers feel much better due to more productivity under trench method.</li> </ul>
2	Sugarcane - IWM (Halosulfuron methyl 75% WG)	<ul style="list-style-type: none"> <li>• Farmers feel better in case of labour crises.</li> </ul>
3	Sugarcane - IPM	<ul style="list-style-type: none"> <li>• Farmers feel better in case of yield through Chlorantraniliprole 4% GR @ 20 kg/ha.</li> </ul>
4	Sugarcane - IPM	<ul style="list-style-type: none"> <li>• Farmers feel better in case of yield through Imidacloprid 40% + Fipronil 40% (80 WG) @ 250 gm/ha.</li> </ul>
5	Hybrid Rice-(ARIZE-6444 Gold)	<ul style="list-style-type: none"> <li>• Rice of ARIZE-6444 Gold is medium cylindrical and its yield better than Arize-6444</li> <li>• Market potential of ARIZE-6444 Gold is better than Arize-6444 due to better rice quality</li> </ul>
6	Basmati Rice - (PB-1509)	<ul style="list-style-type: none"> <li>• Rice of PB-1509 is longer than pusa-1121</li> <li>• Market potential of PB-1509 is better than pusa-1121 due to their high demand</li> <li>• Farmers like very much basmati varieties pusa basmati 1509 due to their short crop duration, which is fit for early crop rotation</li> </ul>
7	Paddy-IDM	<ul style="list-style-type: none"> <li>• Farmers like chemical Validamycin @ 1.0 lit./ha for controlling sheath blight in rice.</li> </ul>
8	Paddy-IDM	<ul style="list-style-type: none"> <li>• Farmers like chemical Tricyclazole @ 500 gm/ha for controlling blast in rice.</li> </ul>
9	Paddy-IPM	<ul style="list-style-type: none"> <li>• Farmers like chemical Buprofezin @ 1.0 lit./ha for controlling BPH in rice.</li> </ul>

10	Paddy - IWM (Bispyribac sodium 10% SC)	<ul style="list-style-type: none"> <li>The bispyribac Sodium effectively control weeds as comparison to other weedicides used by farmers.</li> </ul>
11	Paddy - IWM (Oxadigryl 80% W.P)	<ul style="list-style-type: none"> <li>It is good under pre-emergence condition.</li> </ul>
12	Mustard (Sulphur and Boron)	<ul style="list-style-type: none"> <li>They get more yields in comparison to without sulphur and boron.</li> </ul>
13	Mustard (PYS-1)	<ul style="list-style-type: none"> <li>Grain size of PYS-1 is bold and it has good market potential.</li> </ul>
14	Wheat (DBW-88)	<ul style="list-style-type: none"> <li>Grain size of DBW-88 is bold and its chapatti making quality is better than DBW-17 and it has good market potential</li> </ul>
15	Wheat (HD-3059)	<ul style="list-style-type: none"> <li>Grain size of HD-3059 is bold and its chapatti making quality is better than DBW-16 and it has good market potential.</li> </ul>
16	Wheat - IDM	<ul style="list-style-type: none"> <li>Use of Propiconazole 25EC @ 500 ml/ha in wheat resulted shining in grains.</li> </ul>
17	Wheat (Clodinafop + Metsulfuron methyl)	<ul style="list-style-type: none"> <li>Weeds controlled effectively and no phytotoxic effect of weedicides on crop.</li> </ul>
18	Cauliflower	<ul style="list-style-type: none"> <li>Application of boron removes the various cauliflowers problems like small curd size, browning disease and poor marketability due to small curd &amp; browning of curd</li> <li>Application of boron increases the productivity of cauliflower</li> </ul>
19	French Bean	<ul style="list-style-type: none"> <li>Application of zinc increases the productivities of French bean</li> </ul>

### Extension and Training activities under FLD

SN	Crop	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Sugarcane - Trench Method	Farmers Training	02	05.09.2017, 19.09.2017	40	--
		Field days	03	15.12.2017, 15.01.2018, 16.10.2017	80	--
2	Sugarcane - IWM (Halosulfuron methyl 75% WG)	Farmers Training	02	05.03.2018, 07.02.2018	40	--
		Field days	01	22.04.2017	60	--
3	Sugarcane - IPM	Farmers Training	01	--	20	--
		Field days	01	--	23	--
4	Sugarcane - IPM	Farmers Training	01	--	20	--
		Field days	01	--	36	--
5	Hybrid Rice-(ARIZE-6444 Gold)	Farmers Training	01	22.05.20117	20	--
		Field days	01	10.10.2017	42	--

6	Basmati Rice - (PB-1509)	Farmers Training	01	16.05.17& 13.06.2017	40	--
		Field days	02	30.09.2017	79	--
7	Paddy-IDM	Farmers Training	01	--	20	--
		Field days	01	--	44	--
8	Paddy-IDM	Farmers Training	01	--	20	--
		Field days	01	--	22	--
9	Paddy-IPM	Farmers Training	01	--	20	--
		Field days	01	--	50	--
10	Paddy - IWM (Bispyribac sodium 10% SC) & (Oxadigryl 80% W.P)	Farmers Training	01	20.07.2017	20	--
		Field days	01	30.09.2017	40	--
11	Mustard (Sulphur and Boron)	Farmers Training	01	23.09.2017	20	--
		Field days	01	29.12.2017	25	--
12	Mustard (PYS-1)	Farmers Training	01	12.09.2017	20	--
		Field days	01	--	60	--
13	Wheat (DBW-88)	Farmers Training	01	13.11.2017	20	--
		Field days	02	07.04.2017	88	--
14	Wheat (HD-3059)	Farmers Training	01	08.12.2017	20	--
		Field days	02	09.04.2018	75	--
15	Wheat - IDM	Farmers Training	01	--	20	--
		Field days	01	--	31	--
16	Wheat (Clodinafop + Metsulfuron methyl)	Farmers Training	03	13.10.2017, 10.11.2017, 08.12.2017	60	--
		Field days	01	21.12.2017	20	--
17	Cauliflower	Training	1	19.08.2017	20	--
		Field day	1	28.11.2017	24	--
18	French Bean	Training	1	02.11.2017	20	--
		Field day	1	07.04.2018	21	--

## Performance of Frontline demonstrations

### Frontline demonstrations on oilseed crops:

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)			Check	% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo					Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Mustard	Varietal improvement	Seed (Participatory)	PYS-1	20	4.0	15.0	10.0	12.87	9.58	34.34	27290.00	55341.00	28051.00	2.02	28384.00	41194.00	12810.00	1.45
Mustard	Nutrient management	Sulphur and Boron	YSH-0401	10	4.0	15.2	12.5	13.98	11.54	21.32	28680.00	59415.00	30735.00	2.07	24967.00	49045.00	24077.00	1.96

### Frontline demonstrations on pulse crops:

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)			Check	% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo					Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Urd	ICM	Variety, Liquid bio-fertilizer & Zinc sulphate	PU-31	50	20	Result awaited												

### 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					Disease incidence (%)	No. of weeds m <sup>2</sup>	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Average												
Cereals																			
Paddy																			
Paddy	Weed Management	Bispyribac Sodium 10% sc	10	4.0	63.9	58.5	61.52	48.62	26.60	10.8	55.2	53130.00	95430.00	42299.50	1.80	51980.00	75430.00	23449.50	1.45
Paddy	Weed Management	Oxadigryl 80% W.P	20	8.0	62.8	57.5	60.28	48.40	24.67	29.6	55.5	52030.50	93420.00	41389.50	1.80	51980.00	75100.00	23119.50	1.44
										Disease incidence (%)									
Paddy	IDM	Validamycin @ 1.0 lit./ha	10	2.0	51.25	45.80	49.50	40.85	21.18	0-4	12-15	42800.00	127800.00	85000.00	2.98	41500.00	107040.00	65540.00	2.58
										Disease incidence (%)									
Paddy	IDM	Tricyclazole @ 500 gm/ha	10	2.0	53.25	45.50	49.78	40.0	24.45	0-5	15-18	42300.00	128472.00	85672.00	3.00	41300.00	105000.00	63500.00	2.53

										<b>Disease incidence (%)</b>									
Paddy	IPM	Buprofezin @ 1.0 lit./ha	10	2.0	53.50	45.50	49.45	39.87	24.02	0-7	20-22	42500.00	127680.00	85180.00	3.00	40800.00	104600.00	63800.00	2.50
<b>Waterlogged Situation</b>																			
<b>Coarse Rice</b>																			
<b>Scented Rice</b>										<b>Disease incidence (%)</b>									
Basmati Rice	Varietal improvement	PB-1509	25	5.0	62.5	45.0	52.80	41.43	27.44	0	15-25	36728.00	138768.00	102040.00	3.77	39662.00	111884.00	72222.00	2.82
										<b>Lodging (%)</b>									
										0-4	17-25								
<b>Wheat</b>										<b>No. of weeds m<sup>2</sup></b>									
Wheat	Weed management	Clodinafop 15% W.P + Metsulfuron methyl 20 % W.P.	10	4.0	55.0	50.1	52.5	44.40	18.24	1.8	41.8	45307.50	106837.50	61530.00	2.36	45107.50	90354.00	45246.50	2.00
										<b>Disease incidence (%)</b>									
Wheat	IDM	Propiconazole 25EC @ 500 ml/ha	10	2.0	55.15	50.35	52.43	43.77	19.78	0-3	10-15	48000.00	113990.00	65990.00	2.37	46500.00	98878.00	52378.00	2.13
<b>Wheat Timely Sown</b>										<b>Disease incidence (%)</b>									
Wheat	Varietal improvement	DBW-88	12	2.4	62.50	48.75	54.68	45.70	19.64	0	10-15	45358.33	122682.3	76990.63	2.70	48016.67	107102.00	59085.33	2.23
										<b>Lodging (%)</b>									
										0-5	15-22								
<b>Wheat Late Sown</b>										<b>Disease incidence (%)</b>									
Wheat	Varietal improvement	HD-3059	10	2.0	57.50	42.50	47.75	40.15	18.92	0	14-18	42053.00	113721.30	71668.30	2.70	43660.00	94695.25	51035.25	2.16
										<b>Lodging (%)</b>									
										0-6	20-25								
<b>Millets</b>																			
<b>Vegetables</b>																			
Cauliflower	IPNM	Boron application	06	1.20	284	228	256	230	11.3	--	--	94740.00	256000.00	161000.00	2.70	92200.00	230000.00	137800.00	2.49
French bean	IPNM	Zinc application	06	0.936	183	147	165	140	17.9	--	--	134765.00	33000.00	195235.00	2.15	124815.00	280000.00	155185.00	2.24
<b>Flower crops</b>																			
<b>Fruit crops</b>																			

Mango																			
Papaya																			
Spices & condiments																			
Commercial Crops																			
Sugarcane										Insect incident									
Sugarcane	IPM	Chlorantraniliprole 4% GR @ 20 kg/ha	10	2.0	850	750	776	639	21.44	0-5	10-12	98800.00	252200.00	153400.00	2.55	96500.00	207675.00	111175.00	2.15
										Insect incident									
Sugarcane	IPM	Imidacloprid 40% + Fipronil 40% (80 WG) @ 250 gm/ha	10	2.0	820	750	786	641	22.62	0-3	12-18	98500.00	255450.00	156950.00	2.59	97200.00	208325.00	111125.00	2.14
										Cane wt (Kg)									
Sugarcane	ICM	Trench method of sugarcane sowing	20	8.0	1973	1285	1475	1062.5	38.82	1.62	1.08	136124.00	464625.00	328501.00	3.41	121686.00	334687.00	213001.00	2.75
										No. of hoeing									
Sugarcane	Weed Management	Hellosulfuron methyl	05	2.0	1012	788.5	943.75	912.5	3.42	03	02	109186.00	297281.00	188094.75	2.72	118936.00	287437.00	168501.00	2.42
Medicinal & aromatic plants																			
Fodder Crops																			
Plantation Crops																			
Burma Dreka/ Neem																			

### 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	GrossReturn	NetReturn	BCR(R/C)	Gross Cost	GrossReturn	NetReturn	BCR(R/C)

### FLD on Fisheries

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		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)

### FLD on Other Enterprises

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)	

### FLD on Women Empowerment

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 & Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units	Yield (Kg)		% change in yield	Other parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demonstration	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)

### FLD on Demonstration details on crop hybrids

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	BCR (R/C)
					High	Low	Average						
Paddy	Hybrid variety of rice	ARIZE-6444 Gold	10	2.0	73.75	60.00	69.00	57.25	20.52	40065.00	119324.00	79259.00	2.97

## Glimpses of Technology Demonstrations during the Year



### 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	1	11	-	11	09	-	09	20	-	20
Resource Conservation Technologies	5	73	-	73	27	-	27	100	-	100
<b>Total</b>	<b>6</b>	<b>84</b>	<b>-</b>	<b>84</b>	<b>36</b>	<b>-</b>	<b>36</b>	<b>120</b>	<b>-</b>	<b>120</b>
<b>II Horticulture</b>										
<b>a) Vegetable Crops</b>										
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>III Soil Health and Fertility Management</b>										
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>IV Livestock Production and Management</b>										
<b>V Home Science/Women empowerment</b>										
Drudgery reduction	1	-	11	11	-	4	4	-	15	15
Women and child care	1	-	9	9	-	6	6	-	15	15
<b>Total</b>	<b>2</b>	<b>-</b>	<b>20</b>	<b>20</b>	<b>-</b>	<b>10</b>	<b>10</b>	<b>-</b>	<b>30</b>	<b>30</b>
<b>VI Agril. Engineering</b>										
<b>VII Plant Protection</b>										
Integrated Pest Management	1	16	-	16	4	-	4	20	-	20
Integrated Disease Management	2	37	-	37	3	-	3	40	-	40
<b>Total</b>	<b>3</b>	<b>53</b>	<b>-</b>	<b>53</b>	<b>7</b>	<b>-</b>	<b>7</b>	<b>60</b>	<b>-</b>	<b>60</b>
<b>VIII Fisheries</b>										
<b>IX Production of Inputs at site</b>										
<b>X Capacity Building and Group Dynamics</b>										
<b>XI Agro-forestry</b>										
Production technologies	3	55	-	55	5	-	5	60	-	60
<b>Total</b>	<b>3</b>	<b>55</b>	<b>-</b>	<b>55</b>	<b>5</b>	<b>-</b>	<b>5</b>	<b>60</b>	<b>-</b>	<b>60</b>
<b>XII Plant Breeding</b>										
Seed Production & varietal improvement	4	69	-	69	11	-	11	80	-	80
Diversification	4	67	-	67	13	-	13	80	-	80
Resource conservation	1	18	-	18	02	-	02	20	-	20
<b>Total</b>	<b>9</b>	<b>154</b>	<b>-</b>	<b>154</b>	<b>26</b>	<b>-</b>	<b>26</b>	<b>180</b>	<b>-</b>	<b>180</b>
<b>GRAND TOTAL</b>	<b>23</b>	<b>346</b>	<b>20</b>	<b>366</b>	<b>74</b>	<b>10</b>	<b>84</b>	<b>420</b>	<b>30</b>	<b>450</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>										
Integrated Nutrient Management	3	52	11	63	01	-	01	53	11	64
Weed Management	2	40	-	40	-	-	-	40	-	40
Residual Management	1	11	-	11	09	-	09	20	-	20
Resource Conservation Technologies	1	18	-	18	02	-	02	20	-	20
Integrated Crop Management	5	72	-	72	30	-	30	102	-	102
<b>Total</b>	<b>12</b>	<b>193</b>	<b>11</b>	<b>204</b>	<b>42</b>	<b>-</b>	<b>42</b>	<b>235</b>	<b>11</b>	<b>246</b>
<b>II Horticulture</b>										
<b>a) Vegetable Crops</b>										
Integrated Crop Management	3	52	-	52	8	-	8	60	-	60
<b>Total (a)</b>	<b>3</b>	<b>52</b>	<b>-</b>	<b>52</b>	<b>8</b>	<b>-</b>	<b>8</b>	<b>60</b>	<b>-</b>	<b>60</b>
<b>b) Fruits</b>										
Cultivation of Fruit	3	60	-	60	-	-	-	60	-	60
<b>Total (b)</b>	<b>3</b>	<b>60</b>	<b>-</b>	<b>60</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>60</b>	<b>-</b>	<b>60</b>
<b>c) Spices</b>										
Production and Management	1	20	-	20	-	-	-	20	-	20
<b>Total (c)</b>	<b>1</b>	<b>20</b>	<b>-</b>	<b>20</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>20</b>	<b>-</b>	<b>20</b>
<b>GT (a+b+c)</b>	<b>7</b>	<b>132</b>	<b>-</b>	<b>132</b>	<b>8</b>	<b>-</b>	<b>8</b>	<b>140</b>	<b>-</b>	<b>140</b>
<b>III Soil Health and Fertility Management</b>										
Integrated nutrient Management	3	59	-	59	1	-	1	60	-	60
<b>Total</b>	<b>3</b>	<b>59</b>	<b>-</b>	<b>59</b>	<b>1</b>	<b>-</b>	<b>1</b>	<b>60</b>	<b>-</b>	<b>60</b>
<b>IV Livestock Production and Management</b>										
<b>V Home Science/Women empowerment</b>										
Drudgery reduction	3	-	42	42	-	18	18	-	60	60
Women and child care	3	-	45	45	-	15	15	-	60	60
Minimization of nutrient loss in processing	2	-	24	24	-	18	18	-	42	42
<b>Total</b>	<b>8</b>	<b>-</b>	<b>111</b>	<b>111</b>	<b>-</b>	<b>51</b>	<b>51</b>	<b>-</b>	<b>162</b>	<b>162</b>

<b>VI Agril. Engineering</b>										
<b>VII Plant Protection</b>										
Integrated Pest Management	9	162	-	162	18	-	18	180	-	180
Integrated Disease Management	3	52	-	52	8	-	8	60	-	60
<b>Total</b>	<b>12</b>	<b>214</b>	<b>-</b>	<b>214</b>	<b>26</b>	<b>-</b>	<b>26</b>	<b>240</b>	<b>-</b>	<b>240</b>
<b>VIII Fisheries</b>										
<b>IX Production of Inputs at site</b>										
<b>X Capacity Building and Group Dynamics</b>										
<b>XI Agro-forestry</b>										
Production technologies	2	33	-	33	7	-	7	40	-	40
<b>Total</b>	<b>2</b>	<b>33</b>	<b>-</b>	<b>33</b>	<b>7</b>	<b>-</b>	<b>7</b>	<b>40</b>	<b>-</b>	<b>40</b>
<b>XII Plant Breeding</b>										
Seed Production & varietal improvement	3	54	-	54	6	-	6	60	-	60
Resource conservation	2	40	-	40	-	-	-	40	-	40
<b>Total</b>	<b>5</b>	<b>94</b>	<b>-</b>	<b>94</b>	<b>6</b>	<b>-</b>	<b>6</b>	<b>100</b>	<b>-</b>	<b>100</b>
<b>GRAND TOTAL</b>	<b>49</b>	<b>725</b>	<b>122</b>	<b>847</b>	<b>90</b>	<b>51</b>	<b>141</b>	<b>815</b>	<b>173</b>	<b>988</b>

#### Farmers' Training Including Sponsored Training Programmes – CONSOLIDATED (On + Off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>I Crop Production</b>										
Integrated Nutrient Management	3	52	11	63	1	-	1	53	11	64
Integrated Crop Management	5	72	-	72	30	-	30	102	-	102
Residue Management	1	11	-	11	9	-	9	20	-	20
Resource Conservation Technologies	6	91	-	91	29	-	29	120	-	120
Weed Management	3	51	-	51	9	-	9	60	-	60
<b>Total</b>	<b>18</b>	<b>277</b>	<b>11</b>	<b>288</b>	<b>78</b>	<b>-</b>	<b>78</b>	<b>355</b>	<b>11</b>	<b>366</b>
<b>II Horticulture</b>										
<b>a) Vegetable Crops</b>										
Integrated Crop Management	3	52	-	52	8	-	8	60	-	60
<b>Total (a)</b>	<b>3</b>	<b>52</b>	<b>-</b>	<b>52</b>	<b>8</b>	<b>-</b>	<b>8</b>	<b>60</b>	<b>-</b>	<b>60</b>

<b>b) Fruits</b>										
Cultivation of Fruit	3	60	-	60	-	-	-	60	-	60
<b>Total (b)</b>	<b>3</b>	<b>60</b>	<b>-</b>	<b>60</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>60</b>	<b>-</b>	<b>60</b>
<b>c) Spices</b>										
Production and Management	1	20	-	20	-	-	-	20	-	20
<b>Total (c)</b>	<b>1</b>	<b>20</b>	<b>-</b>	<b>20</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>20</b>	<b>-</b>	<b>20</b>
<b>GT (a+b+c)</b>	<b>7</b>	<b>132</b>	<b>-</b>	<b>132</b>	<b>8</b>	<b>-</b>	<b>8</b>	<b>140</b>	<b>-</b>	<b>140</b>
<b>III Soil Health and Fertility Management</b>										
Integrated nutrient Management	3	59	-	59	1	-	1	60	-	60
<b>Total</b>	<b>3</b>	<b>59</b>	<b>-</b>	<b>59</b>	<b>1</b>	<b>-</b>	<b>1</b>	<b>60</b>	<b>-</b>	<b>60</b>
<b>IV Livestock Production and Management</b>										
<b>V Home Science/Women empowerment</b>										
Drudgery reduction	4	-	53	53	-	22	22	-	75	75
Minimization of nutrient loss in processing	2	-	24	24	-	18	18	-	42	42
Women and child care	4	-	54	54	-	21	21	-	75	75
<b>Total</b>	<b>10</b>	<b>-</b>	<b>131</b>	<b>131</b>	<b>-</b>	<b>61</b>	<b>61</b>	<b>-</b>	<b>192</b>	<b>192</b>
<b>VI Agril. Engineering</b>										
<b>VII Plant Protection</b>										
Integrated Pest Management	10	178	-	178	22	-	22	200	-	200
Integrated Disease Management	5	89	-	89	11	-	11	100	-	100
<b>Total</b>	<b>15</b>	<b>267</b>	<b>-</b>	<b>267</b>	<b>33</b>	<b>-</b>	<b>33</b>	<b>300</b>	<b>-</b>	<b>300</b>
<b>VIII Fisheries</b>										
<b>IX Production of Inputs at site</b>										
<b>X Capacity Building and Group Dynamics</b>										
<b>XI Agro-forestry</b>										
Production technologies	5	88	-	88	12	-	12	100	-	100
<b>Total</b>	<b>5</b>	<b>88</b>	<b>-</b>	<b>88</b>	<b>12</b>	<b>-</b>	<b>12</b>	<b>100</b>	<b>-</b>	<b>100</b>
<b>XII Plant Breeding</b>										
Seed Production & varietal improvement	7	123	-	123	17	-	17	140	-	140
Diversification	4	67	-	67	13	-	13	80	-	80
Resource conservation	3	58	-	58	2	-	2	60	-	60
<b>Total</b>	<b>14</b>	<b>248</b>	<b>-</b>	<b>248</b>	<b>32</b>	<b>-</b>	<b>32</b>	<b>280</b>	<b>-</b>	<b>280</b>
<b>GRAND TOTAL</b>	<b>72</b>	<b>1071</b>	<b>142</b>	<b>1213</b>	<b>164</b>	<b>61</b>	<b>225</b>	<b>1235</b>	<b>203</b>	<b>1438</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
Commercial fruit production & nursery	1	11	-	11	-	-	-	11	--	11
Integrated farming	1	9	-	9	1	-	1	10	-	10
Mushroom Production	1	20	-	20	-	-	-	20	-	20
Organic Farming	1	10	-	10	-	-	-	10	-	10
Planting material production - (Agro Forestry)	1	11	-	11	-	-	-	11	-	11
Precision Farming	1	9	-	9	1	-	1	10	-	10
Seed production	3	25	-	25	5	-	5	30	-	30
Value addition	3	-	23	23	-	7	7	-	30	30
<b>TOTAL</b>	<b>12</b>	<b>95</b>	<b>23</b>	<b>118</b>	<b>7</b>	<b>7</b>	<b>14</b>	<b>102</b>	<b>30</b>	<b>132</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
Commercial fruit production & nursery	1	11	-	11	-	-	-	11	--	11
Integrated farming	1	9	-	9	1	-	1	10	-	10
Mushroom Production	1	20	-	20	-	-	-	20	-	20
Organic Farming	1	10	-	10	-	-	-	10	-	10
Planting material production - (Agro Forestry)	1	11	-	11	-	-	-	11	-	11
Precision Farming	1	9	-	9	1	-	1	10	-	10
Seed production	3	25	-	25	5	-	5	30	-	30
Value addition	3	-	23	23	-	7	7	-	30	30
<b>TOTAL</b>	<b>12</b>	<b>95</b>	<b>23</b>	<b>118</b>	<b>7</b>	<b>7</b>	<b>14</b>	<b>102</b>	<b>30</b>	<b>132</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
Seed Production	5	42	-	42	8	-	8	50	-	50
Varietal Diversification	1	18	-	18	2	-	2	20	-	20
<b>TOTAL</b>	<b>6</b>	<b>60</b>	<b>0</b>	<b>60</b>	<b>10</b>	<b>0</b>	<b>10</b>	<b>70</b>	<b>0</b>	<b>70</b>

**Training Programmes for Extension Personnel Including Sponsored Training Programmes (Off campus)**

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Integrated Crop Management	2	14	-	14	6	-	6	20	-	20
Integrated nutrient management	1	8	-	8	3	-	3	11	-	11
Integrated Pest Management	4	32	-	32	8	-	8	40	-	40
Nursery Management	1	9	-	9	1	-	1	10	-	10
Productivity enhancement in Agro-forestry crops	1	10	-	10	-	-	-	10	-	10
Productivity enhancement in horticulture crops	2	18	-	18	2	-	2	20	-	20
Resource Conservation Technologies	2	14	-	14	6	-	6	20	-	20
Women and Child care	3	-	23	23	-	7	7	-	30	30
<b>TOTAL</b>	<b>16</b>	<b>105</b>	<b>23</b>	<b>128</b>	<b>26</b>	<b>7</b>	<b>33</b>	<b>131</b>	<b>30</b>	<b>161</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
Integrated Crop Management	2	14	-	14	6	-	6	20	-	20
Integrated nutrient management	1	8	-	8	3	-	3	11	-	11
Integrated Pest Management	4	32	-	32	8	-	8	40	-	40
Nursery Management	1	9	-	9	1	-	1	10	-	10
Seed Production	5	42	-	42	8	-	8	50	-	50
Varietal Diversification	1	18	-	18	2	-	2	20	-	20
Productivity enhancement in Agro-forestry crops	1	10	-	10	-	-	-	10	-	10
Productivity enhancement in horticulture crops	2	18	-	18	2	-	2	20	-	20
Resource Conservation Technologies	2	14	-	14	6	-	6	20	-	20
Women and Child care	3	-	23	23	-	7	7	-	30	30
<b>TOTAL</b>	<b>22</b>	<b>165</b>	<b>23</b>	<b>188</b>	<b>36</b>	<b>7</b>	<b>43</b>	<b>201</b>	<b>30</b>	<b>231</b>

**Sponsored Training Programmes : Nil**

**Name of sponsoring agencies involved**

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

## Glimpses of Training Programmes during the Year



#### IV. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	-	-	-	-
Farmer visit at KVK	202	2108	50	2158
Diagnostic visits	08	70	5	75
Field Day	22	770	09	779
Group discussions	03	148	05	153
Kisan Ghosthi	07	4700	257	5957
Film Show	04	680	20	700
Self -help groups	-	-	-	-
Kisan Mela	1	500	50	550
Exhibition	2	650	29	679
Scientists' visit to farmers field	177	2150	23	2173
Plant/animal health camps	-	-	-	-
Farm Science Club	-	-	-	-
Ex-trainees Sammelan	-	-	-	-
Farmers' seminar/workshop	-	-	-	-
Method Demonstrations	5	112	14	126
Celebration of important days	-	-	-	-
Special day celebration/Kisan Diwas (23.12.16)	1	35	2	37
Exposure visits	02	110	-	110
Lecture Delivers by KVK scientist	34	10000	200	10200
Krishi Rath/Pre Kharif abhyan	-	-	-	-
<b>Total</b>	<b>468</b>	<b>22033</b>	<b>664</b>	<b>22697</b>

#### Details of other extension programmes

Particulars	Number
Electronic Media (CD/DVD)	--
Extension Literature	05
News paper coverage	48
Popular articles	07
Radio Talks	01
TV Talks	--
Animal health camps (Number of animals treated)	--
Research Paper	06
<b>Total</b>	<b>67</b>

## Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Market- ing	Aware- ness	Other enterprise	
Nagina (Bijnor)	Text only	50	-	-	-	10	-	60
	Voice only	100	-	-	-	15	-	115
	Voice & Text both	-	-	-	-	-	-	-
	<b>Total messages</b>	150	-	-	-	25	-	175
	<b>Total farmer benefitted</b>	200	-	-	-	50	-	250

## Glimpses of Extension Activities during the Year



## V. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS

Number of KVKs organized Technology Week	Types of Activities	No. of Activities	Number of Participants	Related crop/livestock technology
	Gosthies	-	-	-
	Lectures organized	-	-	
	Exhibition	-	-	
	Film show	-	-	
	Fair	-	-	
	Farm Visit	-	-	
	Diagnostic Practical's	-	-	
	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	Rice	Pusa Basmati -1509	--	125.00	--	--
	Wheat	DBW-90	--	210.00	--	--
<b>Total</b>				<b>335.00</b>	<b>--</b>	

### Details of participatory quality seed production at farmer's field

Crop	Variety	Produced Seed (qt)	F to F seed distribution
Paddy	PB-1509	1004.00	917
	PR-123	82.00	54
	NDR-3112	45.50	46
Wheat	HD-2967	674.50	690
	HD-3086	189.00	74
	DBW-88	353.25	317
	WH-1105	67.55	47
	WB-02	66.91	66
	DBW-90	119.00	60
	HD-3059	309.00	274
	HPBW-01	21.00	8
	<b>Total</b>	<b>2931.71</b>	<b>2553</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
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**Production of Bio-Products** : Nil

**Production of livestock materials** : Nil

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

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)
Soil	--	--	--	--
<b>Total</b>	--	--	--	--

**VIII. SCIENTIFIC ADVISORY COMMITTEE**

Name of KVK	Number of SACs conducted
Krishi Vigyan Kendra, Nagina (Bijnor)	01

**IX. NEWSLETTER/MAGAZINE** : Nil

**X. Publications**

Category	Number
Research Paper	06
Extension bulletins	06
Technical reports	10
Extension Literature	05
Book/Book chapter/Training manual	02
Popular articles	07
Workshop/ Conference/ Training Programme Attended	05
Seminar papers	06
Lead Papers/ Invites lecture	01
Awards	02

**Research Papers published**

SN	Authors	Year	Title	Journal with volume, number & page number	NAAS Rating	Impact factor
1	K. K. Singh, D.P. Singh, Narendra Singh, A.V. Singh, S. K. Yadav, Balraj Singh, Vivek Yadav & Rajendra Singh	2018	Adoption of wheat variety HD-3059 in district Bijnor with the special reference to analysis of yield gap and their performance.	International Journal of Agriculture Sciences : Vol-10, Issue-07	4.20	
2	Narendra Singh, Bhagwan Singh Vivek Yadav, and K.K Singh	2017	Effect of sulphur and boron levels on physiological growth indicators of mustard ( <i>Brassica juncea</i> L.)	Bioved 28 (1): 63-68	4.54	
3	K.K. Singh et al	2017	Participatory quality seed production: An innovative farming technology for rural development and rural entrepreneurship.	Bioved 28 (2): 299-302	4.54	
4	K. K. Singh, A.V. Singh, Narendra Singh, D. P. Singh, Vivek Yadav, Balraj Singh & Rajendra Singh	2017	Varietal screening of basmati rice varieties against rice stem borer and leaf folder.	New Agriculturist: 28 (2) : 469-471	4.28	

5	Narendra Singh and Sanjay Kumar	2017	Yield enhancement and popularization of improved production technologies in wheat through frontline demonstrations.	International Journal of advance biological research (IJABR), Vol.7 (1) 2017: 81-84.	4.64	
6	Narendra Singh, Bhagwan Singh and Hemant Kumar Gangwar	2017	Optimization of sulphur and boron for mustard ( <i>Brassica juncea</i> L. Czern. & Coss.) under eastern U.P. condition	International Journal of basic & applied agricultural research (IJBAAR). Vol 15 (1, 2) Jan. - August 2017.	4.60	

### Books/Book Chapters

SN	Authors	Year	Title	Book/ Publisher's name & address	Publisher (recognized or local)
1	समस्त वैज्ञानिक	2017	जनपद बिजनौर हेतु उपयुक्त कृषि तकनीकी	के०वी०के०	Local
2	समस्त वैज्ञानिक	2017	मशरूम उत्पादन तकनीक	के०वी०के०	Local

### Training Manuals

SN	Authors	Year	Title
1	डा० शकुन्तला गुप्ता एवं डा० डी० पी० सिंह	2018	मौसम में खराब होने वाले फलों एवं सब्जियों का परीक्षण
2	डा० शकुन्तला गुप्ता एवं डा० डी० पी० सिंह	2017	खेतीहर कृषक महिलाओं हेतु श्रम शक्ति बचाने वाले उपकरण

### Extension bulletins

SN	Authors	Year	Title
1	डा० नरेन्द्र सिंह	2017	उर्द की उत्पादन तकनीक
2	डा० बलराज सिंह	2017	पपीते की उन्नत किस्में एवं उत्पादन तकनीक
3	डा० बलराज सिंह	2017	शिमला मिर्च की उन्नत किस्में एवं उत्पादन तकनीक
4	डा० बलराज सिंह	2017	फ्रेंचबीन की उन्नत किस्में एवं उत्पादन तकनीक
5	डा० बलराज सिंह	2017	भिण्डी की उन्नत किस्में एवं उत्पादन तकनीक
6	डा० बलराज सिंह	2017	अमरुद की खेती बेहद लाभकारी

### Extension Literature

SN	Authors	Year	Title
1	डा० के०के० सिंह	2018	उर्द की उन्नत प्रजातियों एवं उत्पादन तकनीक
2	डा० के०के० सिंह	2017	अगस्त माह के कृषि कार्य
3	डा० के०के० सिंह	2017	गन्ना की उन्नत प्रजातियों एवं उत्पादन तकनीक
4	डा० के०के० सिंह	2017	अक्टूबर माह के कृषि कार्य
5	डा० बलराज सिंह	2017	आम में मासिक कृषि कार्य

### Popular articles

SN	Authors	Year	Title	Journal with volume, number & page number
1	डा० नरेन्द्र सिंह	2017	बासमती धान की उत्पादन तकनीक	फार्म एन फूड, 1 जून, 2017, पेज 30-31
2	डा० नरेन्द्र सिंह	2017	ट्रेंच विधि से गन्ना उत्पादन	फार्म एन फूड, सितम्बर, 2017,
3	डा० नरेन्द्र सिंह	2017	समय प्रबन्धन से बदल सकती है गन्ना कृषकों की दशा	फार्म एन फूड, 1 अक्टूबर, 2017, पेज 32

4	डा० नरेन्द्र सिंह	2017	गन्ना व राजमा की सहफसली खेती	फार्म एन फूड, 1 नवम्बर, 2017, पेज 23
5	के. के. सिंह एवं विनोद कुमार सिंह	2017	गेहूँ की उन्नत प्रजातियाँ व उन्नत उत्पादन तकनीक	VINDHYA KRISHI RABI-2017 पेज 1-9
6	के० के० सिंह एवं अन्य	2018	गन्ना की बीज उत्पादन तकनीक	VINDHYA KRISHI Zaid-2018 पेज
7	के० के० सिंह एवं अन्य	2018	जैविक खेती	VINDHYA KRISHI Zaid-2018 पेज

### Success Story Published

SN	Authors	Year	Title	Journal with volume, number & page number
1	डा० नरेन्द्र सिंह	2017	सफलता की कहानी : ट्रैन्च विधि से गन्ना उत्पादन कर बदली अपने जीवन की तस्वीर	फार्म एंड फूड, नवम्बर 16 मई 2017, पेज 6

### Research papers (Abstract) in seminars

SN	Authors	Year	Title
1	K.K. Singh: Invited Talk	2018	Participatory quality seed production is helpful for faster seed replacement ratio, rural development and rural employment. 20 <sup>th</sup> Indian Agricultural Scientist & Farmer's Congress. Feb. 17-18, 2018 at Allahabad, Pp-16.
2	A.V. Singh, K.K. Singh, D.P. Singh, Narendra Singh and Balraj Singh	2018	Varietal evaluation of timely sown wheat varieties for better yield, economics and adoption in district Bijnor. 20 <sup>th</sup> Indian Agricultural Scientist & Farmer's Congress. Feb. 17-18, 2018 at Allahabad, Pp-30.
3	K.K. Singh, Narendra Singh, D.P. Singh, A.V. Singh, Balraj Singh and Vivek Yadav	2018	Assessment of efficacy of different insecticides in sugarcane against top borer. 20 <sup>th</sup> Indian Agricultural Scientist & Farmer's Congress. Feb. 17-18, 2018 at Allahabad, Pp-30.
4	Narendra Singh, D.P. Singh, K.K. Singh and Balraj Singh (2017)	2017	Enhancing sugarcane ( <i>Saccharum officinarum</i> L.) productivity through trench method of planting in Bijnor district of U.P. (India), National Conference on Farmers' Centric Agri-innovation for Sustainable Development, March 24-25, 2017 at CSA, Kanpur.
5	Narendra Singh, D.P. Singh, K.K. Singh, and Balraj Singh	2017	Intercropping: An only option to enhance the system productivity and profitability of sugarcane growers, National Conference on Farmers' Centric Agri-innovation for Sustainable Development, March 24-25, 2017 at CSA, Kanpur.
6	K.K. Singh, Narendra Singh, A.V. Singh, D.P. Singh and Balraj Singh	2017	Adoption of sugarcane variety Co-0238 in district Bijnor. 19 <sup>th</sup> Indian Agricultural Scientist & Farmer's Congress. Feb. 18-19, 2017 at Allahabad, Pp-48.

### Workshop/ Conference/ Training Programme Attended:

SN	Persons	Topic	Place	Duration	Organizer
1	Dr K K Singh	20 <sup>th</sup> Indian Agricultural Scientist & Farmer's Congress	Allahabad	17-18 Feb. 2018	BRIAT, Allahabad
2	Dr K K Singh	HRD Training	SVPUA&T, Meerut	29-30 Jan. 2018	SVPUA&T, Meerut
3	Dr K K Singh & Dr. A V Singh	Review Meeting on CFLD Pulses – Oilseeds and Other Projects	ARARI, Kanpur	07-08 Feb. 2018	ARARI, Kanpur
4	Dr K K Singh & Er. S K Yadav	Meeting for Zonal & National Best KVK Award. Upgradation Meeting KVKs of UP	ARARI, Kanpur	11-12 Dec. 2017	NILERD, New Delhi & ARARI, Kanpur
5	Dr. Narendra Singh	2nd International Conference on Food & Agriculture 2018	Dhanbad	29-31 March 2018	Endling conferences

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

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

**XIII. DETAILS ON HRD ACTIVITIES** : Nil

**XIV. CASE STUDIES/SUCCESS STORY** : 05 villages adopted for survey of technological gap

**1. Successful cultivation: Hybrid Rice Variety Arize-6444 Gold**

<b>Name of KVK</b>	: <b>Krishi Vigyan Kendra, Nagina (Bijnor)</b>
<b>Introduction</b>	: <b>Technology (Variety) Arize-6444 Gold</b> is developed by the BAYRE Crop Sciences and released during 2015. Arize-6444 Gold with medium slender grains and 130- 140 day duration. In case of BLB attack, the yield advantage provided by Arize 6444 Gold goes up significantly compared to other traditional inbred or hybrid varieties.
<b>KVK intervention</b>	: The area under Rice is about 54,000 ha in district Bijnor, out of that about 4000 to 6000 ha area is hybrid rice. Commonly grown hybrid rice varieties are Arize 6444, PHB-71, VNR-2245. Variety <b>Arize-6444 Gold</b> was introduced and demonstrated by KVK Bijnor during Kharif 2016 at 25 farmer's field through FLD.
<b>Output</b>	: The average yield at Farmers field was 67.15 qt per ha (78.75 qt. maximum yield per ha.) with cost of cultivation of Rs. 37804.00 per ha. The average net profit per ha was recorded Rs. 71636.00 per ha. due to lodging resistant nature, lodging in ARIZE-6444 Gold is less (4-8%) as comparison to local check (15-18%) and Disease incidence in ARIZE-6444 Gold is not seen while it is about 14-19% in local check.
<b>Outcome</b>	: This technology may be capable for increasing extra net return of farmers.
<b>Impact</b>	: The area under this variety has now spread to more than 550 ha in just two year. Farmers are all satisfied with the yield of this variety and also claim that it is free from BLB disease. The successful farmer is <b>Sri Nitin Kumar</b> Village – Chandupura, Block – Kotwali.



## 2. Successful cultivation: Wheat Variety DBW-90

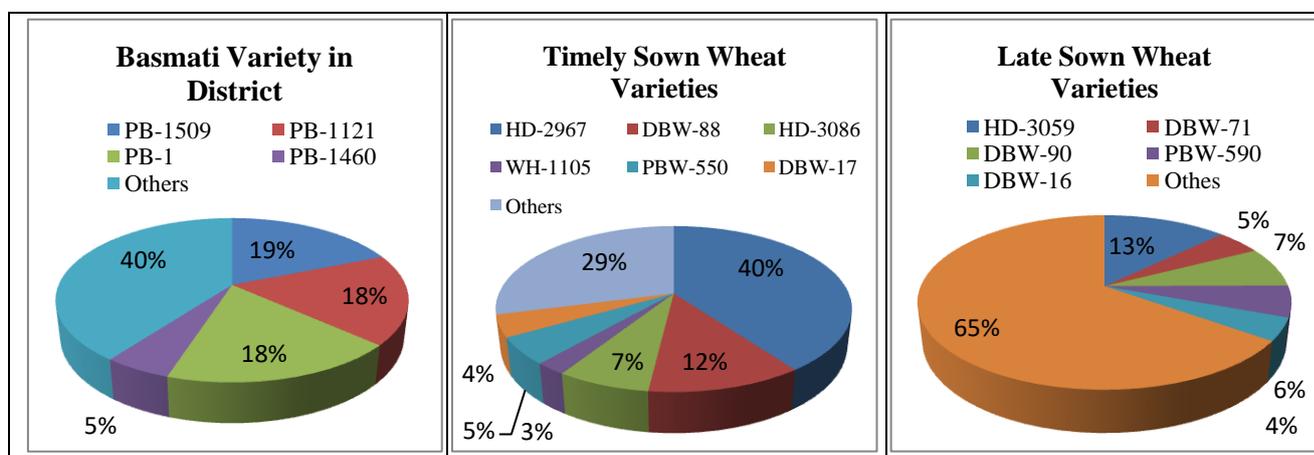
<b>Name of KVK</b>	:	<b>Krishi Vigyan Kendra, Nagina (Bijnor)</b>
<b>Introduction</b>	:	<b>Technology (Variety) DBW-90</b> is developed by the IIWBR, Karnal and released during 2014. It has medium dwarf plant stature (Plant Height 91 cm), 121 days seed to seed maturity. Quality wise it has good degree of heat tolerance, resistance to stripe and leaf rusts might be helpful in minimizing disease losses. This variety is good for chapatti, bread and biscuit and has better nutritional quality.
<b>KVK intervention</b>	:	The area under wheat is about 118,000 ha in district Bijnor, out of that about 65,000 ha area is under late sown condition due to Sugarcane – Wheat cropping system. Commonly grown late sown wheat varieties are PBW-226, DBW -16, PBW-373, and PBW-590. Variety DBW-90 was introduced and demonstrated by KVK Bijnor during Rabi 2015-16 at 05 farmer's field through OFT and 14 farmers field during 2016-17 through FLD.
<b>Output</b>	:	The average yield at Farmers field was 46.75 qt per ha (56.25 qt. maximum yield per ha.) with cost of cultivation of Rs. 40982.14 per ha. The average net profit per ha was recorded Rs. 69047.36 per ha. Due to medium-dwarf nature the lodging in DBW-90 is less (0-5% in comparison to local check (12-18%). Maturing with 120-125 day crop duration, bold grained variety that possesses high degree of resistant against yellow rust and leaf blight (Yellow rust and blight incidence in DBW-90 is none, while it is about 9-11% in local check).
<b>Outcome</b>	:	This technology may be capable for increasing seed replacement ratio in district with extra net return. Due to higher demand of seeds of this variety emerged an entrepreneurship programme of seed production at farmer's field for better income.
<b>Impact</b>	:	The area under this variety has now spread to more than 3800 ha in just three year. Farmers are all satisfied with the yield of this variety and also claim that it is free from most of the disease. This variety increased seed replacement rate about 12 to 18 % in operational area of KVK and also emerged entrepreneurs of seed production of this variety. The successful farmer is <b>Sri Mukesh Kumar</b> Village – Rampur, Block – Kiratpur.



## Impact of evaluated, demonstrated and introduced technologies in district

### (A) Varietal diversification:

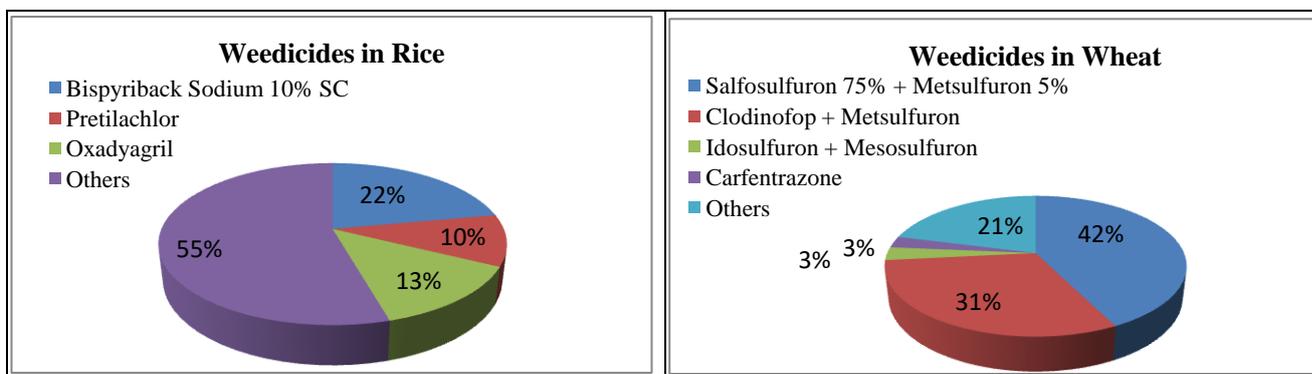
Crop	Current Technology	Potential of Current Tech. (q/ha)	Demo. yield of current technology (q/ha)	Net Return (Rs/ha)	Technological Gap (q/ha)	Area Covered by Tech. (ha)
Wheat	HD-2967	66.10	54.25	83356.00	11.85	42000
	DBW-88	69.90	54.00	81798.50	15.90	9550
	HD-3086	71.10	51.500	74272.00	19.20	2100
	WH-1105	71.60	53.37	79781.00	18.23	1550
	DBW-90	66.60	46.59	69047.36	20.01	3200
	HD-3059	59.40	47.75	71668.3	13.10	5500
	DBW-71	68.90	42.00	58400.00	26.90	1500
Paddy	PB-1509	60.00	54.10	102040.00	5.90	7200
	Arize-6444 Gold	80.00	67.15	71636.00	12.85	550



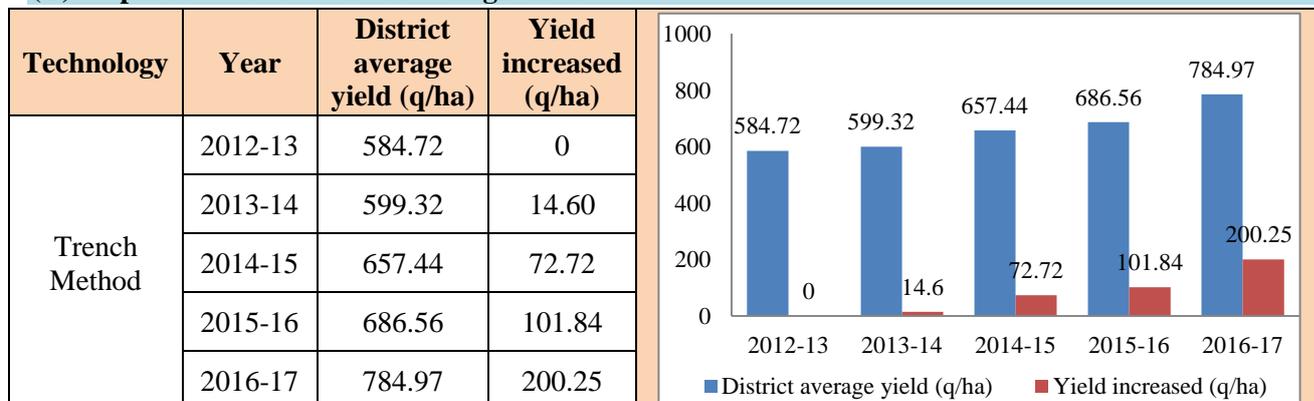
### (B) Impact of Weedicides evaluation:

#### Horizontal Spread of weedicides

Technology	Area (ha)	No. of Village Covered
<b>Rice</b>		
Bispyriback Sodium 10% SC	7,500	385
Pretilachlor	3,500	115
Oxadyagril	4,500	190
<b>Wheat</b>		
Salfosulfuron 75% + Metsulfuron 5%	45,450	480
Clodinofof + Metsulfuron	32,800	350
Idosulfuron + Mesosulfuron	3,200	210
Carfentrazone	2,800	70



### (C) Impact of Trench Method in Sugarcane



### Horizontal spread of Technologies in district after assessment and demonstration

#### (i) Trench Method in sugarcane is Big way for district Bijnor

It is well known that the sugarcane is the major crop of district Bijnor and its cover 2,10,269 ha area in district. The production and productivity is very low in comparison to National average yield due to traditional planting method and delayed sowing. Keeping in mind that facts, KVK introduce new planting techniques i.e Trench Method & September sowing in 2010-11. The average yield gradually increased from 2010-11 to 2016-17 and average yield in demonstrated field was recorded 1415q/ha, the enhancement in productivity due to adoption of Trench method and September sowing and farmers got highest yield. Presently the area covered under Trench method is 55,000 ha in district Bijnor.

#### Horizontal spread of Trench Method and Present Status of Productivity

Year	Yield (q/ha)	Area Coverage (ha)
2010-11	555.52	Starting Year
2011-12	576.88	1,500
2012-13	584.72	6,500
2013-14	599.32	19,500
2014-15	657.44	30,200
2015-16	686.56	45,600
2016-17	784.97	55,000

**(D) Impact of Participatory Seed Production in adopted villages**

Crop	Variety	Seed Produced (q)	Seed distributed Farmers to Farmers	No. of Village Covered	Additional net income per year (Rs)
Paddy	PB-1509	2008.00	1116	185	114000.00
Wheat	HD-2967	3467.00	1425	205	42500.00
	HD-3086	245.35	155	21	
	WH-1105	119.00	74	9	
	DBW-88	299.50	239	45	
	DBW-90	210.22	243	63	
	HD-3059	572.30	497	85	

**Seed Replacement Rate (%) of Wheat and Paddy in Adopted Villages**

Year	Harganpur	Patpura	Rampur	Nansiwala	Khusalpur	Kalakheri	Kokapur
<b>Paddy</b>							
2014	4.50	5.00	6.00	6.50	3.00	5.50	8.00
2015	27.00	16.00	26.50	19.50	19.50	18.50	29.50
2016	37.00	36.00	34.00	37.50	32.50	27.50	42.50
2017	52.50	45.50	48.00	46.00	42.00	39.00	47.00
<b>Wheat</b>							
2014	8.50	9.50	9.00	8.50	6.00	5.00	7.50
2015	27.50	21.00	25.00	18.00	22.50	55.00	19.00
2016	42.00	38.50	42.00	38.50	38.00	32.00	37.50
2017	65.50	60.50	55.00	52.00	53.00	48.00	47.00

**Impact of quality seed production on Average additional yield (qt/ha) increased in Adopted villages**

<b>Paddy</b>							
2014	8.00	5.00	6.50	5.00	4.00	8.00	5.00
2015	14.50	12.00	14.00	13.00	13.50	14.50	15.00
2016	19.00	17.00	15.50	20.00	15.50	18.00	21.00
2017	25.00	22.00	24.50	28.00	21.50	25.00	28.00
<b>Wheat</b>							
2014	5.50	4.5	3.00	4.00	2.50	2.50	5.50
2015	9.40	8.00	7.50	8.50	6.50	5.40	8.00
2016	12.00	12.00	11.50	13.00	12.50	8.00	13.00
2017	18.50	17.50	15.00	16.00	15.50	12.50	16.50

**Impact of seed production in adopted villages**

- Seed replacement rate (45-55%) increased.
- Production and productivity increased (22-36%)
- Cost of cultivation reduced because of use of quality seed of recommended varieties.



## Entrepreneurship development

### (i) High Density Orcharding in Fruits

The KVK initiated High Density Orcharding technique of Fruits in the district during 2014-15 to 2016-17. The identified farmers of different villages were trained on different aspects of High Density Orcharding in Fruits.

Crop	No. of Farmers Adopted	Present Status
Mango	15	40
Guava	22	55
Mango+ Guava	25	52
Mango+ Guava + Papaya	03	05

### Major Entrepreneurs Developed through High density planting of Guava

A progressive farmer Mh. Samsuden attended training Programmes at Krishi Vigyan Kendra, Bijnor and learnt the skill of growing high density orcharding of guava technique. The high density orcharding activity is supervised by the KVK scientists.

### High density Techniques of Guava with intercrops

Production system	Ist Year			IInd Year			IIIrd Year		
	Prod. (q/ha)	Gross Cost (Rs/ha)	Net Return (Rs/ha)	Prod. (q/ha)	Gross Cost (Rs/ha)	Net Return (Rs/ha)	Prod. (q/ha)	Gross Cost (Rs/ha)	Net Return (Rs/ha)
Guava	20	1,12,000	-82,000	48	20,000	82,000	85	18,000	1,55,000
Gram (Green Leaf)	72	42,000	50,000	60	40,000	45,000	42	28,000	35,000
Chilli	160	1,32,000	1,94,000	120	1,10,000	1,32,000	125	78,000	85,000
Cauliflower	170	60,000	68,000	125	42,000	45,000	80	38,000	40,000
<b>Total</b>		<b>3,46,000</b>	<b>2,30,000</b>		<b>2,12,000</b>	<b>3,04,000</b>		<b>1,62,000</b>	<b>3,15,000</b>



### (ii) Nursery Raising as Entrepreneurship

The KVK initiated Nursery Raising of Vegetable and Plantation crop, in the district during 2014-15 to 2016-17. The identified farmers of different villages were trained on different aspects of Nursery Raising of Vegetable and Plantation crop. After taking training programme on Nursery Raising of Vegetable and Plantation crops the trained farmers are engaged in Nursery Raising

Name of Unit	No. of Unit	Total Sapling sold	Income generated by the farmers
Vegetables	25	05 Lack	1,25,000.00 (Each unit)
Plantation tree	08	2.50 Lack	5,00,000.00 (Each unit)

### Major Entrepreneurs Developed through Nursery Raising

A progressive farmer Mr. Harish Kumar attended training Programmes at Krishi Vigyan Kendra, Bijnor and learnt the skill of Nursery Raising technique. The nursery raising activity is supervised by the KVK scientists.

Production system	Initial Cost	Ist Year			IInd Year			IIIrd Year		
		Sapling Prod. (No.)	Gross Cost (Rs)	Net Return (Rs)	Sapling Prod. (No.)	Gross Cost (Rs)	Net Return (Rs)	Sapling Prod. (No.)	Gross Cost (Rs)	Net Return (Rs)
Mango	4,50,000.00	--	40,000	--	--	80,000	--	3,000	55,000	1,50,000
Guava		--	--	--	--	70,000	--	8,000	50,000	2,35,000
Burma Deak		10,000	45,000	1,50,000	15,000	60,000	2,25,000	20,000	55,000	3,20,000
Leman		--	--	--	--	40,000	--	3,000	35,000	1,10,000
Jak Fruit		--	--	--	--	65,000	--	500	50,000	1,80,000
Eucalyptus		1,25,000	1,10,000	5,20,000	1,65,000	1,45,000	7,12,000	5,00,000	3,15,000	18,00,000
<b>Total</b>		<b>1,35,000</b>	<b>1,95,000</b>	<b>6,70,000</b>	<b>1,80,000</b>	<b>4,60,000</b>	<b>9,37,000</b>	<b>5,34,500</b>	<b>5,60,000</b>	<b>27,95,000</b>



### (iii) Vermi-compost Production as Entrepreneurship

Krishi Vigyan Kendra, Bijnor taken initiatives about establishment of Vermi-compost Production units, in the district during 2012-13 to 2016-17. The identified farmers of different villages were trained on different aspects of Vermi-compost Production techniques. After training the trained farmers are established Vermi-compost production units. Details are as below:

Year	No. of Unit	Production (qt)	Income generated by the farmers
2012-13	02	250 - 500 qt per unit per year	1.25 - 2.50 Lac per unit per year
2013-14	07		
2014-15	10		
2015-16	12		
2016-17	15		

**A success full farmer:** Vermi compost production at commercial level started by Sh. Virendra Kumar after motivation and training of KVK, Bijnor. Father of Mr. Virendra Kumar doing job in Katai Mill (Co-operative sector), due to some unfortunate reason mill has close and family of Mr. Virendra Kumar suffering for livelihood, than his father came to KVK with Virendra Kumar. Than Scientist of KVKs motivated to Virendra and given support to all technical aspect, his father arrange Rs.



25,000.00 (Twenty Five Thousand) for Virendra. Than Virendra take a old building on hire and purchase one quintal worm and purchase dairy dung and arrange self work wastage of mundi Smaiti and started a vermin compost unit. At present he is earned about 2, 83,800.00 every year.



#### Detail of Vermi-Compost Unit

➤ 15 Feet long and 3 feet width, having 30 beds.

##### A Cost of production

1	Dairy Dung 200 quintal @ Rs. 40/ q	:	8,000.00
2	Transportation cost Rs. 10@quintel	:	2,000.00
3	6 Labour @ Rs. 300/day for Mixing, Bed filling and punging	:	1,800.00
4	20 Labour for packaging & Filtering @ Rs. 300/ day	:	6,000.00
5	Other Cost	:	4,000.00
<b>Total (Rs.)</b>			<b>21,800.00</b>

<b>Total Cost - Repetition of work about 9 times therefore (21,800 x 9)</b>	:	<b>1,96,200.00</b>
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##### B Income

1	Prepare compost about 100 quintal each time (100 x9 =900)	:	
2	Selling Price @ 500 /quintal	:	
3	Selling Cost (Rs.) = 900 x500	:	4,50,000.00
4	Income by earthworm selling (1 quintal)	:	30,000.00
<b>Total Income (Rs.)</b>			<b>4,80,000.00</b>

<b>Net Profit (A-B)</b>	:	<b>2,83,800.00</b>
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#### (iv) Entrepreneurship through Mushroom cultivation

Mushroom production promoted by the KVK in the district Bijnor. Regular rural youth trainings for self employment generation were conducted for the popularization of Mushroom production. Sh. Vikas Kumar a progressive and educated farmer started a commercial unit of Mushroom production & all technical support provided by the KVK. He was properly trained by the KVK, Nagina on every minute aspect of commercial mushroom production. The unit producing mushroom throughout the year and one unique example of Mushroom production is giving here under:-



### Detail of Results obtained due to the adoption of technologies

SN	Particular	Amount (Rs.)
i.	Cost of production per 5 q compost	1,800.00
ii.	Spawn	700.00
iii.	Labour	1,000.00
iv.	Other expenses	400.00
	<b>Total</b>	<b>3,900.00</b>
	<b>Gross Cost (Rs.) : 3900.00X 25q compost</b>	<b>87,500.00</b>
v.	Average production from 5 q compost - 140 Kg Mushroom	
vi.	Price realized (Rs. per kg.)	80.00
vii.	Gross Income	11,200.00
viii.	Net Income	7,300.00
	<b>Gross Income (Rs.) : 7,300.00 X 25 q compost</b>	<b>1,82,500.00</b>



### (v) Entrepreneurs Developed through Participatory Seed Production

A progressive farmer Sharad Kumar Singh, attended training Programmes at Krishi Vigyan Kendra Bijnor during 2014 and learnt the skill of growing quality Seed Production technique. Due to high demand of seeds newly released wheat and paddy varieties, Sharad Kumar Singh has taken own field for seed production. The seed production activity is supervised by the KVK scientists.

### Seed production and seed supply of farmers to farmers

Year	Crop	Varieties	Seed Produced (q)	Total distributed seed (q)	Seed Supplied to farmers
2014-15	Paddy	PB-1509	180.00	52.00	112
		HD 2967	110.50	62.50	70
	Wheat	DB W 88	87.00	32.00	45
		WH 1105	98.00	24.00	40
		HD 3086	91.00	18.50	32
2015-16	Paddy	PB-1509	71.00	40.75	80
		HD-2967	300.00	159.50	125
	Wheat	HD-3086	26.25	18.80	35
		DBW-88	24.25	20.00	16
		DBW-90	22.50	18.75	19
		DBW-71	21.25	4.00	10
	HD-3059	75.00	52.00	60	
2016-17	Paddy	PB-1509	188.00	40.00	93
		HD-3086	29.00	17.00	11
	Wheat	HD-2967	160.00	125.00	92
		HD-3059	48.00	34.00	46
		DBW-88	56.00	41.50	55
	DBW-90	46.00	39.85	48	

225 qt. of seed supplied to Singhal Seed Company in 2016-17 and get Extra income from produced seeds:

### Extra income through Participatory seed production

Year	Crop	Extra income through seeds Rs.
2014-15	Paddy	2,84,000.00
	Wheat	6,50,600.00
2015-16	Paddy	80,875.00
	Wheat	6,91,490.00
2016-17	Paddy	2,92,000.00
	Wheat	5,83,230.00

**Recognition and Awards:** Sri Sharad Kumar Singh achieved first prize of Rs 10,0000.00 in wheat production (Variety HD-2967) in all over Uttar Pradesh during 2016, felicitated by Uttar Pradesh government.



### Innovative methodology for Transfer of Technology

#### (a) Progressive and leader farmers developed as Extension Agents

During 2014 the KVK developed 100 progressive farmers as Extension agents for the dissemination of new technologies in other fellow farmers of the district. The trained farmers came to KVK time to time for update their skills through newly developed agro-techniques.

Thematic Area	No. of expert farmers	Interaction with another farmers	No. of village covered
Trench method and intercropping in sugarcane	75	4500	48
IPNM in crops	40	3500	35
Varietal diversification and seed production	60	2500	25
IPM technique	15	700	10
New orcharding techniques	20	400	08
Micro irrigation system	05	350	05

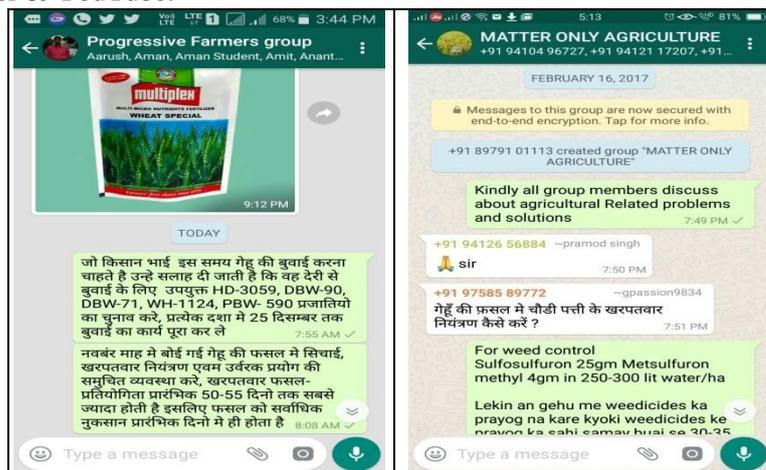


#### (b) Spread of technology through Sugarcane Collection Centers

The district Bijnor has 760 sugarcane collection centres. KVK prepares one page technology message which is pasted on the walls of the centre where farmers from the area Jurisdiction come for delivering sugarcane for onward transportation to factories. Many times farmers enquire through mobiles of Scientists as per need. This method is adopted during sugarcane harvesting time starting from November – April. This is one of the most effective technology transfers in the shortest time period.

### (c) Technological message delivered through Social Media

The KVK scientist prepares technological message and sends it to directly Farmers of the district. Presently KVK scientists govern 02 Whatsapp groups with 300 farmers and also use of other social media like Facebook, Twitter & YouTube.



Facebook : <https://www.facebook.com/Bijnor-KVK-309300895907675/>  
 Twitter : <https://twitter.com/KVKBijnor>  
 YouTube : <https://www.youtube.com/watch?v=5W7h9dx5vWs&pbjreload=10>

### (d) Problem diagnosed/technology popularized through Phone calls

Year	No. of phone calls/ Requests received from farmers for farm Assistances	No. of problems addressed
2012-13	1750	2150
2013-14	1882	2282
2014-15	1605	2005
2015-16	2042	2542
2016-17	2230	2730
<b>Total</b>	<b>9509</b>	<b>11709</b>

### (e) Transfer of technology through Electronic & Print Media

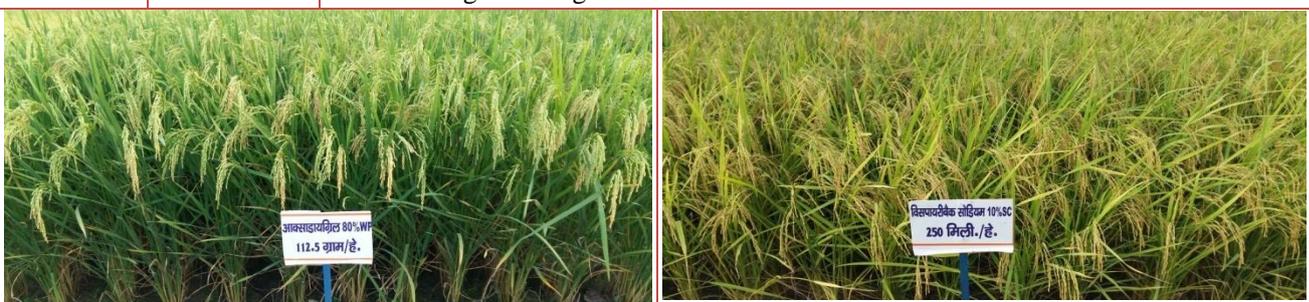
Media	Thematic area of Talk	No. of talk/ print
Radio	Varietal, Management, ICM, Weed IPM, Horticultural Crops	40
TV (ETV)	Varietal, Management, ICM, Weed IPM, Horticultural Crops	18
Newspaper	Varietal, Management, ICM, Weed IPM, Horticultural Crops	210

**(f) Transfer of technology through Technology Park**

**1. Technological display on Wheat Crops (Total Visitors: 8500)**

Thematic Area	No. of Tech. display	Major Highlighting Technology
Varietal	30	<b>Timely Sown:</b> HD-2967, HD-3086, DBW-88, WB-01, HPBW-01 & WH-1105 <b>Late Sown:</b> HD-3059, DBW-90, WH-1124 and DBW-71
		
Weed Management	07	<b>Post Emergence :</b> Sulfosulfuran 75% + Metsulfuron 5% @ 40 gm/ha, Mesosulfuran methyl 3% + Idosulfuran methyl 0.6% @ 400 gm/ha, Clodinothop 15% WP @ 400 gm/ha + Metsulfuron 20% @ 20 gm/ha
		
IPM	02	Propiconazol 1ml/lit water, Tebuconazol 1ml/lit water
		

## 2. Technological display on Rice Crops (Total Visitors: 9450)

Thematic Area	Tech. display	Major Highlighting Technology
Varietal	35	<p><b>Scented Rice:</b> Pusa -1612, PB-1121, PB-1509, Pant Basmat-1, Pant Basmati-2</p> <p><b>Coarse Rice:</b> Nagina-22, Nagina-12 NDR-3112, PR-123, PR-124, PR-126</p> <p><b>Hybrid Rice:</b> Arize 6444 Gold , VNR-2245</p>
		
Weed Management	05	<p><b>Post Emergence :</b> Bispyribac sodium 10%SC @250 ml/ha</p> <p><b>Pre-Emergence :</b> Pretilachlor @ 2.0 lit/ha, Bensulfuron + Pretilaclore @ 10 kg/ha and Oxadiagril 112.5gm/ha</p>
		
IPM	05	<p><b>Fungicides :</b> Validamycin 400gm + Carbendazim 200gm/ha, Tricyclazole 120gm/ha, Copper Oxichliride 500gm + Streptomycin 15gm/ha</p> <p><b>Insecticides :</b> Corazen 150 ml/ha and Fipronil18 kg/ha</p>
		
Organic	01	Organic Basmati Production
		

### 3. Technological display on Lentil & Mustard Crops (Total Visitors: 3400)

Thematic Area	No. of Tech. display	Major Highlighting Technology
Varietal	03	PL-8, PL-7 and IPL-406
Varietal	10	Pusa Mustard-28, Pusa Mustard-26, Pusa Mustard-27, Pusa Mustard-30, NRCHB-101, PYS-1, YSH-0401, Pusa-25, PR-19 & PR-20
ICM	02	Mustard + Lentil, Mustard + Gram

**(g) Transfer of technology through ATIC**

Agricultural technology information center established at KVK, Bijnor during March, 2017. At ATIC different visitors & farmers visited and raised the problem based on agricultural related.

Thematic Area	No. of Question raised	No. of visitors
Trench Method & suitable Intercrop in Sugarcane	88	935
Variety and seeds	115	
Proper weed management in crop	65	
Disease and Insect management in crops	280	
Management in orchard	40	
Management in vegetables	28	
Related to women empowerment	20	
Related to High Tech Agriculture	10	



1,000 copy distributed in visitors

## LINKAGES

### Functional linkage with different organization

The KVK has very strong linkage with different line departments and stake holders. The KVK is involved in technical backstopping of the line departments officials and regular participation in the programmes and vice versa. The linkages with stake holders are as under.

Name of Organization	Nature of Linkage
Deptt. of Agriculture	Diagnostic survey, training, gosthi/Seminar/ Farmers Fair
Deptt. of Horticulture	Participation in meeting/demonstration/training/ Farmers Fair
Cane Deptt. & Sugar industries	Gosthies& Trainings
NABARD	Technical Support to Kisan Clubs
ETV	Technical recordings & News coverage
Radio	Technical recordings & News coverage
NHM	Capacity building & Nursery management
UPDASP	Trainings, Meeting, Demonstration, Validation trial
IFFCO, KRIBHCO	Trainings/Gosthi
Deptt. of Animal Science	Trainings/Seminar/Animal Exhibition
NGO	Trainings/Gosthi

## XIV. AGRICULTURAL TECHNOLOGY INFORMATION CENTRE :

### A. Details on ATICs

SN	Name of the ATIC	Name of the Host Institute	Name of the ATIC Manager
1	KVK Bijnor	SVPUAT, Meeut	Dr. K. K. Singh

### B. Details on Farmer's visit

SN	Purpose of visit	Number of farmer's visited
1	Technology Information	1250
2	Technology Products	--

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

SN	Particulars	Availability (Please $\sqrt$ mark)	Number of ATICs
01	Reception counter	$\sqrt$	01
02	Exhibition / technology museum	$\sqrt$	
03	Touch screen Kiosk	--	
04	Cafeteria	$\sqrt$	
05	Sales counter	--	
06	Farmer's feedback register	$\sqrt$	

## D. Technology information provided

### D.1. Details on technology information

SN	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
1	Kisan Call Centre / other Phone calls from farmers	01	3975	980	650	720	1400	180	45
2	Video shows	01	1900	08	07	05	11	02	02
3	Letters received	01	--	--	--	--	--	--	--
4	Letters replied	01	--	--	--	--	--	--	--
5	Training to farmers / technocrats / students	01	2200	14	05	05	22	02	02

**D.2 . Publications (Print & Electronic media) : NA**

**E. Technology Products provided : NA**

### F. Technology services provided

SN	Particulars	Number of farmers benefitted
1	Soil and water testing	--
2	Plant diagnostics	48
3	Details about the services to line Departments	150

## XV. TECHNOLOGICAL BACKSTOPPING BY DIRECTORATES OF EXTENSION : N.A

### Status of revolving fund (Rs. in lakhs)

Year	Opening balance as on 1 <sup>st</sup> April	Income during the year	Expenditure during the year	Net balance in hand as on 1 <sup>st</sup> April of each year
April 2011 to March12	10,27,297.54	9,89,554.00	12,33,093.00	7,83,759.54
April 2012 to March13	7,83,759.54	6,75,002.00	12,82,714.00	1,76,047.54
April 2013 to March14	1,76,047.54	15,40,487.00	12,90,660.00	4,25,874.45
April 2014 to March15	4,25,874.45	10,29,033.00	13,52,613.00	1,02,294.45
April 2015 to March16	1,02,294.45	9,47,854.00	9,22,097.95	1,28,050.50
April 2016 to March17	1,28,050.50	7,68,723.94	7,82,472.24	1,14,301.70
April 2017 to March18	1,14,301.70	--	--	1,85,395.09

## Utilization of KVK funds during the year 2017-18

A	Recurring items		Sanctioned Grant (Council's share)	Grant received (Council's share)	Expenditure (Council's share)	Variation	
						(+) Savings	(-) Excess
1	Pay & Allowances		105,00,000.00	117,97,000.00	118,63,807.00	--	66,807.00
2	Travelling Allowances		1,00,000.00	1,00,000.00	85,648.00	14,352.00	--
3	HRD		50,000.00	50,000.00	11,000.00	39,000.00	--
4	<b>Contingencies</b>						
	a	Stationery, telephone, postage & other expdt. on office running including printing of reports including minor repair & white washing of admn. building	3,45,000.00	5,85,000.00	3,61,668.00	2,23,332.00	--
	b	P.O.L, Repair of Vehicles, Tractor & Equipment	1,20,000.00	1,20,000.00	1,12,742.00	7,258.00	--
	c	<b>Vocational Training</b>					
		(i) Meals /refreshment for trainees (ceiling upto Rs. 150.00/ day/ trainee for the trg. programmes of residential nature and Rs. 40.00/ day/ trainee for the trg. programmes of non-residential nature)	80,000.00	80,000.00	55,600.00	24,400.00	--
		(ii) Training material (Posters, charts, demonstrations material including chemicals etc. required for conducting the Training)	30,000.00	30,000.00	23,200.00	6,800.00	--
	d	FLD excluding Oilseeds & Pulses	1,00,000.00	1,00,000.00	96,759.00	3,241.00	--
	e	On Farm Trial (On need based , location specific & newly generated information in the major production systems of area)	50,000.00	50,000.00	13,594.00	36,406.00	--
	f	Training of extension functionaries (ceiling upto Rs. 150.00/ day/ trainee for the trg. programmes of residential nature & Rs. 40.00/ day/ trainee for the trg. programmes of non-residential nature)	30,000.00	30,000.00	4,400.00	25,600.00	--
	g	Library (Purchase of Journal & News Paper)	5,000.00	5,000.00	1,818.00	3,182.00	--
	h	Farmers' Fair	--	--	--	--	--
	i	Misc. Expenditure	--	--	--	--	--
		<b>Total (A)</b>	<b>114,10,000.00</b>	<b>129,47,000.00</b>	<b>126,30,236.00</b>	<b>3,83,571.00</b>	<b>66,807.00</b>
<b>B</b>	<b>Non-Recurring items</b>						
	a	Equipments	1,30,000.00	--	--	--	--
	b	Works	--	--	--	--	--
	c	Library	20,000.00	--	--	--	--
	d	Vehicle	--	--	--	--	--
		<b>Total (B)</b>	<b>1,50,000.00</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>C</b>	<b>Revolving Fund</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>D</b>	<b>TSP</b>						
	a	General Contingency	--	--	--	--	--
	b	Capital	--	--	--	--	--
		<b>Total (D)</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
		<b>Grand Total (A+B+C+D)</b>	<b>115,60,000.00</b>	<b>128,47,000.00</b>	<b>126,30,236.00</b>	<b>3,83,571.00</b>	<b>66,807.00</b>

## Outreach of the KVK in different Blocks of the district Bijnor through different activities (2013-14 to 2017-18)

### 2013-14

Name of Activities	No. of Programme	No. Of Participants	No. of Blocks covered
Capacity building programmes (Trainings)	85	1965	05
Technology demonstrations (FLD)	85	85	04
Technological Assessment (OFT)	06	21	03
Field days	05	191	03
Kisan Mela/Kisan gosthi organized	--	--	--
Scientist visit at farmers field	236	2468	06
Farmers visit at KVK	40	1200	07
Lecture delivered as Knowledge resource person in Programmes of district line departments.	21	2500	08
Campaign	1	800	04
Other extension activities	22	1800	04
Literature distributed	05	2200	05

### 2014-15

Name of Activities	No. of Programme	No. Of Participants	No. of Blocks covered
Capacity building programmes (Trainings)	47	1110	06
Technology demonstrations (FLD)	161	161	04
Technological Assessment (OFT)	03	20	03
Field days	10	540	04
Kisan Mela/Kisan gosthi organized	1	200	06
Scientist visit at farmers field	214	2014	05
Farmers visit at KVK	80	482	06
Lecture delivered as Knowledge resource person in Programmes of district line departments.	30	4200	05
Campaign	1	800	04
Other extension activities	22	1800	04
Literature distributed	08	2000	07

### 2015-16

Name of Activities	No. of Programme	No. Of Participants	No. of Blocks covered
Capacity building programmes (Trainings)	101	1409	09
Technology demonstrations (FLD)	390	390	07
Technological Assessment (OFT)	09	42	04
Field days	20	590	05
Kisan Mela/Kisan gosthi organized	1	200	07
Scientist visit at farmers field	210	3710	08
Farmers visit at KVK	250	3420	09
Lecture delivered as Knowledge resource person in Programmes of district line departments.	40	4650	11
Campaign	2	219	04
Other extension activities	30	2500	05
Literature distributed	10	2200	07

**2016-17**

Name of Activities	No. of Programme	No. Of Participants	No. of Blocks covered
Capacity building programmes (Trainings)	112	1959	11
Technology demonstrations (FLD)	341	341	08
Technological Assessment (OFT)	09	27	06
Field days	11	411	07
Kisan Mela/Kisan gosthi organized	1	500	10
Scientist visit at farmers field	180	1575	10
Farmers visit at KVK	231	1278	11
Lecture delivered as Knowledge resource person in Programmes of district line departments.	54	20200	11
Campaign	2	240	04
Other extension activities	35	2800	05
Literature distributed	13	2800	09

**2017-18**

Name of Activities	No. of Programme	No. Of Participants	No. of Blocks covered
Capacity building programmes (Trainings)	106	1801	11
Technology demonstrations (FLD)	333	333	11
Technological Assessment (OFT)	11	40	08
Field days	22	779	09
Kisan Mela/Kisan gosthi organized	1	500	11
Scientist visit at farmers field	177	2173	11
Farmers visit at KVK	202	2158	11
Lecture delivered as Knowledge resource person in Programmes of district line departments.	34	10200	11
Campaign	3	185	06
Other extension activities	40	3800	1100
Literature distributed	15	3200	11

**List of 15 Farmers from each villages (having Smartphone) :** The KVK already send the list of 2667 farmers. Other farmers list to be send positively.

## Action Plan for to adopted villages for doubling farmers income

1 Name of Village : Jamalpur Dhikli, Block-Kotwali  
 No. of farmers Targeted : 20

### Major Crops & their productivity, Use of fertilizers & Average farmers income

Crop	Area (ha)	Productivity (q/ha)	Use of Fertilizers/per ha/Year	Average Farmers income per Year
Sugarcane	65.00	480	DAP - 180 kg Urea - 230 kg MOP - 40 kg	45,000.00
Paddy	32.00	36		
Wheat	41.00	30		
Mustard	5.00	6		
Lentil	7.00	4		
Urd	6.00	3.5		
Vegetables	2.50	--		

(based on primary survey )

### Action Plan for Village

Thematic Area	Major Intervention	Budget requirement (Rs)
Promotion of intercropping	FLD, Trg., Extension activity	1.25 Lakh. per Year
Promotion of Newly High yielding varieties of crops		
Promotion of Value addition at house hold level		
Promotion of IPM & IPNM techniques		
Promotion of quality seed production at farmers field		
Promotion of organic farming		
Efficient resource management through precision farming		
Entrepreneurship development through capacity building programme		

2 **Name of Village** : Tisotra, Block-Najibabad  
**No. of farmers Targeted** : 20

**Major Crops & their productivity, Use of fertilizers & Average farmers income**

Crop	Area (ha)	Productivity (q/ha)	Use of Fertilizers/per ha/Year	Average Farmers income per Year
Sugarcane	380.00	550	DAP - 220 kg Urea - 310 kg MOP - 55 kg	58,000.00
Paddy	150.00	38		
Wheat	200.00	29.5		
Mustard	15.00	7.0		
Lentil	8.00	3.5		
Urd	10.00	6.0		
Vegetables	5.00	--		

(based on primary survey )

**Action Plan for Village**

Thematic Area	Major Intervention	Budget requirement (Rs)
Promotion of intercropping	FLD, Trg., Extension activity	1.50 Lakh. per Year
Promotion of Newly High yielding varieties of crops		
Promotion of Value addition at house hold level		
Promotion of IPM & IPNM techniques		
Promotion of quality seed production at farmers field		
Promotion of organic farming		
Efficient resource management through precision farming		
Entrepreneurship development through capacity building programme		

**Information required on Doubling Farmers Income (DFI) by KVKs of Uttar Pradesh**

Name of KVK/ dist.	Name of villages adopted	Plan of action for DFI	Present status of implementation of planned work	Major interventions undertaken	Market linkage established	FPO formed or not?	Name of other partners involved (State Deptt./ Central govt. Deptt./ PSU/ NGO/ Private org.
Bijnor	1) Jamalpur Dhikli, Block- Kotwali 2) Tisotra, Block- Najibabad	<ul style="list-style-type: none"> <li>➤ Promotion of intercropping</li> <li>➤ Promotion of Newly High yielding varieties of crops</li> <li>➤ Promotion of Value addition at house hold level</li> <li>➤ Promotion of IPM &amp; IPNM techniques</li> <li>➤ Promotion of quality seed production at farmers field</li> <li>➤ Promotion of organic farming</li> <li>➤ Efficient resource management through precision farming</li> <li>➤ Entrepreneurship development through capacity building programme</li> </ul>	--	Major interventions to be undertaken FLD, Trg., Extension activity	--	--	--

## संकल्प से सिद्धि कार्यक्रम (दिनांक : 29 अगस्त, 2017)

Budget released	Actual expenditure	Closing balance
75,000.00	74,805.00	5,195.00

Name of Chief Guest with designation	Name of other VIPs	No. of persons/ farmers	DD Covered program (yes/no)	Bank officials
Dr. Yashwant Singh, Hon'ble Member of Parliament (Nagina)	Joint Director Agriculture, Moradabad Zone	556	Programme covered by AIR, Najibabad	DDM, NABARD

कृषि विज्ञान केन्द्र, नगीना (बिजनौर) पर आज दिनांक 29 अगस्त, 2017 को संकल्प से सिद्धि कार्यक्रम का आयोजन किया गया। कार्यक्रम का उद्घाटन मुख्य अतिथि माननीय सांसद डा० यशवन्त सिंह द्वारा फीता काटकर किया गया। मुख्य अतिथि का स्वागत केन्द्र अध्यक्ष डा० डी० पी० सिंह द्वारा पुष्प-गुच्छ देकर किया गया।

1. कार्यक्रम की शुरुआत मुख्य अतिथि द्वारा उपस्थित जन समूह को नये भारत का संकल्प दिलाने के साथ किया।
2. उपस्थित जन समूह के समक्ष कृषि विज्ञान केन्द्र द्वारा Agriculture Kisan नामक फिल्म प्रदर्शित की गयी।
3. उपस्थित जन समूह के समक्ष वर्ष 2022 तक कृषकों की आय दोगुनी करने हेतु प्रमुख सात संकल्प सूत्रों के बारे में विशेषज्ञों द्वारा बताया गया जो निम्नवत् है :-

<b>पहला सूत्र</b>	- पर्याप्त संसाधन के साथ सिंचाई पर ध्यान केंद्रित करना	<b>डा० नरेन्द्र सिंह</b>
<b>दूसरा सूत्र</b>	- गुणवत्तापूर्ण बीज, रोपण सामग्री, जैविक खेती, प्रत्येक खेत को मृदा स्वास्थ्य कार्ड एवं अन्य योजनाओं के माध्यम से उत्पादन में वृद्धि	<b>डा० के० के० सिंह</b>
<b>तीसरा सूत्र</b>	- फसलोपरांत होने वाली हानि को रोकने के लिए वेयर हाउसिंग और कोल्ड चैन का सुदृढीकरण।	<b>डा० बलराज सिंह</b>
<b>चौथा सूत्र</b>	- खाद्य प्रसंस्करण के माध्यम से मूल्य संवर्धन की योजना पर कार्य।	<b>डा० शकुन्तला गुप्ता</b>
<b>पंचवा सूत्र</b>	- ई-राष्ट्रीय कृषि बाजार से कृषि बाजार क्षेत्र की विकृतियों पर अंकुश।	<b>जिला कृषि अधिकारी, बिजनौर</b>
<b>छठा सूत्र</b>	- कृषि क्षेत्र में जोखिम कम करने एवं कृषि क्षेत्र के विकास के लिए संस्थागत ऋण की उपलब्धता पर कार्य।	<b>उप कृषि निदेशक, बिजनौर</b>
<b>सातवा सूत्र</b>	- कृषि के अनुसंगी कार्यकलाप जैसे डेयरी विकास, पोल्ट्री, मधुमक्खी, मत्स्य पालन, कृषि वानिकी एवं एकीकृत कृषि प्रणाली।	<b>मुख्य पशु चिकित्साधिकारी, बिजनौर</b>

4. किसानों के समक्ष देश भक्ति से परिपूर्ण फिल्म बार्डर का प्रदर्शन किया गया।
5. मुख्य अतिथि द्वारा जन समूह को वर्ष 2022 तक आय दोगुनी करने के सम्बन्ध में प्रेरित किया गया।
6. कृषि विज्ञान केन्द्र के अध्यक्ष डा० डी० पी० सिंह द्वारा उपस्थित जन समूह एवं मुख्य अतिथि के प्रति आभार व्यक्त किया गया।
7. उक्त अवसर पर केन्द्र के वैज्ञानिकों द्वारा कृषकों को कृषि से सम्बन्धित तकनीकी बिन्दुओं पर जानकारी दी गयी।

8. कार्यक्रम का संचालन डा0 ए0 वी0 सिंह, सह निदेशक प्रसार (पादप सुरक्षा) द्वारा किया गया।
9. कार्यक्रम से सम्बन्धित सभी जानकारी Social Media एवं सम्बन्धित पटल पर ई0 शैलेन्द्र कुमार यादव, कार्यक्रम सहायक (कम्प्यूटर) द्वारा Upload किया गया।

Facebook : <https://www.facebook.com/Bijnor-KVK-309300895907675/>

Twitter : <https://twitter.com/KVKBijnor>

Youtube : <https://www.youtube.com/watch?v=5W7h9dx5vWs&pbjreload=10>

Upload on Narendra Modi App

Upload on **facebook** and **twitter** account of **Hon'ble PM** and **Hon'ble AM**

Report send to ATARI Kanpur and DE, SVPUA&T, Meerut on same date



## Swachhta Hi Sewa Campaign (from 15<sup>th</sup> September to 2<sup>nd</sup> October 2017)

Activity	No of Villages Involved	No. of Participants
Celebration of Sewa Divas (17 <sup>th</sup> Sept. 2017)	--	--
Celebration of Samagra Swachhta Diwas 24 <sup>th</sup> Sept. 2017	03	108
Celebration of Sarwatra Swachhta 25 <sup>th</sup> Sept. 2017	02	55
Swachhta of nearby Tourist Spots.	--	--
Public Function/ Award Ceremony	--	--
Other Misc. activities: Swachhta diwas programme on Mahatma Gandhi Jayanti (2 <sup>nd</sup> Oct.)	KVK	35

### Glimpses of activities



## Celebration of World Soil Day on 05.12.2017

Name of KVK	No. of MLAs participated	No. of Govt. Officials, PRI members etc. participated	No. of farmer participated	Total No. of Participants	No. of Soil Health Cards distributed
<b>Bijnor</b>	<b>01</b>	<b>21</b>	<b>330</b>	<b>352</b>	<b>16</b>



## CLUSTER FRONTLINE DEMONSTRATION OF ZAID PULSES Urd 2017-18

### Details of FLDs implemented during 2017-18

SN	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demon.			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Urd	ICM	Variety, Liquid bio-fertilizer & Zinc sulphate	Zaid 2018	20	20	10	40	50	--

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					
Urd	Zaid 2018	Irrigated	Loam	L	M	L	S.cane & mustard	15-30.03.2018	5-25.June.2018	--	--

### Technical Feedback on the demonstrated technologies

SN	Crop/Technology	Feed back
1	Urd	<ul style="list-style-type: none"> <li>• Variety PU-31 found suitable for Bijnor district but early sowing is beneficial.</li> <li>• Use of liquid bio-fertilizer &amp; use of zinc sulphate play significant role in yield enhancement</li> </ul>

### Farmers' reactions on specific technologies

SN	Crop/Technology	Feed back
1	Urd	<ul style="list-style-type: none"> <li>• Early supply of seed and inputs are required.</li> </ul>

### Performance of Frontline demonstrations

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										
Urd	ICM	Variety, Liquid bio-fertilizer & Zinc sulphate	PU-31	50	20	14.60	8.6	11.44	8.6	33.0	30622.00	45760.00	15097.00	1.49	29525.00	34400.00	4875.00	1.17



