

ANNUAL PROGRESS REPORT (April-2018-March-2019)

APR SUMMARY

1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & Farm women	84	1660	20	1680
Rural Youths	17	170	-	170
Extension Functionaries	10	100	-	100
Sponsored Training	16	1125	-	1125
Vocational Training	06	300	-	300
Total	133	3355	20	3375

2. Frontline demonstrations

Enterprise	No. of Farmers	Area (ha)	Units/Animals
Oilseeds	-	-	-
Pulses	63	25.20	63
Cereals	15	06	15
Vegetables	63	15.20	63
Other crops			
Hybrid crops			
Total	141	46.40	141
Livestock & Fisheries	20	20 (Animals)	20
Other enterprises(Poultry)	10	4500 (Chicks)	10
Total	30	20+4500	30
Grand Total	171	46.40 + 20+4500	171

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	01	03	03
Livestock			
Various enterprises	02	06	06
Total	09	29	29
Technology Refined			
Crops			
Livestock			
Various enterprises			
Total			
Grand Total	09	29	29

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	3358	13343
Other extension activities	82	Mass
Total	3440	13343

5. Mobile Advisory Services (Personal)

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	
Badaun	Text only							
	Voice only	960	286			282	672	2200
	Voice & Text both							
	Total Messages	960	286			282	672	2200
	Total farmers Benefitted	960	286			282	672	2200

6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	481.30	854146.00
Planting material (No.)	28500	Distributed to Line deptt. and KVK
Bio-Products (Trichoderma)	25 kg	Used at KVK Farms
Livestock Production (No.)	-	-
Fishery production (No.)	-	-

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil 28	22	1400.00
Water		
Plant		
Total 28	22	1400.00

8. HRD and Publications

S.N.	Category	Number
1	Workshops	04
2	Conferences	03
3	Meetings	28
4	Trainings for KVK officials	08
5	Visits of KVK officials	06
6	Book published	-
7	Training Manual	01
8	Book chapters	-
9	Research papers/ Abstract	08
10	Lead papers	01
11	Seminar papers	08
12	Extension folder	14
13	Proceedings	04
14	Award & recognition	01
15	On going research projects	-

1. General Information about the KVK

1.1 Name and address of the KVK with Phone, Fax and e-mail

Address	Telephone	e-mail	Website
Krishi Vigyan Kendra, Ujhani Distt. – Badaun (U.P.) PIN – 243639	05832 – 264996	badaunkvk@gmail.com	badaun.kvk4.in

1.2 Name and address of the host organization with Phone, Fax and e-mail

Address	Telephone	Fax	e-mail
Sardar Vallabhbhai Patel University of Agriculture & Technology, Modipuram, Meerut -250110 (U.P.)	0121-2888511	0121- 2888540	deesvpuat2014@gmail.com

1.3 Name of the Programme Coordinator with Phone & Mobile No.

Name	Telephone	e-mail
Prof. (Dr.) Raksha Pal Singh	9412723066 8218909359	rpdr65@gmail.com

1.4 Year of sanction : 01.08.1992

1.5 Staff Position (as on 31 March, 2019) :

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 no.	Age	Email id
1	Senior Scientist & Head	Dr. Raksha Pal Singh	Professor & Head	Ph.D. Agril. Extension	37400-67000	67490	08.12.03	Permanent	Other	9412723066	54	rpdr65@gmail.com
2	Subject Matter Specialist	Dr. Sanjay Kumar	S.M.S. /Asstt. Prof. (Plant Protection)	Ph.D.. (Entomology)	15600-39100	31070	15.07.08	Permanent	SC	9412368175	42	sanjayento77@gmail.com
3	Subject Matter Specialist	Dr. Shri Pal Singh	S.M.S. /Asstt. Prof. (Animal Science)	Ph.D. (Animal Science)	15600-39100	33840	18.08.08	Permanent	OBC	8954903816	57	sspsachan@gmail.com

4	Subject Matter Specialist	Dr. Y.P. Singh	S.M.S. /Asstt. Prof. (Horticulture)	Ph.D. (Horticulture)	15600-39100	32020	19.01.09	Permanent	OBC	9457111952	43	ypsingh76@gmail.com
5	Programme Assistant	Dr. Anand Prakash	Trg. Asstt. (A.V. Aids)	Ph.D. (Agril. Extn.)	1740-3000	74300	20.12.95	Permanent	OBC	9412195441	53	dranandprakash121@gmail.com
6	Computer Programmer	Sh. Ashish Agarwal	Prog. Asstt. (Computer)	B.Sc. & Diploma in computer	9300-34800	70000	16.10.99	Permanent	Other	9456868422	44	to.ashishagarwal1999@gmail.com
7	Farm Manager	Dr. Vimal Kumar Singh	Prog. Asstt. \Farm Manager	Ph.D.. (Entomology)	9300-34800	64100	22.07.08	Permanent	Other	9450779838	39	to.vksingh1978@gmail.com
8	Accountant / Superintendent	Sh. Alok Saxena	Office. Supdt./ Accountant	M.Com.	9300-34800	47600	6.9.2000	Permanent	Other	9411300515	47	saxenaalok72@gmail.com
9	Driver cum Mechanic	Sri. Subash Chand	Driver	B.A.	5200-20200	27600	26.12.08	Permanent	OBC	8057332297	43	-
10	Supporting staff	Sh. Riyasat	Mali	Literate	5200-20200	33300	28.04.97	Permanent	OBC	9917405005	54	-
11	Supporting staff	Sh. Jagvir Singh	Field Attendant	B.A.	5200-20200	28400	15.01.04	Permanent	OBC	9410021878	34	jagvirsakya85@gmail.com

1.6 Total land with KVK (ha): 14.045 ha

S. No.	Item	Area (ha)
1	Under Buildings	1.445
2.	Under Demonstration Units	0.10
3.	Under Crops	10.00
4.	Orchard/Agro-forestry	2.50
5.	Others (specify)	-

1.7. Infra-structural Development

A) Buildings

S.N.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion date	Plinth area (sq.m)	Expenditure (lac)	Starting date	Plinth area (sq.m)	Status of construction
1.	Administrative building	ICAR	2001	550	29.00	-	-	Complete
2.	Farmers Hostel	ICAR	2005	300	16.43	-	-	Complete
3.	Staff Quarters (06)	ICAR	2008	2400	28.67	-	-	Complete
4.	Demo. unit. (02)	ICAR	2008	160	4.00	-	-	Complete
5.	Fencing	ICAR	2007	2000	16.43	-	-	Complete
6.	Rain water harvesting system	ICAR	2005	4000	0.33	-	-	Complete
7.	Threshing floor	ICAR	2007	300	1.00	-	-	Complete
8.	Farm godown	ICAR	2007	60	1.00	-	-	Complete

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Vehicle No. /Total kms. Run	Present status
Jeep (01)	2008	507000.00 + Expenses	UP24 – G 0127 /163000	Working
Motorcycle (01)	2010	Purchased by H.Q.	UP24G-0148/59216	Working
Cycle (02)	1998	2338.00	-	Working

C) Equipments & Audio Visual Aids

Name of equipment	Year of purchase	Cost (Rs.)	Present status
Computer	Received 2005	Purchased by H.Q.	Working
Computer Printer	Received 2005	Purchased by H.Q.	Working
Computer Printer	2006	6800.00	Working
Soil testing lab. equipment	2005	485432.40	Working
LCD	2007	64125.00	Working
Laptop	2016	Purchased by H.Q	Working
LED TV	2017	54000.00	Working
Laptop	2017	Purchased by H.Q	Working
Projector	2017	Purchased by H.Q.	Working
Digital Camera	2018	13400.00	Working

1.8 A) Details of SAC meeting conducted in the year

Date – 05.03.2019

S.N.	Name & Designation of Delegates	Salient Recommendations	Action taken
1	Sri. Ajay Pratap Singh, DDO, Badaun	Sri. A.P. Singh, DDO Badaun suggested that there should be training of application of Trichoderma, Neem and other biopesticides	Suggestion have been incorporate in Action Plan
2	Dr. S.B. Singh Incharge, ZRC, Ujhani	Dr. S.B. Singh suggested that there should be improve variety in the OFT/FLD and variety name should also be mention in the farmers practice	Suggestion have been incorporate in Action Plan
3	Sri. Jai Prakash Singh, PPO Badaun	Dr. Preeti Agarwal advised to include the training on organic farming and Goatery.	Suggestion have been incorporate in Action Plan
4	Dr. Vivek Kumar, V.O., Ujhani	Dr. S.B. Singh suggested that Bee keeping and mushroom training should be conducted for rural youth for self employment	Suggestion have been incorporate in Action Plan
5	Sri. Rajesh Pratap Singh SAC, Member	Smt. Geeta Devi suggested that KVK should make available minikit of vegetables for kitchen gardening.	Suggestion have been incorporate in Action Plan
	Smt. Geeta Devi SAC, Member		
	Dr. Preeti Agarwal, Principal		

6	Sri. Rajesh Kumar, Asstt. Field Manager, IFFCO	Shri. Rajesh Pratap Singh suggested that KVK should arrange technological tour for farmers in different Agricultural institutions.	Suggestion have been incorporate in Action Plan
7	Smt. Usha Gautam NGO	Ms. Usha Gautam suggested that there should be training for farm women on value addition in vegetables & fruits.	Suggestion have been incorporate in Action Plan
8	Smt. Sadhana Singh SAC, Member	Sri. V.K. Saxena suggested that an animal health camp for awareness on importance of ecto & endo parasites.	Suggestion have been incorporate in Action Plan
9	Sri. K.P. Singh Progressive Farmer	Sri. Leeladhar Sharma suggested that training on Medicinal Plant cultivation technology and their importance.	Suggestion have been incorporate in Action Plan

2.0 Details of District

2.1 Major farming systems/enterprises

(Based on the analysis made by the KVK)

S.N.	Enterprise
1	Agriculture crops (Wheat, Mustard, Lentil, Potato, Paddy, Sugarcane, Maize, Bajra & Toria)
2	Horticulture crops (Guava, Mango, Papaya, Capsicum, Brinjal, Chilli, Tomato, Cucurbits, Bottle gourd, Sponge gourd, Bitter gourd, Muskmelon & Watermelon)
3	Animal husbandry (Buffalo, Cow & Goat)
4	Poultry & Fisheries

S.N.	Farming system
1	Agriculture + Horticulture + Animal Husbandry
2	Agriculture + Animal Husbandry + Horticulture
3	Agriculture + Animal Husbandry + Poultry
4	Agriculture + Horticulture + Animal Husbandry + Poultry

2.2 Description of Agro-Climatic Zone (based on soil and topography)

S.N.	Agro-Climatic Zone	Characteristics
1	MWPZ	District Badaun comes under Mid Western Plain Zone of U.P. The temperature ranges from 4.5 °C to 45.4 °C. The soils of the region are mostly alluvial and soils are neutral to moderately alkaline and medium in organic content. Rainfall in this region is received during mid June to mid October with annual rainfall is 882 mm.

2.3 Soil types

S.N.	Soil type	Characteristics	Area (ha)
1	Clay Loam	It is more fertile than sandy and sandy loam	2558
2	Sandy Soil	Sandy soil is dominated and having low status of NPK.	224480
3	Sandy Loams	It is more fertile than sandy soil	199730

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

S.N.	Crop	Area (ha)	Production (mt)	Productivity (Qtl /ha)
A	FIELD CROPS INCLUDING OIL SEEDS AND PULSES			
1.	Wheat	232327	772345	33.24
2.	Gram	68	75	11.11
3.	Pea	836	1774	21.22
4.	Mustard /Torla	35071	52417	14.95
5.	Lentil	3842	5379	14.00
6.	Paddy	78127	178254	22.82
7.	Bajra	99882	185962	18.62
8.	Maize	8024	16653	20.75
9.	Arhar	503	492	9.79
10.	Groundnut	525	620	11.80
11.	Moong	126	68	5.40
12.	Sugarcane	26891	1560108	580.16
B	VEGETABLES			
1.	Potato	12104	214664	177.35
2.	Tabacco	706	3912	55.45
3.	Turmeric	250	715	28.61

2.5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	

2.6 Population of livestock, Poultry, Fisheries etc. in the district

Category	Population
Cattle	
Crossbred	10561
Indigenous	22945
Buffalo	40590
Sheep	15930
Goats	22975
Crossbred	9350
Indigenous	35730
Poultry	159725

2.7 Details of operational area / villages

Sl.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified thrust areas
1	Bilsi	Ambiapur	Hasapur Baheria	Bajra, Maize, Wheat, Potato, Mustard, Barley, Toria, Sugarcane, Paddy, Gram, Vegetables, Guava, Mango, Mentha, Poultry, Dairy & Goatry	Productivity of paddy, wheat, Maize, Bajra, Lentil etc. in general are very low. The main reason of low yield is imbalance use of fertilizer and lack of high yielding varieties Attack of stem borer, Brown Plant Hopper and Blast disease in rice. Attack of wilt in gram. Weed infestation in various crops. Use of local varieties of different crops by the farmer. Pest problems in vegetable crops. Poor milk production and infertility in animals. Lack of quality planting material in horticultural crops. Wilt infestation in Guava orchards. Drudgery in farm activities.	Integrated nutrient management. High yielding varieties Post harvest management. Nutrition and health. Employment generation in Rural areas. Bio pesticide in vegetables/ cereals. Establishment of nurseries. Diversification in Agriculture. Use of improved varieties. Nutrition management and repeated breeding management in dairy animals.
2	Sadar	Ujhani	Kuwandanda, Bhawanipur, Mihona, Roli, Baramaldev			
3	Sadar	Dahgawan	Malpur tatera Jatuki			
4	Sahaswan	Sahaswan	Bhowys			

2.8 Priority thrust areas

Crop/Enterprise	Thrust area
Agriculture	Diversification (Crops, Horticultural crops, Bee Keeping, Mushroom Production etc.)
Crops	Imbalance nutrition, Soil testing and INM
Soil	Low organic carbon
Fruit crops	Poor management /Elite quality planting material
Mango orchard	Poor management, Rejuvenation , IPM and IDM
Guava orchrd	IPM, IDM & Crop regulation
Capsicum / Chilli	HYVs, IPM, IDM & Nutrition management
Potato	INM & IDM
Cole crops	HYVs & IPM
Cucurbits	HYVs & IPM
Paddy	ICM, IPM & IDM
Maize	INM & HYVs
Bajra	HYVs & ICM
Urd	ICM & IPM
Mustard	ICM
Wheat	INM & Weed Management
Sugarcane	ICM, IPM , IDM and Intercropping
Farming	Organic farming
Empowerment	Women empowerment
PHM	Post harvest management of food grains, seed, fruit, vegetables, milk and milk products.
IFS	Integrated Farming System for doubling farmers income
RCTs	Promoting Resource conservation technologies
Buffalo	Poor management, Balanced feeding in livestock
Cattle	Lack of improved indigenous breeds
Poultry	Poor nutrition and disease management

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

Demonstrations

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

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.							
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.							
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) *

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
Mixed Farming 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
IFS System(Kharif-Rabi-Zaid) -Livestock etc.							

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
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

OFT (Technology Assessment and Refinement)				FLD (Oilseeds, Pulses, Cotton, Other Crops/Enterprises)			
1				2			
Number of OFTs		Total no. of Trials		No. of FLD		Number of Farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
12	08	36	73	79	46.20	200	171

Training					Extension Activities			
3					4			
Number of Courses			Number of Participants		Number of activities		Number of participants	
Clientele	Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
Farmers	84	84	1680	1680	2000	3358	Mass	13343
Rural youth	17	17	170	170				
Extension Functionaries	16	10	160	100				

Seed Production (Qtl.)			Planting material (Nos.)		
5			6		
Target	Achievement	Distributed to no. of farmers	Target	Achievement	Distributed to no. of farmers
400	481.30	Seed supplied to NSC	20000	28500	-

I.A TECHNOLOGY ASSESSMENT

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

Thematic areas	Crop	Name of the technology assessed	No. of trials	No. of farmers
Integrated Nutrient Management	Paddy	Foliar spray of micro nutrient	05	05
Varietal Evaluation	Onion	Evaluation of high yielding varieties	03	03
Post harvest technology/value addition	Mango+ Turmeric	Centre opening with intercropping of Haldi	03	03
Total			11	11

Summary of technologies assessed under **livestock** by KVKs

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Disease Management	Buffalo	Use of UMMB feeding (Liking)@2 Kg each -4 brick/Month/Animal for three months feeding	06	06
Dairy Management	Buffalo	Use of supplement feed and Vetmate inj. 02 ml / animal (72 hr before A.I. after 45 days of Calving)	06	06
Others (Pl. specify)	Cattle	Use of mineral supplement @ 40-50 g/day till the animals come into heat and conceive.	01	50
Total			13	62

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

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

Note: Suppose **IPM in paddy** is the technology assessed by 50 KVKs in the Zone with 5 trials by each KVK, then IPM in paddy needs to be considered as a single technology, with $50 \times 5 = 250$ trials and No. of KVKs will be 50. In addition, please note that even if IPM in paddy is done with various combinations of Technology Options (treatments), it may be considered as a single technology only.

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

Thematic areas	Enterprise	Name of the technology assessed	No. of trials	No. of farmers
INM	Paddy	Foliar spray of micro nutrient	05	05
Total			05	05

Thematic areas	Enterprise	Name of the technology assessed	No. of trials	No. of farmers
Varietal evaluation	Onion	Evaluation of high yielding varieties	03	03
Total			03	03

Thematic areas	Enterprise	Name of the technology assessed	No. of trials	No. of farmers
	Mango + Turmeric	Centre opening with intercropping of Haldi	03	03
Total			03	03

Summary of technologies assessed under **livestock** by KVKs

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Dairy Management	Buffalo	Use of UMMB feeding (Liking)@2 Kg each -4 brick/Month/Animal for three months feeding	06	06
Disease (disorder) and management	Buffalo	Use of supplement feed and Vetmate inj. 02 ml / animal (72 hr before A.I. after 45 days of Calving)	06	06
Disease (disorder) and management	Cattle	Use of mineral supplement @ 40-50 g/day till the animals come into heat and conceive.	50	50
Total			62	62

I.B. TECHNOLOGY REFINEMENT

Summary of technologies refined under various **CROPS** by KVKs

Thematic areas	Crop	Name of the technology refined	No. of trials	No. of farmers
Total				

I.C. TECHNOLOGY ASSESSMENT AND REFINEMENT IN DETAIL

OFT -1

Problem definition : Micronutrient deficiency disease management.

Technology Assessed : Foliar application of micronutrients.

Rice is grown on 78056 ha area in district Badaun. Paddy crop is affected by several diseases from seedling stage to maturity stage. An OFT was conducted during Kharif-2019 to assess foliar application of micronutrient (ZnSO₄ + 0.25% FeSO₄ + 0.20% Boron) in paddy. The result of OFT showed resulted in paddy yield increase of 32.53% as compared to farmer's practice (ZnSO₄ @ 15 kg/ha).

Table : Performance of paddy under integrated nutrient management

Technology Option	No.of trials	Yield (q/ha)	Net Returns (Rs./ha)	BC ratio
T ₁ Farmers Practice (ZnSO ₄ @ 15 kg/ha)	03	33.20	25097	1.95
T ₂ 2 spray (40 & 55 DAT) of 0.25% ZnSO ₄ + 0.25% FeSO ₄ + 0.20% Boron		44.00	40968	2.51

OFT -2

Problem definition: Low productivity & poor quality of growing onion.

Technology Assessed or Refined : varietal assessment of HYV “Bhima Shakti”.

An On Farm Trial was conducted in sandy loam soil under irrigated conditions for the assessment of high yielding variety “Bhima Shakti” at three locations in Pearl Millet – Potato-Onion cropping system during Summer 2018. Maximum yield (349 q/ha) were recorded with the variety “Bhima Shakti” while in Farmer Practice (A.D.R.) 288 q/ha. Uniform neckfall were also recorded in “Bhima Shakti”

Table – Assessment of high yielding variety of Onion

Technology assessed/Refined	No. of trials	Production (q/ha)	Net return Rs./ha	BC ratio
T ₁ F P (Agrifound Dark Red)	03	288.00	226300.00	3.50
T ₂ (Bhima Shakti)		349.00	298056.00	4.27

Date of Transplanting -06-15.02.18

Date of Harvesting – 04-09 June 2018

Recommendation:

1. The “Bhima Shakti” variety gave maximum yield (349 q/ha) followed by farmer practice (ADR) 288 q/ha.
2. Highest net return (Rs. 298056) was recorded with Bhima Shakti.
3. Uniform neckfall was also observed in Bhima Shakti.

Farmer’s Reaction :

1. Only 115-120 days taken to attain bulb maturity.
2. Bulbs attains immediate attractive red colour after harvest.
3. Very less double bulbs and bolters were recorded in Bhima Shakti.
4. Fetches good market price due to attractive bulb colour purple flesh colour.
5. Very good bulb storability (upto 6 months)

LIVE STOCK

OFT – 3

Problem definition: Higher incidences of repeat breeding in Buffaloes.

Technology Assessed: UMMB feeding to control repeat breeding in buffaloes.

The trials were conducted during May 2018 (03 trials in Kharif Season) on 03 repeat breeders buffaloes (buffaloes show oestrus but not conceive even after 4-5 oestrous) at 03 locations village wise, to evaluate the remedial measures for curing repeat breeding. In treatment one i.e.T1 which is farmers practice (as usual feeding of choker & common salt normally), In the treatment T2 i.e. feeding of UMMB (feeding/licking of UMMB @ 2 Kg Block for 7-8 days/animal up to 90 days). Each and every animals should be free from ecto and endo parasites using ivermectin injection @ 01 ml for 50 kg body weight.

Table - Effect of UMMB feeding / licking in cure/minimize the incidence of repeat breeding (KHARIF 2018)

Technology Option	No.of trials	Repeat Breeding (Buffaloes)	
		Number	%
T ₁ -Farmer’s practice (Use of choker and common salt)	3	03	100
T ₂ - Use of Dewormer (Ivermectin inj.) + UMMB feeding (Licking)@2 kg each- 4 brick/ month/animal for three month feeding		01	33 (Rate of Success is 67%)

OFT – 4

Problem definition: Higher incidences of repeat breeding in Buffaloes.

Technology Assessed: UMMB feeding to control repeat breeding in buffaloes.

The trials were conducted during January 2019 (03 trials in Rabi Season) on 03 repeat breeders buffaloes (buffaloes show oestrus but not conceive even after 4-5 oestrous) at 03 locations village wise, to evaluate the remedial measures for curing repeat breeding. In treatment one i.e.T1 which is farmers practice (as usual feeding of choker & common salt normally), In the treatment T2 i.e. feeding of UMMB (feeding/licking of UMMB @ 2 Kg Block for 7-8 days/animal up to 90 days). Each and every animals should be free from ecto and endo parasites using ivermectin injection @ 01 ml for 50 kg body weight.

Table - Effect of UMMB feeding / licking in cure/minimize the incidence of repeat breeding (RABI 2018-19)

Technology Option	No.of trials	Repeat Breeding (Buffaloes)	
		Number	%
T ₁ -Farmer's practice (Use of choker and common salt)	3	03	100
T ₂ - Use of Dewormer (Ivermectin inj.) + UMMB feeding (Licking)@2 kg each- 4 brick/ month/animal for three month feeding		02	67 (Rate of Success is 33%)

Farmers Reaction :

1. The A.H. Deptt. should organize regular camps in the villages to tackle repeat breeding problem.
2. The mineral deficiency and poor nutrition is a major problem among animals due to imbalance nutrition/feeding application in buffaloes.
3. The repeat breeding problem is also due to lack of diversity in feed & fodder and lack of pasture.

OFT– 5

Problem definition: Higher incidences of post-calving anoestrous

Technology Assessed: Evaluation of clinical and non-clinical treatment for post-calving anoestrous in Buffaloes.

The trials were conducted during May 2018 (03 trials in Kharif Season) on 03 repeat breeders buffaloes (buffaloes did not show oestrus between second to fourth lactation after 3-4 months of calving) at three locations village wise, to evaluate the remedial measures for curing post calving anoestrus. In treatment one i.e.T1 which is farmers practice (feeding of choker & common salt), Even single buffalo did not responded or conceived. In the treatment T2 i.e. nonclinical remedies (Vetmate (Gonadotrophic hormone) inj 2 ml (72 hrs before AI) and feeding of minerals mixture@ 50gm/day/animal up to 45 days) three buffalo responded. Each and every animals should be free from ecto and endo parasites using ivermectin injection @ 01 ml for 50 kg body weight.

Table - Effect of minerals mixture+ Vetmate cure/minimize the post-calving anoestrous (KHARIF 2018)

Technology Option	No.of trials	Post calving anoestrous (Buffaloes)	
		Number	%
T 1 -Farmer's practice (Use of choker and common salt)	3	03	100
T2- Use of Vetmate (Gonadotrophic hormone) inj 2 ml (72 hrs before AI) after 45 days of calving + Mineral mixture supplementation @ 50 g/day /animal for 45 days		0	(Rate of Success is 100%)

OFT – 6

Problem definition: Higher incidences of post-calving anoestrous

Technology Assessed: Evaluation of clinical and non-clinical treatment for post-calving anoestrous in Buffaloes.

The trials were conducted during January 2019 (03 trials in Rabi Season) on 03 repeat breeders buffaloes (buffaloes did not show oestrus between second to fourth lactation after 3-4 months of calving) at three locations village wise, to evaluate the remedial measures for curing post calving anoestrus. In treatment one i.e.T1 which is farmers practice (feeding of choker & common salt), Even single buffalo did not responded or conceived. In the treatment T2 i.e. nonclinical remedies (Vetmate (Gonadotrophic hormone) inj 2 ml (72 hrs before AI) and feeding of minerals mixture@ 50gm/day/animal up to 45 days) two buffalo responded. Each and every animals should be free from ecto and endo parasites using ivermectin injection @ 01 ml for 50 kg body weight.

Table - Effect of minerals mixture+ Vetmate cure/minimize the post-calving anoestrous (RABI 2018-19)

Technology Option	No.of trials	Post calving anoestrous (Buffaloes)	
		Number	%
T 1 -Farmer's practice (Use of choker and common salt)	3	03	100
T2- Use of Vetmate (Gonadotrophic hormone) inj 2 ml (72 hrs before AI) after 45 days of calving + Mineral mixture supplementation @ 50 g/day /animal for 45 days		01	(Rate of Success is 67%)

Recommendation : Present trial revealed that in T1 the conception rate was 0%, in T2 (clinical) 100% and 67 % respectively responded & conceived.

Farmers Reaction :

1. The A.H. Deptt. should organize regular camps in the villages to tackle anoestrous problem.
2. The mineral deficiency and poor nutrition is a major problem among animals due to imbalance nutrition/feeding application in buffaloes.
3. The anoestrous problem is also due to lack of diversity in feed & fodder and lack of pasture.

OFT – 7

Technology Assessed: On Farm validation trials on mineral supplement

On-farm validation trials to assess the impact of mineral supplement will be undertaken at farm-gate level with a special focus on problematic dairy animals. Response to the mineral supplementation will be ascertained by measuring relevant parameters related to production and reproduction. Farmers' perception will be recorded about socio-economic feasibility of the mineral supplement.

Table - On Farm validation trials on mineral supplement- sponsored by IVRI Bareilly (RABI 2018-19)

Technology Option	No. of trials	Results	
		Number	Numbers
T 1 -Farmer's practice (Use of choker and common salt)		10 farm animals	No. of animal conceive = 0
T2- The experimental animals will be given mineral supplement @ 40-50 g/day. The amount of concentrate mixture will be provided as per the farmers' practices. Basal diet of cereal straws (wheat/paddy) or sugarcane top will be offered <i>ad libitum</i> . The feeding of mineral supplement will be continued till the animals come into heat and conceive. The confirmation of pregnancy will be done at 2 months post-mating	50	Buffalo Heifers	
		Total	40
		No. of animal Responded	34
		No. of animal repeated	3
		No. of animal conceive	31
		Lactating Buffalo	
		Total	10
		No. of animal Responded	9
		No. of animal repeated	1
		No. of animal conceive	8
		Milk yield increase	21.53%

Recommendation : Present trial revealed that in T1 the conception rate was 0%, in T2 Heifers Conceived 77.5% and Lactating buffalo Conceived 80 % with increase of milk yield 21.53%.

Farmers Reaction :

1. The mineral deficiency and poor nutrition is a major problem among animals due to imbalance nutrition/feeding application in buffaloes.

II. FRONTLINE DEMONSTRATIONS

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

List of technologies demonstrated during previous year and popularized during 2017-18 and recommended for large scale adoption in the district

S.N.	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/ Animals
YEAR 2017-18							
1	Bajra	Varietal evaluation	Use of improved var.	Use of improved varieties of bajra produced higher grain yield by 11.08% alongwith 22.36 % more net return as compared to farmers practice.	10	15	18
2	Paddy	INM	Foliar spray of micronutrient	Disease free crop, good yield, Net income increased upto 38.2%	16	26	15
3	Bitter gourd	IPM	Pheromone trap against fruit fly	It is highly effective against fruit fly management in cucurbits	10	18	19
4	Paddy	IPM	Use of Buprofezin 25% against BPH	Effective and safer technology for management of Yellow stem borer	06	10	10
5	Potato	IDM	Metalaxyl 8 % + Mencozeb 64 % against late blight	Effective and excellent fungicide against late blight	12	31	38
6	Cabbage	IPM	Emamectin Benzoate against DBM	Highly effective insecticide for the management of DBM	06	14	16
7	Wheat	Weed Management	Use of Sulfosulfuron + Metsulfuron methyl	Weed control in wheat by using weedicide Sulfosulfuron + Metsulfuron methyl had reduced the population of weeds in crop resulted in higher yield (7.86) and net returns (13.41%) from the wheat crops.	06	10	10
8	Cauliflower	Varietal evaluation	Use of improved var. Sabour Agrim	White curd colour, better yield and uniform maturity	08	14	14
9	Tomato	INM	Foliar spray of micronutrient	Use of ZN, B, Cu, Fe 01 gm/lit each increase yield and keeping quality of fruits	07	15	15

- b. Details of FLDs implemented during 2018-19 (Information is to be furnished in the following **three tables for each category** i.e. **cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.**)

S. N.	Crop	Thematic area	Tech. Demo.	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Prop.	Actual	SC/ST	Others	Total	
1	Paddy	INM	Foliar spray of micronutrient	Kharif 18	2.00	2.00	-	05	05	-
2	Paddy	IPM	Use of Buprofezin 25% against BPH	Kharif 18	4.00	4.00	08	02	10	
3	Potato	IDM	Metalaxyl 8 % + Mencozeb 64 % against late blight	Rabi 18-19	4.00	4.00	11	09	20	
4	Chilli	IPM	Emamectin Benzoate against DBM	Rabi 18-19	5.20	5.20	12	01	13	
5	Cauliflower	Varietal evaluation	Use of improved var. Sabour Agrim	Kharif 18	3.00	3.00	-	15	15	
6	Tomato	INM	Foliar spray of micronutrient	Rabi 18-19	3.00	3.00	-	15	15	

Details of farming situation

Crop	Season	Farming situation	Soil type	Status of Soil			Previous crop	Sowing date/TSP	Harvest date	Seasonal rainfall	No. of rainy days
				N	P	K					
Paddy	Kharif 18	Irrigated	Sandy	L	M	L	Wheat	12.07.18	18.10.18	412 mm	22
Paddy	Kharif 18	Irrigated	Sandy loam	L	M	M	Wheat	11.07.18	27.10.18	412 mm	22
Potato	Rabi 18-19	Irrigated	Sandy	L	M	L	Maize	20.10.18	07.03.19	52 mm	04
Chilli	Rabi 18-19	Irrigated	Sandy	L	M	L	Maize	10.11.18	25.01.19	52 mm	04
Cauliflower	Kharif 18	Irrigated	Sandy	L	M	L	Cucumber	13.07.18	25.09.18	412 mm	22
Tomato	Rabi 18-19	Irrigated	Sandy	L	M	M	Cauliflower	03.01.18	-	52 mm	04

Technical Feedback

S.N.	Crop	Feedback
1	Paddy	Disease free crop, good yield, Net income increased upto 38.2%
2	Paddy	Effective and safer technology for management of Yellow stem borer
3	Potato	Effective and excellent fungicide against late blight
4	Chilli	Highly effective insecticide for the management of DBM
5	Cauliflower	White curd colour, better yield and uniform maturity
6	Tomato	Use of micronutrient increased the tomato yield

Farmers reaction –

S.N.	Crop	Feedback
1	Paddy	Agree to adopt the treatment widely due to low cost of nutrient management.
2	Paddy	Cartap hydrochloride is highly effective and economical against stem borer
3	Potato	The use of metalaxyl 8 % + Mancozeb 64% is effective to control the late blight in potato
4	Chilli	Highly effective insecticide
5	Cauliflower	Farmers like due to early maturity and white colored curd for get better price
6	Tomato	Higher income due to more production and market value

Extension and Training activities under FLD

S.N.	Activity	No. of activities organized	Date	No. of participants	Remark
1	Field days	02	27.09.18	38	
			21.02.19	35	
2	Farmers Training	05	06.07.18	20	
			06.09.18	20	
			26.12.18	20	
			15.02.19	20	
			10.06.18	20	

Performance of FLD

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)			Check	% Increase in yield
						High	Low	Average		
Paddy	INM	Foliar spray of micronutrient	Sarbati	05	2.00	46.3	45.3	45.0	36.9	21.9
Paddy	IPM	Use of Buprofezin 25% against BPH	Pusa B.-1	10	4.00	40.65	36.76	38.46	32.17	19.55
Potato	IDM	Cymoxinel 8 % + Mancozeb 64 % against late blight	K Chipsona- 1	20	4.00	364.15	335.28	348.65	264.08	32.06
Chilli	IPM	Emamectin Benzoate against DBM	Mahyco C-261	13	5.20	355.20	341.15	347.76	278.71	25.00
Cauliflower	Varietal evaluation	Use of improved var.	Sabour Agrim	15	3.00	156.00	134.00	145.00	111.00	30.63
Tomato	INM	Foliar spray of micronutrient	Himsona	15	3.00	237.00	200.00	216.20	192.26	12.45

Economic Performance of FLD

Crop	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Paddy	26950	69812	42862	2.59	26250	57257	31007	2.18
Paddy	31570	67305	35735	2.13	31300	56303	25003	1.80
Potato	67653	174327	106675	2.58	66872	132041	65170	1.97
Chilli	76750	521339	444889	6.79	76300	418370	341496	5.48
Cauliflower	65000	166750	101750	2.57	65000	122100	57100	1.88
Tomato	58000	129270	71720	2.23	58000	115360	57360	1.99

Performance of Cluster Frontline demonstrations

S.N	Crop	Thematic area	Tech. Demo.	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Prop.	Actual	SC/ST	Others	Total	
1	Urd	ICM	Use of improved var. PU-31	Khariif 18	20	10	18	07	25	
2	Field Pea	ICM	Use of improved var. AMAN	Rabi 18-19	10	5.20	13	-	13	
3	Lentil	ICM	Use of improved var. PL-8	Rabi 18-19	10	10	14	11	25	

Frontline demonstration on pulse crops

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield
						Demo			Check	
						High	Low	Average		
Urd	ICM	Use of improved var.	PU -31	25	10	7.71	7.27	7.54	6.55	15.11
Field Pea	ICM	Use of improved var.	IPFD1012	13	5.20	23.16	17.02	19.67	16.74	17.50
Lentil	ICM	Use of improved var.	PL-8	25	10	14.28	10.65	12.53	9.95	25.93

Economic Performance of Pulse CFLD

Crop	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Urd	26125	36211	10086	1.39	25900	31459	5559	1.21
Field Pea	27500	62929	35429	2.29	26500	53556	27056	2.02
Lentil	25500	65177	39677	2.56	24500	51750	27250	2.10

Details of farming situation

Crop	Season	Farming situation	Soil type	Status of Soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall	No. of rainy days
				N	P	K					
Urd	Khariif 18	Irrigated	Sandy loam	L	M	L	Wheat	27.07.18	12.10.18	412 mm	26
Field Pea	Rabi 18-19	Irrigated	Sandy loam	L	M	L	Bajra	24.11.18	27.03.19	52 mm	04
Lentil	Rabi 18-19	Irrigated	Sandy loam	L	M	L	Bajra	20.11.18	28.03.19	52 mm	04

Technical Feedback

SN.	Crop	Feedback
1	Mustard	Use of improved variety and integrated crop management helps in growth & development of crop resulted in higher production of crop & better profit.
2	Urd	Use of improved variety and integrated crop management helps in growth & development of crop resulted in higher production of crop.
3	Field Pea	Use of improved variety and integrated crop management helps in growth & development of crop resulted in higher production of crop.
4	Lentil	Use of improved variety and integrated crop management helps in growth & development of crop resulted in higher production of crop & better profit.

Farmers reaction –

SN.	Crop	Feedback
1	Urd	Use of improved variety resulted in higher yield of the crop and more income to the farmers.
2	Mustard	Use of improved variety resulted in higher yield of the crop and more income to the farmers.
3	Field Pea	Use of improved variety resulted in higher yield of the crop and more income to the farmers.
4	Lentil	Use of improved variety resulted in higher yield of the crop and more income to the farmers.

Extension and Training activities under FLD

SN.	Activity	No. of activities organized	Date	No. of participants	Remark
1	Field days	04	14.09.18 21.11.18 13.12.18 22.12.18	33 20 20 25	
2	Farmers Training	04	26.09.18 17.07.18 16.11.18 17.11.18	25 20 50 20	

Details of Enterprises (Live Stock)

FLD on Livestock KHARIF 2018

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units (Animal/ Poultry/ Birds, etc)	Milk Production lt/day/ Body weight (gm)		% Increase
					Demo.	F.P.	
Buffaloes	Disease Management	Use of Ivermectin Inj.	05	05	4.85-5.10	4.55-4.20	Milk production increased 21.42% by Ivermectin Inj.
Buffaloes	Nutrition /Feed management	Use of calcium + Phosphorus and vit. D ₃	05	05	4.95-5.55	4.60-4.20	Milk production increased 32.14%
Chicken (Broiler)	Nutrition /Feed management	Use of vitamin & mineral mixture	05	05	2140 gm Body weight 1.11% mortality	1970 gm Body weight 4.80% mortality	Body weight improved 8.63 % & mortality reduced 3.69 %

Category	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)			
	Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Buffaloes	5.10 lt	4.20 lt	89.5/day	149.6/day	63.1/day	1.70	88/day	131.6/day	46.6/day	1.53
Buffaloes	5.55 lt	4.20 lt	96/day	161.9/day	73.9/day	1.76	93/day	131.60/day	38.6/day	1.42
Chicken (Broiler)	2250gm B.W.	1970 gm B.W.	3.10/day	4.10/day	1.0/day	1.16	2.80/day	3.15/day	0.35/day	1.13

a. Results of FLDs implemented during the year (Rabi 18-19)

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units (Animal/ Poultry/ Birds, etc)	Milk Production lt/day		Milk Production lt/day
					Demo.	F.P.	
Buffaloes	Disease Management	Use of Ivermectin Inj.	05	05	4.00- 4.50 lt	4.55-4.20 lt	Milk production increased 20.19% by Ivermectin Inj.
Buffaloes	Nutrition/Feed management	Use of calcicum + Phosphorus and vit. D ₃	05	05	5.00-5.48 lt	4.60-4.20 lt	Milk production increased 19.28%
Chicken (Broiler)	Nutrition /Feed management	Use of vitamin & mineral mixture	05	05	2170 gm Body weight 1.15 % mortality	2000 gm Body weight 4.80% mortality	Body weight improved 8.50 % & mortality reduced 3.65 %

Category	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)			
	Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Buffaloes	4.50 lt	4.00 lt	108/day	172/day	64/day	1.56	100/day	138day	38/day	1.40
Buffaloes	5.48 lt	5.00 lt	128/day	183/day	55/day	1.40	113/day	128/day	15/day	1.28
Chicken (Broiler)	2170 gm Body weight 1.11 % mortality	2000 gm Body weight 8.0% mortality	3.50/day	4.10/day	0.60/day	1.71	2.75/day	3.10/day	0.35/day	1.31

Technical Feedback

1. Use of Ivermectin Injection is much effective and safe to the animals because it works for endo-ecto parasite both and farmers are ready to accept this techniques to remove endo-ecto parasite from the animal body.
2. After using Calcium + phosphorus and Vit. D₃, the milk production increased by 19.28 % and its also increases lactation length and reduces infertility in animals.
3. Using of vitamins and minerals in broiler chicken, its increased body weight 8.50 % and reduces mortality 3.65 % and also solving the leg deformities in the chicken.

Farmers reaction

1. As per farmers reactions all the above techniques are very useful for the farmers to improve yield as well as economic returns.

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

Crop	Technology demonstrated	Hybrid Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)			
					Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Average						
Oilseed crop													
Pulse crop													
Cereal crop													
Vegetable crop													
Chilli	Fruit borer management	Rashi 078	13	5.20	355.20	341.15	347.76	278.71	25.0	76750	521339	444889	7.0
Tomato	Nutrition management	Himsona	15	3.00	237.00	200.00	216.20	19.26	14.46	58000	129270	71720	2.24
Fruit crop													

III. Training Programme

Farmers' Training including sponsored training programmes

A) On Campus

Thematic Area	No. of courses	No. of participants							Grand Total
		Others			SC/ST*				
		Male	Female	Total	Male	Female	Total		
A) Farmers & Farm Women									
Crop Production									
Production of organic input	01	20	-	20	-	-	-	20	
ICM	02	40	-	40	-	-	-	40	
INM	01	19	-	19	01	-	01	20	
Plant Protection									
IPM	02	13	-	13	27	-	27	40	
IDM	02	37	-	37	03	-	03	40	
Animal Science									
Animal Nutrition management	03	54	-	54	06	-	06	60	
Disease management	01	20	-	20	-	-	-	20	
Horticulture									
Production Management technology	02	30	-	30	03	-	10	40	
Production Management technology on Medicinal Plant	01	17	-	17	01	-	03	20	

Propagation techniques of Ornamental Plants	01	07	-	07	01	-	13	20
Soil Science								
Soil & water conservation	01	20	-	20	-	-	-	20
Micro nutrient deficiency in crops	01	20	-	20	-	-	-	20
INM	01	17	-	17	03	-	03	20
Soil fertility	01	18	-	18	02	-	02	20
Total	20	353	-	353	47	-	47	400

Off Campus

Thematic Area	No. of courses	No. of participants						Grand Total
		Others			SC/ST			
		Male	Female	Total	Male	Female	Total	
B) Farmers & Farm Women								
A) Farmers & Farm Women								
Crop Production								
INM	01	20	-	20	-	-	-	20
Weed Management	01	20	-	20	-	-	-	20
ICM	07	112	06	118	22	-	22	140
Inter Cropping system	02	40	-	40	-	-	-	40
Resource conservation technology	01	20	-	20	-	-	-	20
Fodder management	01	15	-	15	05	-	05	20
Nursery management	02	39	-	39	01	-	01	40
Plant Protection								
IPM	11	46	-	46	160	14	174	220
IDM	01	-	-	-	20	-	20	20
Animal Science								
Animal Nutrition management	04	72	-	72	08	-	08	80
Dairy management	02	36	-	36	04	-	04	40
Management of farm animals	02	37	-	37	03	-	03	40
Disease management	04	73	-	73	07	-	07	80
Horticulture								
Production Management technology of flowers	01	20	-	20	-	-	-	20
Production Management technology of vegetable	02	40	-	40	-	-	-	40
Production mgt. of MAP	02	40	-	40	-	-	-	40
Packaging and transport	01	15	-	15	05	-	05	20
Nursery raising	03	55	-	55	05	-	05	60
Training and pruning	-	-	-	-	-	-	-	-
Mulching in fruits	01	20	-	20	-	-	-	20
Crop regulation	01	20	-	20	-	-	-	20
Layout and management of orchard	01	20	-	20	-	-	-	20
Exotic vegetables	01	15	-	15	05	-	05	20
Off season vegetables	01	20	-	20	-	-	-	20
Machan cultivation	01	10	-	10	10	-	-	20
Soil Science								
INM	02	28	02	30	10	-	10	40
ICM	01	20	-	20	-	-	-	20

Management of problematic soil	01	20	-	20	-	-	-	20
Soil & water testing	02	40	-	40	-	-	-	40
Micronutrient deficiency in crops	01	15	-	15	05	-	05	20
Soil fertility management	02	40	-	40	-	-	-	40
Nutrient use efficiency	01	16	-	16	04	-	04	20
TOTAL	64	984	08	992	274	14	288	1280

B. RURAL YOUTH

Thematic Area	No. of courses	No. of participants						Grand Total
		Others			SC/ST			
		Male	Female	Total	Male	Female	Total	
Agronomy								
NADEP	01	08	-	08	02	-	02	10
Seed production	02	15	-	15	05	-	05	20
Vermi culture Production	01	07	-	07	03	-	03	10
Plant Protection								
Bee Keeping	03	11	-	11	19	-	19	30
Mushroom Production	01	05	-	05	05	-	05	10
Animal Science								
Dairying	02	20	-	20	-	-	-	20
Poultry production	01	10	-	10	-	-	-	10
Goat rearing	01	10	-	10	-	-	-	10
Horticulture								
Nursery mgt. of horticultural crops	01	06	-	06	04	-	04	10
Protected cultivation	02	16	-	16	04	-	04	20
Commercial Flower Production	01	08	-	08	02	-	02	10
Soil Science								
Soil testing	01	10		10	10		10	10
TOTAL	17	126	02	126	44	-	44	170

C. EXTENSION FUNCTIONARIES

Thematic Area	No. of courses	No. of participants						Grand Total
		Others			SC/ST			
		Male	Female	Total	Male	Female	Total	
Agronomy								
Production and use of organic input	01	08		08	02	-	02	10
INM	01	10	-	10	-	-	-	10
Resource conservation technology	01	10	-	10	-	-	-	10
Animal Science								
Management in farm animals	03	25	-	25	05	-	05	30
Horticulture								
Rejuvenation of orchard	01	07	-	07	03	-	03	10
Micro irrigation system	01	06	-	06	04	-	04	10
Low Volume and high value vegetable production	01	06	-	06	04	-	04	
Plant Protection								
Mushroom Production	01	10	-	10	-	-	-	10
Total	10	82	-	82	18	-	18	100

CONSOLIDATED ON & OFF

A)

Thematic Area	No. of courses	No. of participants						Grand Total
		Others			SC/ST			
		Male	Female	Total	Male	Female	Total	
A) Farmers & Farm Women								
Agronomy								
Production of organic input	01	20	-	20	-	-	-	20
ICM	09	152	06	158	22	-	22	180
INM	02	39	-	39	01	-	01	40
Weed Management	01	20	-	20	-	-	-	20
Inter Cropping system	02	45	-	45	-	-	-	45
Resource conservation technology	01	18	-	18	02	-	02	20
Fodder management	01	15	-	15	05	-	05	20
Nursery management	02	39	-	39	01	-	01	40
Plant Protection								
IDM	03	37	-	37	23	-	23	60
IPM	13	59	-	59	187	14	201	260
Animal Science								
Disease management	05	93	-	93	07	-	07	100
Animal Nutrition management	07	126	-	126	14	-	14	140
Dairy management	02	36	-	36	04	-	04	40
Management of farm animals	02	37	-	37	03	-	03	40
Horticulture								
Production Management technology	02	30	-	30	10	-	10	40
Production Management technology on Medicinal Plant	01	17	-	17	03	-	03	20
Propagation techniques of Ornamental Plants	01	07	-	07	13	-	13	20
Production Management technology of flowers	01	20	-	20	-	-	-	20
Production Management technology of vegetable	02	40	-	40	-	-	-	40
Production mgt. of MAP	02	40	-	40	-	-	-	40
Packaging and transport	01	15	-	15	05	-	05	20
Nursery raising	03	55	-	55	05	-	05	60
Mulching in fruits	01	20	-	20	-	-	-	20
Crop regulation	01	20	-	20	-	-	-	20
Layout and management of orchard	01	20	-	20	-	-	-	20
Exotic vegetables	01	15	-	15	05	-	05	20
Off season vegetables	01	20	-	20	-	-	-	20
Machan cultivation	01	15	-	10	05	-	05	20
Soil Science								
Soil & water conservation	01	20	-	20	-	-	-	20
Micro nutrient deficiency in crops	02	40	-	40	-	-	-	40
INM	03	50	-	50	10	-	10	60
ICM	01	20	-	20	-	-	-	20
Management of problematic soil	01	20	-	20	-	-	-	20
Soil & water testing	02	40	-	40	-	-	-	40
Micronutrient deficiency in crops	02	30	-	30	10	-	10	40
Soil fertility management	02	40	-	40	-	-	-	40
Nutrient use efficiency	01	16	-	16	04	-	04	20
Total	84	1345	06	1351	315	14	329	1680

B. RURAL YOUTH

Thematic Area	No. of courses	No. of participants						Grand Total
		Others			SC/ST			
		Male	Female	Total	Male	Female	Total	
Agronomy								
NADEP	01	08	-	08	02	-	02	10
Seed production	02	15	-	15	05	-	05	20
Vermi culture Production	01	07	-	07	03	-	03	10
Plant Protection								
Bee Keeping	03	11	-	11	19	-	19	30
Mushroom Production	01	05	-	05	05	-	05	10
Animal Science								
Dairying	02	20	-	20	-	-	-	20
Poultry production	01	10	-	10	-	-	-	10
Goat rearing	01	10	-	10	-	-	-	10
Horticulture								
Nursery mgt. of horticultural crops	01	06	-	06	04	-	04	10
Protected cultivation	02	16	-	16	04	-	04	20
Commercial Flower Production	01	08	-	08	02	-	02	10
Soil Science								
Soil testing	01	10	-	10	10	-	10	10
TOTAL	17	126	-	126	44	-	44	170

C. EXTENSION FUNCTIONARIES

Thematic Area	No. of courses	No. of participants						Grand Total
		Others			SC/ST			
		Male	Female	Total	Male	Female	Total	
Agronomy								
Production and use of organic input	01	08	-	08	02	-	02	10
INM	01	10	-	10	-	-	-	10
Resource conservation technology	01	10	-	10	-	-	-	10
Animal Science								
Management in farm animals	03	25	-	25	05	-	05	30
Horticulture								
Rejuvenation of orchard	01	07	-	07	03	-	03	10
Micro irrigation system	01	06	-	06	04	-	04	10
Low Volume and high value vegetable production	01	06	-	06	04	-	04	
Plant Protection								
Mushroom Production	01	10	-	10	-	-	-	10
Total	10	82	-	82	18	-	18	100

Table. Sponsored training programmes

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management										
Maize Production technology	01	100	-	100	-	-	-	100	-	100
Bajra Production technology	06	595	-	595	-	-	-	595	-	595
Use of Hybrid seed of Maize and pesticide	01	80	-	80	-	-	-	80	-	80
Use of weedicide in Pulses and oilseeds crops	01	100	-	100	-	-	-	100	-	100
Maize Production technology	01	100	-	100	-	-	-	100	-	100
Commercial production of vegetables										
Production and value addition										
Fruit Plants	02	50	-	50	-	-	-	50	-	50
Ornamental plants	02	50	-	50	-	-	-	50	-	50
Spices crops	02	50	-	50	-	-	-	50	-	50
Soil health and fertility management										
Production of Inputs at site										
Methods of protective cultivation										
Others (pl. specify)										
Total										
Post harvest technology and value addition										
Processing and value addition										
Others (pl. specify)										
Total										
Farm machinery										
Farm machinery, tools and implements										
Others (pl. specify)										
Total										
Livestock and fisheries										
Livestock production and management										
Animal Nutrition Management										
Animal Disease Management										
Others (pl. specify)										
Total										
Home Science										
Household nutritional security										
Drudgery reduction of women										
Others (pl. specify)										
Total										
Agricultural Extension										
Capacity Building and Group Dynamics										
Others (pl. specify)										
Total										
GRAND TOTAL	16	1125		1125				1125		1125

IV . Extension Programme

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory services	872	872	-	872
Diagnostic visits	214	214	-	214
Field day	06	118	-	118
Group discussions	10	256	-	256
Kisan gosthi	42	6284	-	6284
Film Show	56	1234	-	1256
Kisan mela under CRM	05	904	-	904
Exhibition	05	904	-	904
Scientists' visit to farmers field	268	624	-	624
Farmers visit to KVK	1786	1786	-	1786
Special day celebration	03	105	-	105
Mobilization of College and School Students	02	350	-	350
Farmers Scientist Interaction	02	100	-	100
Three days Training under CRM	02	50	-	50
World Honey Bee Day	01	34	-	34
Krashak Kalyan Diwas	01	84	-	84
World Soil Health day	01	74	-	74
Total	3276	13993	-	13993

Details of other extension programmes

Particulars	Number
Electronic media	-
Extension literature	16
News paper coverage	76
Technical articles	-
Technical bulletins	03
Technical reports	06
Radio talks	06
TV talks	12
Total	119

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marketing	Aware-ness	Other enterprise	Total
Badaun	Text only							
	Voice only	742	298			218	872	2130
	Voice & Text both							
	Total Messages	742	298			218	872	2130
Total farmers Benefitted		742	298			218	872	2130

V. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS

Number of KVKs organised Technology Week	Types of Activities	No. of Activities	Number of Participants	Related crop/livestock technology
	Diagnostic Practical's	-	-	-
	Distribution of Literature (No.)	-	-	-
	Distribution of Seed (q)	-	-	-
	Distribution of Planting materials (No.)	-	-	-

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

Production of seeds/Commercial 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	No. of KVKs
Cereals	Wheat 17-18	UP-2565, PBW-550	FS	456.30	708318	NSC	
	Urd	PU-31	FS	25.00	145828	NSC	
Total				481.30	854146		

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	No. of KVKs
Ornamental plants							01
Fodder	Napier grass			4000	-	-	
Seasonal Flowers Seedlings	Calendula Nastertium Holyhock Petunia Dogflower Ice plant Sweet William Sweet Allysum Dimorphotheca Conflower Paper flower Cineraria Mari gold			24500	-	Distributed to Primary schools & BRCs & CDO office and other line deptt.	
Bael		Commercial			6000.00	Auction	
Aonla		Commercial			19000.00	Auction	
Total				28500	25000.00		

VII. DETAILS OF SOIL, WATER AND PLANT ANALYSIS

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)	No. of KVKs
Soil & water	28	22	08	1400	01

VIII. SCIENTIFIC ADVISORY COMMITTEE

Name of KVK	Number of SACs conducted
Krishi Vigyan Kendra, Ujhani (Badaun)	01 dated - 05.03.2019

IX. NEWSLETTER

No. of KVKs	Number of issues of newsletter published

X. PUBLICATIONS

Category	Number of KVKs	Number
Research Paper/ Abstract	01	09
Technical bulletins/ Training Manual	01	03
Technical reports	01	06
Extension Literature	01	16

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

Zone	No. of KVKs	Activities conducted				
		No. of Training programmes	No. of Demonstrations	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)
III	01	02	-	-	100	03

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

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

Major area coverage under alternate crops/varieties

Crops	Area (ha)	Number of beneficiaries
Oilseeds		
Pulses		
Cereals		
Vegetable crops		
Tuber crops		
Total		

Farmers-scientists interaction on livestock management

State	Livestock components	Number of interactions	No. of participants
U.P.	04	08	400

Animal health camps organised

State	Number of camps	No. of animals	No. of farmers
Total			

Seed distribution in drought hit states

State	Crops	Quantity (kg)	Coverage of area (ha)	Number of farmers
Total				

Large scale adoption of resource conservation technologies

State	Crops/cultivars and gist of resource conservation technologies introduced	Area (ha)	Number of farmers
U.P.	Crops -		
	Technologies for water saving – Drip Irrigation system for fruits and vegetables crops, Sprinkler/Rain gun for all crops	24	09
	Technologies for resource conservation – Laser land leveling	182	196
Total		206	205

Awareness campaign

State	Meetings/Trainings		Gosthies		Field days		Farmers fair		Exhibition		Film show	
	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers
U.P.	12	450	16	723	01	34	05	904	05	904	03	86

XIII. DETAILS ON HRD ACTIVITIES

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

Name of the SAU	Title of the training programmes	No of programmes	No. of Participants	No. of KVKs involved
Total				

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

Title of the training programmes	No of programmes	No. of Participants	No. of KVKs involved
Total			

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

Each Zone should propose a minimum of three case studies with good action photographs (with captions on the backside of the hard copy of the photos) on the following topics

- Effective popularization on a larger scale of any one FLD technology and its role in transformation of district agriculture with respect to that particular crop or enterprise
- Performance of the end results of any one technology assessed, its refinement if any and its impact in district agriculture with respect to that crop or enterprise
- Effect of production and supply of seeds and planting material / animal breed / or bio-product and its impact on district agriculture with respect to that crop/ enterprise/ bio-product

The general format for preparing the above case studies are furnished below

TITLE

Introduction KVK intervention

Case Study

KVK Case Study of Broiler Farming

Back Yard poultry farming becoming popular for meat and egg production to meet out the cheapest source of protein for poor people : Budaun

Situation analysis / Problem statements : Sri. Gyan Singh, Village, Adholi, Post & Block : Ujhani, district Budaun, state, U.P. a farmers who was selected for demonstration. Earlier he is involved in rearing commercial broiler farming with capacity of 10000 broilers for more meat production with better feed efficiency and less mortality.

Plan, Implement and support : KVK, Budaun tries to make them aware regarding scientific knowledge about improved breeds, feeding and management. KVK has encouraged the farmer to established new farm, water sanitation, how to maintain hygiene, proper medication and vaccination schedule and balanced feeding to produce more meat with minimizing feed conversion ratio.

Output : Mr. Gyan Singh adopted all the activities which I have mentioned above. He provide balanced feed to attain 2 kg body weight at the age of 35 days with 1:1.6 FCR (feed conversion ratio) and adopted scientific technique to minimize mortality less than 2% at the age of 05 weeks.

Outcome : KVK Budaun conducted 62 demonstration in 28 villages during 2008-09 to 2018-19 at farmers field using some improved breeds of broiler from Central Avian Research Institute, Izzatnagar, Bareilly, CARI-VISHAL, CARI-DHANRAJA, CARI-DEVENDRA and some breeds from private sectors. The outcome of this demonstration motivated farming community to replace their old technique of broiler rearing and improve breeds of broiler chicks. Mr. Gyan Singh is very happy on improvement of their income, livelihood as set forth example for other in district Budaun. He himself is running 05 farms in different village with capacity of 50000 broiler per year.

Impact : Mr. Gyan Singh is becoming one of progressive and learned farmer for other with regards to popularization of scientific broiler farming. This technology help him for livelihood, empowerment and make him enthusiastic regards for commercial broiler farming. He is one of the progressive farmer after a becoming a part of KVK Badaun activities and get their effectiveness for his own development.



Bee Keeping – A profitable entrepreneur for rural youth

Situation Analysis – Sri. Amar Singh Vill.- Bhawanipur Block – Ujhani, Distt. Badaun is a marginal farmer. He is cultivating Wheat, Mustard, Mentha, Maize and Bajra in his land.

Plan, Implement & Support – Bee keeping is a cottage entrepreneur in which land less and marginal farmers, unemployed rural youth and farm women can adopt for additional income. It requires less money, labour and space. Along with production of honey, it also gives additional income by selling hive products i.e. wax, royal jelly, pollen, propolis and bee venom.

The KVK Badaun tried to make aware and encourage the farmers regarding importance of bee keeping with the help of practical training on Bee Keeping and their management. The scientist of KVK advised to him to start Bee keeping for additional income.

Output – Sri. Amar Singh adopted the technology and start bee keeping unit at his farm. He started the unit with 10 hives. The cost of unit is as under.

Established cost

10 Wooden hives @ Rs. 800/hive	= 8000.00
10 Honeybee colony @ Rs. 3000/colony	= 30000.00
Equipment cost	= 5000.00
Total	= 43000.00

Annual Expenditure

Artificial food, Comb foundation & Medicine	= 10000.00
Transportation expenses	= 5000.00
Labour (6 month @ 2000/Month)	= 12000.00
Total	= 27000.00

Outcome – The income from bee keeping unit as under

(i) Honey production (10 hive x 40 kg/ hive = 400 kg @120/kg)	= 48000.00
(ii) Wax production 3 kg/10 colonies @ 100/kg	= 300.00
(iii) Income from 5 additional Bee colonies @ 3000/colony	= 15000.00
Total	= 63300.00

Net profit = Rs. 63300-27000 = 36300.00

Mr. Fariduddin Muslim is getting Rs. 36300.00 additional net profit annually from the bee unit.

Impact – Mr. Fariduddin Muslim is becoming one of the progressive bee keeper in this area, other farmer also started the bee keeping by the motivation of Mr. Fariduddin Muslim. Bee keeping is empowering the people by self employment. More than 20 farmers also started the bee keeping entrepreneur after taking training from KVK, Badaun. Mr. Fariduddin Muslim is very happy with his bee keeping Entrepreneur.



XIV. AGRICULTURAL TECHNOLOGY INFORMATION CENTRE

A. Details on ATICs

S.N.	Name of the ATIC	Name of the Host Institute	Name of the ATIC Manager

B. Details on Farmer's visit

S.N.	Purpose of visit	Number of farmer's visited
01	Technology Information	
02	Technology Products	
03	Others if any pl. specify	

C. Facilities in the ATIC which are in operation

S.N.	Particulars	Availability (Please \checkmark mark)	Number of ATICs
01	Reception counter		
02	Exhibition / technology museum		
03	Touch screen Kiosk		
04	Cafeteria		
05	Sales counter		
06	Farmer's feedback register		
07	Others if any (please specify)		

D. Technology information provided

D.1. Details on technology information

S.N.	Information category	Number of ATICs	Total number of farmers benefitted	Category of information						
				Varieties / hybrids	Pest management	Disease management	Agro-techniques	Soil and water conservation	Post Harvest technology and Value addition	Animal Husbandry and fisheries
01	Kisan Call Centre / other Phone calls from farmers									
02	Video shows									
03	Letters received									
04	Letters replied									
05	Training to farmers / technocrats / students									

D.2 . Publications (Print & Electronic media)

S.N.	Particulars	Number sold	Revenue generated in Rs.	Number of farmers benefited
1	Books			
2	Technical bulletins			
3	Technology Inventory			
4	CDs			
5	DVDs			
6	Video films			
7	Audio CDs			
8	Others if any (please specify)			

E. Technology Products provided

S.N.	Particulars	Quantity	Unit of quantity	Value in Rs.	Number of farmers benefited
1	Seeds		Quintal		
2	Planting materials		Numbers		
3	Livestock		Numbers		
4	Poultry birds		Numbers		
5	Bio-products		Quintals		
6	Others pl. specify				

F. Technology services provided

S.N.	Particulars	Number of farmers benefited
1	Soil and water testing	
2	Plant diagnostics	
3	Details about the services to line Departments	
4	Others if any (please specify)	

XV. TECHNOLOGICAL BACKSTOPPING BY DIRECTORATES OF EXTENSION

States covered:

Number of Directorates of Extension:

A. Details on Directors of Extension

S.N.	Name of the SAU	Name of the Director of Extension	Number of KVKs for which technological backstopping is provided					
			SAU/CAU	DU	ICAR	NGO	SDA	Others (pl. specify)
	S.V.P.U.A.&T., Meerut (U.P.)	Dr. Babu Ram						
			✓		✓			

B. Workshops / meetings organized

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

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

S.N.	Particulars	Number of visits
1	SAC meetings	01
2	Field days / Kisan Mela	02
3	Workshops / seminars	-
4	Technology week	-
5	Training programmes	-
6	Others pl. specify (Visit of Hon'ble V.C, Director, Comptroller, Director Sugarcane Lucknow)	04

D. Overseeing of KVKs activities

S.N.	Particulars	Number of fields visited	Major observations / remarks	Major suggestions given
1	On Farm Trials			
2	Front Line Demo.	02		
3	ICAR audit team			

E. Publication on Technology inventory

S.N.	Particulars	Number
1	Directorates published the technological inventory	
2	Directorates constantly updating the technological inventory	

F. Technological Products provided to KVKs

S.N.	Major technologies provided	Number of KVKs
1	Seeds	
2	Planting materials	
3	Bio-products	
4	Livestock breed	
5	Livestock products	
6	Poultry breed	
7	Poultry products	
8	Others pl. specify	

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