KRISHI VIGYAN KENDRA, GAUTAM BUDH NAGAR

ANNUAL PROGRESS REPORT
(APRIL, 2018 – MARCH, 2019)

APR SUMMARY

1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	68	1160	200	1360
Rural youths /Vocational	16	130	30	160
Extension functionaries	33	520	140	660
Sponsored Training	2	100	-	100
Vocational Training	-	-	-	-
Total	**119**	**1910**	**370**	**2280**

2. Frontline demonstrations

Enterprise	No. of Farmers	Area (ha)	Units/Animals
Oilseeds	-	-	-
Pulses (CFLD)	36	13.4	-
Cereals (Including CRM)	35+15=50	12.0+7.0=19.0	-
Vegetables	10	2.0	-
Other crops (Kitchen Garden05/.05) + Greengram (02/0.6)	7	0.65	-
Hybrid crops	-	-	-
Total	**103**	**35.05**	**-**
Livestock & Fisheries	-	-	-
Other enterprises	25	4.0	-
Total	**25**	**4.0**	**-**
Grand Total	**128**	**39.05**	**-**

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	04	04	16
Livestock	-	-	-
Various enterprises	03	03	15
Total	**07**	**07**	**31**
Technology Refined			
Crops	-	-	-
Livestock	-	-	-
Various enterprises	-	-	-
Total	-	-	-
Grand Total	**07**	**07**	**31**

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	939	8240
Other extension activities	35	
Total	**974**	**8240**

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						
		Crop	Live-stock	Weather	Marke-ting	Aware-ness	Other enterprise	Total
GB Nagar	Text only	32	08	-	06	38	52	136
	Voice only	112	22	08	20	42	46	250
	Voice & Text both	-	-	-	-	-	-	-
	Total Messages	**144**	**30**	**8**	**26**	**80**	**98**	**386**
	Total farmers Benefitted	**144**	**30**	**8**	**26**	**80**	**98**	**386**

6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q) (Commercial)	50.65	1,23,092.00
Planting material (No.)	20800	5200.00
Bio-Products (kg)	-	-
Livestock Production (No.)	-	-
Fishery production (No.)	-	-

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil	-	-
Water	-	-
Plant	-	-
Total	**-**	**-**

8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	02
2	Conferences	03
3	Meetings	10
4	Trainings for KVK officials (attended)	12
5	Visits of KVK officials	07
6	Book published	01
7	Training Manual	04
8	Book chapters	-
9	Research papers	02
10	Lead papers	-
11	Seminar papers	-
12	Extension folder	05
13	Proceedings	03
14	Award & recognition	02
15	On going research projects	01

DETAIL REPORT OF APR - 2018-19

1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail
	Office	FAX	
Krishi Vigyan Kendra, Chholas, G.B. Nagar	08178365872	-	gbnagarkvk@gmail.com mayankrai71@gmail.com

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

Address	Telephone		E-mail
	Office	FAX	
SVPUA&T, Meerut	0121-2888511 Mo- 09412923199	0121-2888511	deesvpuat2014@gmail.com

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Mayank Kumar Rai	-	08178365872	mayankrai71@gmail.com

1.4. Year of sanction: June, 2005

1.5. Staff Position (as on 30th March, 2019)

SN	Sanctioned post	Name of the incumbent	Design-ation	Discipline	Pay Scale (Rs.)	Present Total basic (Rs.)	Date of joining	Perman-ent /Temp-orary	Category (SC/ST/ OBC/ Others)	Mobile no.	Age	Email id
1	Head	**Dr. Mayank Kr Rai**	Prof. & Head	Entomology	37400-67000	59950	28.06.08	Regular	Others	08178365872	48	mayankrai71@gmail.com
2	Subject Matter Specialist	Er. Madhvendra Singh	Asso. Dir. Ext.	Ag. Engg.	37400-67000	62420	20.11.13	Regular	Others	09457363443	57	singhm1501@gmail.com
3	Subject Matter Specialist	Dr. Vipin Kumar	Asso. Dir.	Agronomy	15600-39100	40010	25.04.18	Regular	Others	9013389751	46	drv_kumar1973@ rediffmail.com
4	Subject Matter Specialist	Dr. Laxmi Kant	Asst Prof. / SMS	Pl. breeding	15600-39100	30860	01.01.09	Regular	Others	09457085593	52	laxmikant1965@yahoo.co.in
5	Subject Matter Specialist	Smt. Vinita Singh	Asst Prof. / SMS	Home Science	15600-39100	29070	11.07.08	Regular	Others	09717091158	49	write2vinita1@gmail.com
6	Subject Matter Specialist	Dr. Sheesh Pal Singh	Asst Prof. / SMS	Horticulture	15600-39100	31100	07.08.12	Regular	SC	09410849455	44	singhsp14@gmail.com
7	Subject Matter Specialist	**VACCANT**										
8	Programme Assistant	Sh. Kunvar Ghanshyam	Training Assistant	Animal Husbandry	7th Pay	76500	05.07.14	Regular	OBC	09412120240	51	kunwarg2011@gmail.com
9	Computer Programmer	Sh. Ashu Arora	Program Assistant	Computer Science	7th Pay	70000	04.03.06	Regular	Others	08010907124	46	aarora.kvkgbn@yahoo.co.in
10	Farm Manager	**VACCANT**										
11	Accountant / Superintendent	Smt. Rajesh	Assistant	-	7th Pay	36500	20.06.17	Regular	Others	09058699924	59	
12	Stenographer	Sh. Rakesh Kumar	Jr. Steno	-	7th Pay	53600	06.06.06	Regular	OBC	09319367470	51	
13	Driver	Mohd. Shokin	Driver	-	7th Pay	32300	01.08.17	Regular	Others	09058541050	47	
14	Driver	Sh. Sandeep Kumar	Driver	-	7th Pay	29600	30.07.07	Regular	SC	09412833537	39	
15	Supporting staff	**VACCANT**										
16	Supporting staff	Sh. Praduman	Attendant	-	7th Pay	24900	27.02.08	Regular	OBC	09675589243	42	

1.6. Total land with KVK (in ha) : 15.04 ha

S. No.	Item	Area (ha)
1	Under Buildings	1.0
2.	Under Demonstration Units	0.015
3.	Under Crops	14.025
4.	Orchard/Agro-forestry	
5.	Others (specify)	

1.7. Infrastructural Development:

A) Buildings

SN	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expend-iture (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	-	-	-	Oct, 06	510	Work already completed.
2.	Farmers Hostel	ICAR	-	-	-	Oct, 06	300	
3.	Staff Quarter(6)	ICAR	-	-	-	Oct, 06	400	
4.	Demonstration Units (2)	ICAR	-	-	-	Oct, 06	160	
5.	Fencing	ICAR	-	-	-	Oct, 06	2000 r.m	
6.	Rain Water harvesting system	ICAR	-	-	-	-	-	
7.	Threshing floor	ICAR	-	-	-	Oct, 06	300	
8.	Farm godown	ICAR	-	-	-	Oct, 06	60	

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total Km. Run	Present status
Jeep (M & M) Bolero	2006	472210.00	239732	Not fit for use as per NGT directions for NCR
Tractor with implements	2006	360000.00	2031	Working

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Computers (03)	2017	-	Working
Laptop (01)	2017	-	Working
Laptop (01)	2013	-	Working
Chart, Poster & CD	2008	8500.00	Not Working
LCD projector (01)	2007	68125.00	Working
Computer with MFP (01)	2006	67000.00	Poor condition

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

SN	Date	Name and Designation of Participants	Salient Recommendations	Action taken
1.	16.12.2017	1. Dr. Gaya Prasad, Hon'ble Vice Chancellor, SVPUA&T, Meerut 2. Dr. S.K. Sachan, Dir. Ext., SVPUA&T, Meerut 3. Dr. Mohan Lal, Prof. & Head, Agronomy, SVPUA&T, Meerut 4. Dr. Divya Trivedi, Veterinary Officer, Kalonda, GB Nagar 5. Dr. Tanvi Sharma, PPO, GB Nagar 6. Sh. K.P. Singh, DHO, GB Nagar 7. Sh. Jagpal Singh, Secretary, FARMAR NGO 8. Dr. Mayank Kumar Rai, Secretary/ Head, KVK, GB Nagar 9. Er. Madhvendra Singh, Assoc. Dir. Ag. Engg., KVK, GB Nagar 10. Dr. D.K. Sachan, SMS, Agronomy, KVK, GBNagar 11. Dr. Laxmi Kant, SMS, Plant Breeding, KVK, GBNagar 12. Smt. Vinita Singh, SMS, Home Sc., KVK, GB Nagar 13. Dr. Sheesh Pal Singh, SMS, Horticulture, KVK, GBNagar 14. Sh. Kunwar Ghanshyam, Trg. Asstt (AH), KVK, GBNagar 15. Sh. Suraj Bhan, Trg. Asstt.(Agronomy), KVK, GBNagar 16. Sh. Ashu Arora, Prog. Asstt (Computer), KVK, GB Nagar 17. Sh. Rakesh Kumar, Jr. Steno, KVK, GB Nagar 18. Mohd. Shokin, Driver, KVK, GB Nagar 19. Sh. Sandeep, Driver, KVK, GB Nagar 20. Sh. Praduman, Attendent, KVK, GB Nagar 21. Sh. Vegraj, Progressive Farmer, GB Nagar 22. Sh. Maan Singh Bhati, Progressive Farmer, GB Nagar	1. Dr. Gaya Prasad, Hon'ble V.C., SVPUA&T, Meerut suggested that a project for development of farm may be submitted to Rastriya Krishi Vikas Yojna (RKVY) to finance the project.	1. A Project on development of KVK farm, amount Rs 70.00 lakh has been submitted to Rastriya Krishi Vikas Yojna (RKVY) for financial help during the year 2017-18.
			2. Dr. Gaya Prasad, Hon'ble V.C., SVPUA&T, Meerut also suggested that a letter may be written to ICAR for grant of money for repairing of toilets of administrative building of KVK	2. The same has been conveyed to Director, ICAR-ATARI, Kanpur.
			3. Dr. Gaya Prasad, Hon'ble V.C., SVPUA&T, Meerut also directed the scientist of KVK to present progress report and action plan before the SAC in holistic way covering result along with impact.	3. The same will be followed during the presentation of progress report and action plan before the SAC
			4. Dr. S.K. Sachan, Dir. Ext. SVPUA&T, Meerut suggested that, at the centre there should be a demonstration unit of Nutritional Garden and Crop Cafeteria in working condition.	4. Layout plan of the Nutritional Garden and Crop Cafeteria has been worked out.
			5. Dr. S.K. Sachan, Dir. Ext. SVPUA&T, Meerut further suggested that the land which is suitable for crop production should only be consider under the farm crop production plan.	5. The proposal will be submitted as per direction.
			6. Dr. S.K. Sachan, Dir. Ext. SVPUA&T, Meerut directed that the budget granted by ICAR for mandatory activities not be fully utilized.	6. It will done as per the direction.
			7. Dr. Tanvi Sharma, PPO, GB Nagar suggested that bio-control measures should be used more and more for control of disease and pests in vegetables	7. The FLDs, training programmes on this aspects have already been conducted by the KVK.

		23. Sh. Maninder, Progressive Farmer, GB Nagar 24. Sh. Sanjeev Kr. Premi, Progressive Farmer, GB Nagar 25. Sh. Vishan Pal Singh, Progressive Farmer, GB Nagar 26. Sh. Veerendra Singh, Farmer, GB Nagar 27. Sh. Brijesh, Farmer, GB Nagar 28. Sh. Dal Chandra, Farmer, GB Nagar 29. Sh. Jayant Teotia, Farmer, GB Nagar 30. Sh. Rajeev Kumar, Farmer, GB Nagar 31. Sh. Har Swaroop, Farmer, GB Nagar 32. Sh. Pradeep Kumar, Farmer, GB Nagar 33. Sh. Santosh Sharma, Farmer, GB Nagar 34. Sh. Ajay Kumar, Farmer, GB Nagar 35. Sh. Sonu Prakash, Farmer, GB Nagar 36. Sh. Satpal Singh, GB Nagar	8. Dr. Divya Trivedi, V.O., suggested that vaccination programmes for cattle's should be conducted twice in a year in association with veterinary dept.	8. It will be conducted in association with district veterinary dept.
			9. Sh. Jagpal Singh, Secretary, FARMER NGO suggested that the KVK should work in coordination with other departments of the district.	9. The KVK already work in coordination with other department of the district.
			10. Dr. Mohan Lal, Prof. & Head, Agronomy, SVPUA&T, Meerut suggested that the scientist of the KVK adopt villages of the district.	10. All scientist of the KVK has already adopted villages.
			11. Sh. Man Singh Bhati, Progressive farmer suggested that to grant the right price of the produce to farmers their should be formed a producer to consumer net work.	11. The KVK will help in such a initiative of the farmers.
			12. Sh. K.P. Singh, DHO, GB Nagar suggested that the problems being reported in old orchards should be solved by the scientist after seeing the problem at the spot.	12. The Scientist always visit the field if the problem is complex.

Scientific Advisory Committee Meeting Photographs

2. DETAILS OF DISTRICT (2018-19)

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

SN	Farming system / enterprises
1	Crop Production + Dairy
2	Crop Production + horti (Fruit)
3	Crop Production + horti (Vegetable)
4	Crop Production + Backyard poultry
5	Piggery
6	Fisheries

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

SN	Agro-climatic Zone	Characteristics
1	Western Plain Zone	Sandy loam and loamy soil texture, canal and tube well irrigation, medium rainfall, sub-tropical climate, rice-wheat crop rotation crop production based dairy farming system.

SN	Agro-ecological situation	Characteristics
1	AES – I	**Soil type** - Sandy loam soil **Crop rotation** - Rice-Wheat, Jawar (fodder) -wheat, Sugarcane-Ratoon-wheat, Jawar(fodder) -lentil, Vegetables **Orchard –** Mango, Guava **Mixed farming system**
2	AES – II	**Soil type** - Sandy loam, Loam soil **Crop rotation** - Rice-wheat, Jawar(fodder)-wheat, Sugarcane-Ratoon-wheat, Jawar(fodder)-lentil, Vegetables **Mixed farming system** Some area water logged

2.3 Soil type/s

SN	Soil type	Characteristics	Area in (ha)
1	Sandy loam	Sand percentage medium and water holding capacity medium.	37880
2	Loam	Soil fertility status and water holding capacity is high	100937

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

Kharif, 2018

SN	Crop	Area (ha)	Production (Metric ton)	Productivity (q/ha)
1	Rice	15366	37498	25.33
2	Maize	442	237	5.36
3	Bajra	8304	9719	11.70
4	Urd	1	1	5.87
5	Moong	3	12.28	4.14
6	Arhar	3497	26228	7.50

Rabi 2018-19

SN	Crop	Area (ha)	Production (Metric ton)	Productivity (q/ha)
1	Wheat	43503	190	41.76
2	Barley	963	3500	36.34
3	Gram	-	-	-
4	Pea	37	50	15.15
5	Lentil	7	9	12.86
6	Toria	3553	3442	10.27
7	Mustard	236	379	16.06

2.5. Weather data 2017-18 (up to 31.12.2016) -

Month	Rainfall (mm)	Temperature ^{0} C		Relative Humidity (%)
		Maximum	Minimum	
April, 2017	66.00	-	-	-
May, 2017	4.00	-	-	-
June, 2017	67.00	-	-	-
July, 2017	138.00	-	-	-
August, 2017	174.00	-	-	-
September, 2017	0.00	-	-	-
Total Kharif	**449.00**			
October, 2017	0.00	-	-	-
November, 2017	0.00	-	-	-
December, 2017	0.00	-	-	-
January, 2018		-	-	-
February, 2018		-	-	-
March, 2018		-	-	-
Total Rabi	**449.00**			

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

Category	Population	Production	Productivity
Cattle			
Crossbred	15196	121568	8.00
Indigenous	16398	106587	5.50
Buffalo	272847	2319199	7.30
Sheep			
Crossbred	3770	4713	1.20
Indigenous	898	674	0.75
Goats	18176	327168	18.0
Pigs			
Crossbred	808	44440	51
Indigenous	7369	359788	44.0
Poultry			
Improved	22233	24456	1.20
Category	**Population**	**Production**	**Productivity**
Inland	-	3735 q	25/ha/year

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

Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust area
Dadri	Dadri	Chhaulas Nai basti Saithali Veerpura Nagla-Nainsukh Palla Luharli Chaysa Bambabad Akilpur Basantpur Milak Khandera Khursadpura	Rice Wheat Jawar Mustard Lentil Vegetables Orchards Dairy Poultry	• Lower yield of cereals due to imbalanced use of fertilizer and heavy weed infestations. • In pulses pod borer's problem and wild cows. • In oilseeds nutritional problems (Sulphor deficiency) • Wilt in guava orchard • Alternate bearing & pest problem in mango orchard • In milch animals repeat breeding • Worm's infestation	• IPNM • IWM • IPM • Guava orchard management with respect to wilt. • Mango orchard management • Balanced animal feeding • De-worming
Sadar	Bisrakh	Duryai Thapkheda Dujana Moihayapur	Rice Wheat Jawar Mustard Lentil Vegetables Orchards Dairy Poultry	• Lower yield of cereals due to imbalanced use of fertilizer and heavy weed infestations. • In pulses pod borer's problem and wild cows. • In oilseeds nutritional problems (Sulphor deficiency) • Wilt in guava orchard • Alternate bearing & pest problem in mango orchard • In milch animals repeat breeding • Worm's infestation	• IPNM • IWM • IPM • Guava orchard management with respect to wilt. • Mango orchard management • Balanced animal feeding • De-worming

Jewar	Dankor	Parsol Bilaspur Cheersi Bagpur Cheetee Dadupur Atta- Fatehpur	Rice Wheat Jawar Mustard Lentil Vegetables Orchards Dairy	• Lower yield of cereals due to imbalanced use of fertilizer and heavy weed infestations. • In pulses pod borer's problem and wild cows. • In oilseeds nutritional problems (Sulphor deficiency) • Wilt in guava orchard • Alternate bearing & pest problem in mango orchard • In milch animals repeat breeding • Worm's infestation	• IPNM • IWM • IPM • Guava orchard management with respect to wilt. • Mango orchard management • Balanced animal feeding • De-worming
	Jewar	Chakvee- rampur Dhansia Dastampur Mahmadpur- Jadaun Cheeti Astoli	Rice Wheat Jawar Mustard Lentil Vegetables Orchards Dairy	• Lower yield of cereals due to imbalanced use of fertilizer and heavy weed infestations. • In pulses pod borer's problem and wild cows. • In oilseeds nutritional problems (Sulphor deficiency) • Wilt in guava orchard • Alternate bearing & pest problem in mango orchard • In milch animals repeat breeding • Worm's infestation	• IPNM • IWM • IPM • Guava orchard management with respect to wilt. • Mango orchard management • Balanced animal feeding • De-worming

2.8 Priority / thrust areas

Crop/Enterprise	**Thrust area**
Rice/Wheat	Integrated Plant Nutrient Management in Rice-wheat cropping.
Rice/Wheat	Integrated Weed Management in Rice-wheat cropping.
Pulse	Increase area under the kharif and rabi pulses.
Fodder	Round the year green fodder production
Cereals	Integrated Pest Management in crops.
Fruits	Rejuvenation of old mango orchards and mgt. of guava orchards.
Vegetables	Organic Vegetables farming
Dairy	To reduce repeat breeding in buffaloes & cows and calf mortality
Poultry	Promotion of Backyard poultry.
Horticulture	Introduction of aromatic & medicine plants.
Kitchen Garden	Nutritional kitchen gardening.
Value Addition	Value addition in fruits and vegetables.

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.							

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

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

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) *

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.							

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**
IFS System(Kharif-Rabi-Zaid) - Livestock etc.							

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

Note- Same format may be used for OFT.

3. TECHNICAL ACHIEVEMENTS

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

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	07	51	31	38.05	39.05	200	128

Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)					Extension Activities			
3					4			
Number of Courses			Number of Participants		Number of activities		Number of participants	
Clientele	Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
Farmers	76	68	1520	1360	**855**	**974**	**10255**	**8240**
Rural youth	16	16	160	160				
E.F.	33	33	660	660				
Sponsored		2		100				
Total	**125**	**119**	**2340**	**2280**				

Seed Production (q)			Planting material (Nos.)		
5			6		
Target	Achievement	Distributed to no. of farmers	Target	Achievement	Distributed to no. of farmers
200	50.65	-	20000	20800	80

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
INM	Paddy	Effect of sulphor and micronutrient on grain yield of rice	1	5
Varietal Evaluation	Tomato	Assessment of HYV of tomato	1	3
Varietal Evaluation	Bottle guard	Assessment of HYV of Bottle guard	1	3
Varietal Evaluation	Paddy	To assess the adoptability of newly released scented paddy variety for higher yield	1	5
Total			**04**	**16**

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
Total				

Summary of technologies assessed under various enterprises by KVKs

Thematic areas	Enterprise	Name of the technology assessed	No. of trials	No. of farmers
Farm machinery	Agril. Engineering	To assess the effect of puddling in grain yield of rice	01	05
Reduce time and energy	H.Sc.	To reduce time and energy by the use of revolving stool while milking animal	01	05
Value addition	H.Sc.	Preparation of mango squash	01	05
Total			**03**	**15**

I.B. TECHNOLOGY REFINEMENT – N/A

I.C. TECHNOLOGY ASSESSMENT IN DETAIL

Crop Production

I.C.1. Effect of sulphor and micronutrients on grain yield of rice Kharif 2018 *(INM)*

Problem definition: *Low yield of rice due to sulphur and micronutrients deficiency.*
Technology Assessed: *Assessment of Sulphur and micronutrients on basmati rice.*

An on farm trial under Crop Production discipline entitled *"***Effect of sulphor and micronutrients on grain yield of rice***"* has been conducted through application of balance fertilization of macro and micro nutrients.

Table.

Technology Option	*No. of trials*	*Yield (qt./ha)*	*Increase in yield (%)*	*Net Return (Rs./ha)*	*B:C Ratio*
T_1 - Farmers practice {NPKZn (120:60:60:25)}	***05***	38.1	-	63585.00	1.80:1
T_2 - NPKS + (Zn10% + Mn2% + Cu 0.5% + Bo 0.5% +Fe 5%). 120:60:60 +30 +25 kg Micronutrient mixture		42.5	11.50	70875.00	1.99:1
T_3 - NPKS + (Zn10% + Mn2% + Cu 0.5% + Bo 0.5% +Fe 5%). 120:60:60 +30 +50 kg Micronutrient mixture		44.0	15.54	73500.00	2.05:1

Horticulture

I.C.2. Assessment of high yielding varieties of tomato (Rabi, 2018-19) *Varietal Evaluation*

Problem definition **:** *Low production of tomato due to use of local varieties.*

Technology Assessed **:** *Evaluation of newly hybrid variety of tomato.*

An on farm trial under Horticulture discipline entitled *"Evaluation of newly hybrid variety of tomato"* has been conducted by introducing new tomato variety US-2853 in comparison of local variety HS-1 as farmers practice.

Table.

Technology Option	*No. of trials*	*Yield (qt./ha)*	*Increase in yield (%)*	*Net Return (Rs./ha)*	*B:C Ratio*
T_1 - *Farmer's practice (Local variety- HS-1)*	*03*	350	-	361500.00	7.17
T_2 - *SIRI-255*		405	15.71	425200.00	7.99
T_3 - *US-2853*		435	24.28	459500.00	8.35

Note: Tomato variety (US-2853) were superior over theSIRI-255 and farmer practice (Local variety – HS-1)

Photographs of Tomato at farmers field

I.C.3. Assessment of high yielding varieties of bottle gourd (Zaid, 2019) *Varietal Evaluation*

Problem definition: *Low yield of bottle gourd due to use of local varieties.*
Technology Assessed: *Assessment of high yielding variety of bottle gourd*

Table.

Technology Option	*No. of trials*	*Yield (qt./ha)*	*Increase in yield (%)*	*Net Return (Rs./ha)*	*B:C Ratio*
T_1 - *Farmer's practice (Desi variety)*	*03*	Result awaited			
T_2 - *Pusa Naveen*					

Home Science

I.C.4. To reduce time and energy by the use of revolving stool while milking animal (Zaid 2019)

Problem definition: *Extra fatigue causes poor work efficiency and more physical stress.*

Technology Assessed: *Milking an animal by sitting over revolving stool.*

An On Farm Trial under home science disciple has been conducted to reduce drudgery while mulching of animals by using revolving stool in compared with traditional sitting position while milching. On the basis of recorded data, the technology was found highly acceptable and significantly reduced physical stress, bio-mechanical stress and improved work out put.

Table*.*

Incidence of Muscular/skeletal problem during milking animals with Existing (squat position)and Improved Technology (Revolving Stool in sitting Position)

1. Physical Stress

Body Parts	Existing Technology (Milking of animal in squat Position) **(Total No. of Respondent = 5)**					Improved Technology (Milking of animal by sitting over Revolving stool) **(Total No. of Respondent = 5)**				
	Very Severe Pain	Severe Pain	Moderate Pain	Mild Pain	Low Pain / No Pain	Very Severe Pain	Severe Pain	Moderate Pain	Mild Pain	Low Pain / No Pain
Neck Pain	-	-	4	1	-	-	-	1	-	4
Shoulder Pain	-	-	3	2	-	-	-	-	2	3
Back Pain	1	3	1	-	-	-	-	-	4	1
Thigh Pain	2	2	1	-	-	-	-	-	2	3

2. Bio Mechanical

Opinion	Existing (Total No. of Respondent = 5)		Improved (Total No. of Respondent = 5)	
	Yes	No	Yes	No
Maintain comfortable body Posture	-	5	5	-
Twisting of trunk easily while doing the activity	1	4	5	-
Able to synchronize the movement of animal	2	3	4	1

3. Work output

Opinion	Existing (Total No. of Respondent = 5)		Improved (Total No. of Respondent = 5)	
	Yes	No	Yes	No
Tool is effective as per time cost	NA	NA	3	2
Tool is effective in improving the production efficiency	NA	NA	2	3

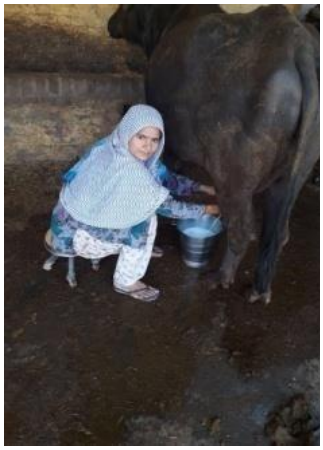
4. Tool Factors

Opinion	Existing (Total No. of Respondent = 5)		Improved (Total No. of Respondent = 5)	
	Yes	No	Yes	No
The milking activity is light enough while using the revolving stool	NA	NA	5	-
Height of the stool needs to be adjusted to the working height	NA	NA	4	1
Easy to maintain or repair	NA	NA	5	-
Revolving stool is stable while sitting and performing the activity of milking	NA	NA	4	1

5. Field acceptability

Opinion	Existing (Total No. of Respondent = 5)		Improved (Total No. of Respondent = 5)	
	Yes	No	Yes	No
Improved tool is a good replacement to the existing work practice	NA	NA	5	-

Milking an animal by sitting over revolving stool photogrpahs



I.C.5. Preparation of mango squash (Value addition) (Kharif 2018)

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

Technology Assessed: *Mango squash preparation by using preservative*

An On Farm Trial was conducted for value addition by mango squash preparation by using preservative (KMS) in view to increase the farmers income as compared to direct selling ripe mango on lower prices in local market. The recommended technology of mango squash preparation proved economic viable and increased farmer's income with 2.56 cost benefit ratio.

Table.

Technology Option	*No. of trials*	*Yield (Liter/kg of mango)*	*Increase in yield (%)*	*Net Return (Rs./kg)*	*B:C Ratio*
T_1 - Farmer Practice (No value addition of mango, except pickle making)	*05*	-	-	-	-
T_2 - Squash making from Mango		3.16	-	289.4	2.56:1

B:C ratio calculated as on behalf of

Ripe mango @ Rs. 121.8/kg
Sugar @ Rs. 47.6/kg
Lemon @ Rs. 10.2/100 gm
Other expenditure (Gas Flame + KMS) = Rs 5.00

Total Cost of = Rs. 184.6/farm women

Prepared amount of mango squash = 3.16 litre/unit
Sale price of mango squash as per market = Rs. 150/litre
Gross income Rs. 474/unit
Net Income = Rs. 474.00 – Rs. 184.60 = Rs. 289.40
BC Ratio = 474/184.6 = 2.56:1

I.C.6. To assess the effect of puddling in grain yield of rice (A.E.)

Problem definition: *Low water productivity of paddy due to improper puddling.*

Technology Assessed: *Puddling through Rotavator and Harrow*

Improper puddling is a major cause of low water productivity in paddy in the district. An on farm trial under Agriculture Engineering discipline was conducted with recommendation of rotavator and harrow for puddling in comparision of farmers practice i.e. transplanting by contract labourer. As per recorded data both rotavator and harrow resulted increased yield 11.94 and 9.35 respectively.

Table - *Effect of various sowing methods on yield of rice.*

Technology Option	*No. of trials*	*Yield (qt./ha)*	*Increase in yield (%)*	*Net Return (Rs./ha)*	*B:C Ratio*
T_1 - *Farmer's practice - transplanting by contract laborer*	*05*	*38.5*	-	*27000.00*	*1.29:1*
T_2 – *Puddling through Rotavator*		*43.1*	*11.94*	*40800.00*	*1.43:1*
T_3 – *Puddling through harrow*		*42.5*	*9.35*	*39000.00*	*1.41:1*

- *B:C Ratio of the Rotavator as well as the puddling through harrow is greater than the check. Hence both the technologies are beneficial.*

I.C.7. To assess the adoptability of newly released scented rice variety for higher yield (PB)

Problem definition: *Low yield of old scented rice variety.*

Technology Assessed: E*valuation of newly released basmati varieties*

Newer varieties Pusa Basmati 2511 and Pusa Basmati 1509 were introduced among farmers by conducting an on farm trial in comparison of traditional sowing of Pusa 1121 as farmes practice. It was observed that both newly introduced variety proved better in terms of net returns and cost benefit ratio. Results are as under.

Table Performance of Basmati Rice Varieties

Technology Option	***No. of trials***	***Yield (qt./ha)***	***Increase in yield (%)***	***Net Return (Rs./ha)***	***B:C Ratio***
T_1 - *Farmers Practice (Variety- Pusa 1121)*	*05*	*42.5*	*-*	*39000.00*	*1.41*
T_2 *– Pusa Basmati 2511*		*47.4*	*11.53*	*44220.00*	*1.46*
T_3 - *Pusa Basmati 1509*		*44.5*	*4.70*	*36100.00*	*1.38*

- *Rice variety Pusa Basmati 2511 is superior over the Pusa Basmati 1509 and farmer's practice (Pusa Basmati-1121).*

II. FRONTLINE DEMONSTRATION

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

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

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	Rice	INM	Use of balance fertilizer (Daincha (GM) + *:60:60:25) * Rest of nitrogen through urea upto 120 kg.	Demonstration, Training and Gosthi	18	160	48.0
2	Rice	IPM	Use of Carbofuron @ 25 kg/ha for the control of Root Knot Nematode	Demonstration, Training and Gosthi	35	175	80.0
3	Rice	Varietal Performance	Variety Pusa 1612	Demonstration, Training and Gosthi	30	200	90.0
4	Wheat	Plant population	Sowing of wheat by ferti seed drill	Demonstration, Training and Gosthi	32	350	200.0
5	Bottlegourd	Varietal performance	Variety – Pusa Naveen	Demonstration, Training and Gosthi	16	40	21.0
6	Cauliflower	Browning	Use of boron	Demonstration, Training and Gosthi	06	18	8.0
7	Onion	Varietal Performance	Use of improved variety	Demonstration, Training and Gosthi	04	12	8.0
8	Okra	Varietal Performance	Use of improved YVMV resistant variety- Pusa A4	Demonstration, Training and Gosthi	18	100	40.0
9	Seasonal vegetables	House hold food security	**Kharif –**cucumber, pumpkin, bitterguard, spongguard, bottleguard **Rabi –** Spinach, Fenogreek, radish, carrat, tomato, brinjal, coriander, cabbage **Zaid -** cucumber, pumpkin, bitterguard, spongguard, bottleguard	Demonstration, Training and Gosthi	22	68	6.0
10	Wheat	Farm machinery	Seeds sowing by Ferti Seed Drill	Demonstration, Training and Gosthi	14	70	18.0
11	Paddy	Farm machinery	Popularization and importance of laser leveler	Demonstration, Training and Gosthi	22	82	22.0

b. Details of FLDs implemented during 2018-19

SN	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Black gram	ICM	Package of agronomy practices for max. production	Kharif 2018	10.0	10.0	-	25	25	-
2	Lentil	ICM	Package of agronomy practices for max. production	Rabi 2018-19	10.0	3.4	2	9	11	-
3	Paddy	INM	Balanced fertilizer(Daincha (GM) + *:60:60:25) * Rest of nitrogen through urea upto 120 kg.	Kharif 2018	2.0	2.0	2	08	10	-
4	Wheat	INM	Effect of secondary and micronutrient on wheat	Rabi 2018-19	2.0	2.0	-	05	05	-
5	Paddy (PB)	Varietal Evaluation	Variety Pusa Basmati 1612	Kharif 2018	4.0	4.0	-	10	10	-
6	Wheat (PB)	Varietal Evaluation	Variety HD-3086	Rabi 2018-19	4.0	4.0	-	10	10	-
7	Carrot	Varietal Performance	Pusa Rudhira	Kharif, 2018	1.0	1.0	02	03	05	
8	Okra	Varietal Performance	Arka Anamika	Zaid, 2019	1.0	1.0	02	03	05	
9	Ferti seed drill (AE)	Sowing methods	Sowing of wheat through ferti seed drill	Rabi 2018-19	4.0	4.0	-	10	10	-
10	Nutritional Kitchen Garden (H.Sc.)	House hold food security	Growing seasonal vegetables, fruits in the kitchen garden (100m^2)	Kharif 2018 Rabi 2018-19 Zaid 2019	0.05	0.05	-	5	5	-
11	Mixed Pickle (HSc.)	Value addition	Pickle making	Zaid 2019	-	-	-	15	15	-
12	Wheat	CRM	Mechanization for field preparation of wheat after sugarcane	Rabi 2018-19	-	4.2	2	6	8	-
13	Wheat	CRM	Sowing of wheat through zero till ferti seed drill	Rabi 2018-19	-	2.8	1	6	7	-
14	Green gram	CRM	Sowing of green gram through zero till ferti seed drill after mustard harvesting	Zaid 2019	-	0.6	2	-	2	

Details of farming situation

SN	Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing /application date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
					N	P	K					
1	Black gram	Kharif 2018	Irrigated	Loam & sandy loam	Medium	Medium	Medium	Sorghum	02.08.18 to 19.08.18	04.11.18 to 07.11.18	135	16
2	Lentil	Rabi 2018-19	Irrigated	-do-	Low	Medium	Medium	Paddy	24.11.18 to 28.11.18	08.04.19 to 14.04.19	24	05
3	Paddy	Kharif 2018	Irrigated	-do-	Low	Medium	Medium	Wheat	20-30.07.18	11-18.11.18	262	42
4	Wheat	Rabi 2018-19	Irrigated	-do-	Low	Medium	Medium	Paddy	02-12.12.18	15-21.04.19	30	06
5	Paddy (PB)	Kharif 2018	Irrigated	Clay Loam	Low	Medium	Medium	Wheat	20-30.06.18	11-18.10.18	246	38
6	Wheat (PB)	Rabi 2018-19	Irrigated	Loam and sandy loam	Low	Medium	Medium	Paddy	18-22.11.18	15-20.04.19	30	06
7	Carrot	Kharif, 2018	Irrigated	-do-	Low	Medium	Medium	Onion	20-25.09.18	30.01.19 to 04.02.19	-	-
8	Okra	Zaid, 2019	Irrigated	-do-	Low	Medium	Medium	Potato	10-15.03.19	-	-	-
9	Wheat (AE)	Rabi 2018-19	Irrigated	-do-	Low	Medium	Medium	Paddy	20-22.11.18	18-21.04.19	30	06
10	Nutritional Kitchen Garden (H.Sc.)	Kharif, 18 Rabi 2018-19 Zaid 19	Irrigated	-do-	Low	Medium	Medium	Kitchen garden	-	-	-	-
11	Mixed Pickle (HSc.)	Zaid 2019	-	-	-	-	-	-	-	-	-	-
12	Wheat (CRM)	Rabi 2018-19	Irrigated	Loam and sandy loam	Low	Medium	Medium	Sugarcane	22-28.12.18	15-21.04.19	30	06
13	Wheat (CRM)	Rabi 2018-19	Irrigated	-do-	Low	Medium	Medium	Sugarcane	22-28.12.18	15-21.04.19	30	06
14	Green gram (CRM)	Zaid 2019	Irrigated	-do-	Low	Medium	Medium	Mustard	02-12.12.18			

Technical Feedback on the demonstrated technologies

S N	Crop	Feed Back
1	Black gram	Variety PU-31 shows resistance against YMV disease.
2	Lentil	Variety Pant Lentil – 8 yielded better than local variety and showed resistance against wilt disease
3	Paddy	Use of balance fertilizer produce higher yield and less incidence of diseases. Variety PS-1612 shows higher yield in its segment and resistance against false smut.
4	Wheat	Variety HD-3086 having good yield and showed resistance against Karnal Bunt disease.
5	Carrot	Variety Pusa Rudhira yield more than local variety with good length of root and absence of pith.
6	Seasonal vegetables	In no cash input except seed the vegetables were available throughout the season for the farmers' family and the neighbors as well.

Farmers' reactions on specific technologies

S N	Crop	Feed Back
1	Black gram	Variety gave good yield even after heavy rain.
2	Lentil	Grain size is as per local mandi demand
3	Paddy	Vareity PS-1612 received approximate similar rate as PB-1509 in local mandi.
4	Wheat	Vareity HD-3086 did not find any disease in field.
5	Carrot	Market rate of produce was higher than other variety.

Extension and Training activities under FLD

SN	Activity	No. of activities organized	Number of participants	Remarks
1	Field days	12	350	-
2	Farmers Training	10	180	-
3	Media coverage	03	-	-
4	Training for extension functionaries	02	40	-

Performance of Frontline demonstrations

Frontline demonstrations on oilseed crops: Not Applicable

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										

Frontline demonstration on pulse crops (Cluster demonstration)

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Blackgram	**(Urd)**																	
Kharif 2018	ICM	Package of agronomy practices for max. production	PU-31	25	10.0	9.38	7.25	8.44	6.34	33.1	40428.00	51484.00	11050.00	1.27	37200.00	38674.00	1474.00	1.03
Lentil (Masoor)																		
Rabi 2018-19	ICM	Package of agronomy practices for max. production	PL-8	11	3.4	15.2	9.5	11.8	9.2	28.2	41500.00	64900.00	23400.00	1.56	38800.00	50600.00	11800.00	1.30

Field Day on CFLD Lentil

Photographs of CFLD Blackgram field

FLD on Other crops

Category & Crop	Thematic Area	Name of the technology	No. of Farmers	Area (ha)	Yield (q/ha)				% Change in Yield	Other Parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demo			Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Avg.												
Scented Rice																			
Basmati (Crop Prod.)	INM	NPK+Zn 120:60:60:25	10	2.0	47.50	42.60	44.80	38.5	16.2	No. of tillers – 132/m^2	No. of tillers – 108/m^2	84800	194200	109400	2.30	80800	169000	88200	2.00
Plant breeding	Varietal Evaluation	Variety – Pusa 1612	10	4.0	55.5	49.0	52.8	48.0	10.0	No. of effective tillers – 142/m^2	No. of effective tillers – 112/m^2	84800	215640	130840	2.50	80800	197400	116600	2.40
Wheat timely sown																			
Crop Production	INM	Secondary & micronutrient	05	2.0	52.00	44.00	48.80	42.80	14.0	-	-	68500	110400	41900	1.6	67200	99900	32700	1.5
Plant breeding	Varietal evaluation	Variety HD-3086	10	4.0	54.00	46.00	49.85	44.60	11.7	No. of effective tillers – 143./m^2	No. of effective tillers – 115./m^2	68500	112238	43738	1.60	67200	103050	35850	1.50
Vegetables																			
Carrot																			
Kharif 2018	Varietal perfor-mance	Pusa Rudhira	05	1.0	275	235	255	205	24.3	-	-	48500	204000	155500	4.20	45500	164000	118500	3.60
Okra																			
Zaid 2019	Varietal perfor-mance	Arka Anamika	05	1.0	Result awaited														

Photographs of FLD

FLD paddy seed distribution

FLD on Paddy variety PB - 1612

FLD critical input distribution

FLD on Carrot

FLD on Paddy and Wheat

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)
Value Addition																
Zaid, 2019	Preparation of mixed pickle	15	15	Product : 1.34 kg	Product : 1.09 kg	22.93	-	-	80.50	160.80	80.30	1.99:1	72.00	109.00	37.00	1.51:1

Training & FLD on prepration of mixed vegetable pickle

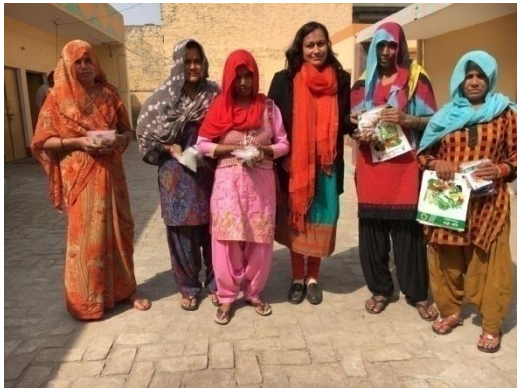
FLD on Farm Implements and Machinery

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	Labor	Irrigation	Total
Ferti Seed Drill	Wheat	Seeds sowing by seed drill	10	4.0	Tillers/m^2 Yield (q/h)	178 48.0	121 43.6	10.0	-	6	65	71	-	24850	-	24850

Wheat sowing through ferti seed drill photograph

FLD on Other Enterprise: Kitchen Gardening

Category and Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units	Yield (Kg)		% change in yield	Other parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demonstration	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Seasonal vegetables for Kharif, 2018 – Bitter gourd, Torai, Bhindi, Radish , Brinjal , Bottle gourd Cucumber, Tinda, Kashiphul, Lobia	House hold food security	Kitchen Gardening	05	05	220.2	144.7	52.17	-	-	650.00	5066.00	4416.00	7.79:1	530.00	3107.00	2577.00	5.86:1
Seasonal vegetables for Rabi, 2018-19 – Tomato, brinjal, spinach, peas, cauliflower, turnip, raddish, mustard, Bakla, Methi, carrot, coriander.	House hold food security	Kitchen Gardening	05	05	194.00	103.7	46.54	-	-	531.00	4178.00	3647.00	7.86:1	402.00	2309.00	1907.00	5.74:1
Seasonal vegetables for Zaid, 2019 –Brinjal, Raddish, Bottle gourd, Bitter gourd, Torai, Bhindi, Cucumber, Tinda, Lobia, Chakai, Kharbooja	House hold food security	Kitchen Gardening	05	05	Result awaited												



Seed distribution photographs at Rabi, Kharif and Zaid season

Kitchen Garden photographs

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
I Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming	1	18	-	18	2	-	2	20	-	20
Micro Irrigation/irrigation										
Seed production										
Nursery management										
Integrated Crop Management										
Soil & water conservation										
Integrated nutrient management	2	36	-	36	4	-	4	40	-	40
Production of organic inputs										
Others (pl specify)										
Total	**3**	**54**	**-**	**54**	**6**	**-**	**6**	**60**	**-**	**60**
II Horticulture										
a) Vegetable Crops										
Production of low value and high volume crops	2	36	-	36	4	-	4	40	-	40
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation	1	18	-	18	2	-	2	20	-	20
Others (pl specify)										
Total (a)										
b) Fruits										
Training and Pruning										
Layout and Management of Orchards	1	18	-	18	2	-	2	20	-	20
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl specify)										
Total (b)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl specify)										
Total (c)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (d)										

e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (e)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (f)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl specify)										
Total (g)										
GT (a-g)										
III Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated Nutrient Management										
Production and use of organic inputs	1	18	-	18	2	-	2	20	-	20
Management of Problematic soils										
Micro nutrient deficiency in crops	1	18	-	18	2	-	2	20	-	20
Nutrient Use Efficiency										
Balance use of fertilizers										
Soil and Water Testing										
Others (pl specify)										
Total										
IV Livestock Production & mgt.										
Dairy Management	1	19	-	19	1	-	1	20	-	20
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Disease Management	2	38	-	38	2	-	2	40	-	40
Feed & fodder technology	1	19	-	19	1	-	1	20	-	20
Production of quality animal products										
Others (pl specify)										
Total										
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	-	10	10	-	10	10	-	20	20
Design and development of low/minimum cost diet	2	-	22	22	-	18	18	-	40	40
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition	1	-	7	7	-	13	13	-	20	20
Women empowerment										
Location specific drudgery reduction technologies										

Rural Crafts										
Women and child care										
Others (pl specify)										
Total										
VI Agril. Engineering										
Farm Machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements	6	108	-	108	12	-	12	120	-	120
Small scale processing and value addition										
Post Harvest Technology										
Others (Use of advanced agricultural implements)										
Total										
VII Plant Protection										
Integrated Pest Management										
Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl specify)										
Total										
VIII Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl specify)										
Total										
IX Production of Inputs at site										
Seed Production (Pl. Breeding)	6	106	-	106	14	-	14	120	-	120
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom Production										
Apiculture										
Others (pl specify)										
Total										

X Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
Others (pl specify)										
Total										
XI Agro-forestry										
=Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
Total										
GRAND TOTAL	**29**	**452**	**39**	**491**	**48**	**41**	**89**	**500**	**80**	**580**

Farmers' Training including sponsored training programmes (off campus)

Thematic area	**No. of courses**	**Participants**								
		Others			**SC/ST**			**Grand Total**		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
I Crop Production										
Weed Management	2	36	-	36	4	-	4	40	-	40
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/irrigation										
Seed production										
Nursery management	1	18	-	18	2	-	2	20	-	20
Integrated Crop Management	2	36	-	36	4	-	4	40	-	40
Soil & water conservatioin										
Integrated nutrient management										
Production of organic inputs										
Soil sampling										
Total										
II Horticulture										
a) Vegetable Crops										
Production of low value and high volume crops	3	54	-	54	6	-	6	60	-	60
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl specify)										
Total (a)										
b) Fruits										
Training and Pruning										
Layout and Management of Orchards	1	18	-	18	2	-	2	20	-	20
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl specify)										
Total (b)										

c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (Production of low value and high valume crops)										
Total (c)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (d)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (e)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (f)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl specify)										
Total (g)										
GT (a-g)										
III Soil Health and Fertility Management										
Soil fertility management	2	36	-	36	4	-	4	40	-	40
Integrated water management										
Integrated Nutrient Management	1	18	-	18	2	-	2	20	-	20
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Balance use of fertilizers										
Soil and Water Testing										
Others (pl specify)										
Total										
IV Livestock Production and Management										
Dairy Management	3	57	-	57	3	-	3	60	-	60
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Disease Management	4	76	-	76	4	-	4	80	-	80
Feed & fodder technology	1	19	-	19	1	-	1	20	-	20
Production of quality animal products										
Others (pl specify)										
Total										

V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs	1	-	16	16	-	4	4	-	20	20
Storage loss minimization techniques	2	-	22	22	-	18	18	-	40	40
Value addition										
Women empowerment										
Location specific drudgery reduction technologies	1	-	7	7	-	13	13	-	20	20
Rural Crafts										
Women and child care	2	-	29	29	-	11	11	-	40	40
Others (pl specify)										
Total										
VI Agril. Engineering										
Farm Machinery and its maintenance										
Installation and maintenance of micro irrigation systems	1	18	-	18	2	-	2	20	-	20
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements	6	108	-	108	12	-	12	120	-	120
Small scale processing and value addition										
Post Harvest Technology										
Others (pl specify)										
Total										
VII Plant Protection										
Integrated Pest Management										
Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Others (pl specify)										
Total										
VIII Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl specify)										
Total										
IX Production of Inputs at site										
Seed Production (Pl. Breeding)	6	109	-	109	11	-	11	120	-	120
Planting material production										

Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom Production										
Apiculture										
Others (pl specify)										
Total										
X Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
Others (pl specify)										
Total										
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
Total										
GRAND TOTAL	**39**	**603**	**74**	**677**	**57**	**46**	**103**	**660**	**120**	**780**

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

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management	2	36	-	36	4	-	4	40	-	40
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming	1	18	-	18	2	-	2	20	-	20
Micro Irrigation/irrigation										
Seed production										
Nursery management	1	18	-	18	2	-	2	20	-	20
Integrated Crop Management	4	72	-	72	8	-	8	80	-	80
Soil & water conservation										
Integrated nutrient management										
Production of organic inputs										
Soil sampling										
Total										
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops	5	90	-	90	10	-	10	100	-	100
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation	1	18	-	18	2	-	2	20	-	20
Others (pl specify)										
Total (a)										

b) Fruits										
Training and Pruning										
Layout and Management of Orchards	2	36	-	36	4	-	4	40	-	40
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl specify)										
Total (b)										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (Production of low value and high valume crops)										
Total (c)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (d)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (e)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (f)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl specify)										
Total (g)										
GT (a-g)										
III Soil Health and Fertility Management										
Soil fertility management	2	36	-	36	4	-	4	40	-	40
Integrated water management										
Integrated Nutrient Management	1	18	-	18	2	-	2	20	-	20
Production and use of organic inputs	1	18	-	18	2	-	2	20	-	20
Management of Problematic soils										
Micro nutrient deficiency in crops	1	18	-	18	2	-	2	20	-	20

Nutrient Use Efficiency										
Balance use of fertilizers										
Soil and Water Testing										
Others (pl specify)										
Total										
IV Livestock Production and Management										
Dairy Management	4	76	-	76	4	-	4	80	-	80
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Disease Management	6	114	-	114	6	-	6	120	-	120
Feed & fodder technology	2	38	-	38	2	-	2	40	-	40
Production of quality animal products										
Others (pl specify)										
Total										
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	-	10	10	-	10	10	-	20	20
Design and development of low/minimum cost diet	2	-	22	22	-	18	18	-	40	40
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs	1	-	16	16	-	4	4	-	20	20
Storage loss minimization techniques	2	-	22	22	-	18	18	-	40	40
Value addition	1	-	7	7	-	13	13	-	20	20
Women empowerment										
Location specific drudgery reduction technologies	1	-	7	7	-	13	13	-	20	20
Rural Crafts										
Women and child care	2	-	29	29	-	11	11	-	40	40
Others (pl specify)										
Total										
VI Agril. Engineering										
Farm Machinery and its maintenance										
Installation and maintenance of micro irrigation systems	1	18	-	18	2	-	2	20	-	20
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements	12	216	-	216	24	-	24	240	-	240
Small scale processing and value addition										
Post Harvest Technology										
Others (Use of advanced agricultural implements)										
Total										
VII Plant Protection										
Integrated Pest Management										
Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										

Others (pl specify)										
Total										
VIII Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl specify)										
Total										
IX Production of Inputs at site										
Seed Production (Pl. Breeding)	12	215	-	215	25	-	25	240	-	240
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom Production										
Apiculture										
Others (pl specify)										
Total										
X Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
Others (pl specify)										
Total										
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
Total										
GRAND TOTAL	**68**	**1055**	**113**	**1168**	**105**	**87**	**192**	**1160**	**200**	**1360**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		M	Fe	T	Ma	Fe	T	M	Fe	T
Nursery Management of Horticulture crops										
Training and pruning of orchards	1	8	-	8	2	-	2	10	-	10
Protected cultivation of vegetable crops	1	8	-	8	2	-	2	10	-	10
Commercial fruit production										
Integrated farming										
Seed production	2	17	-	17	3	-	3	20	-	20
Production of organic inputs	2	16	-	16	4	-	4	20	-	20
Planting material production										
Vermi-culture	1	8	-	8	2	-	2	10	-	10
Mushroom Production	1	8	-	8	2	-	2	10	-	10
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements	2	17	-	17	3	-	3	20	-	20
Value addition	1	-	3	3	-	7	7	-	10	10
Small scale processing										
Post Harvest Technology	2	8	4	12	2	6	8	10	10	20
Tailoring and Stitching										
Rural Crafts (Tie & dye)										
Production of quality animal products										
Dairying	1	10	-	10	-	-	-	10	-	10
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production	1	10	-	10	-	-	-	10	-	10
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Income generation activities for employment of rural women (Printing & Designing)	1	-	6	6	-	4	4	-	10	10
TOTAL	**16**	**110**	**13**	**123**	**20**	**17**	**37**	**130**	**30**	**160**

Training for Rural Youths including sponsored training programmes (Off campus) - NA

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		M	Fe	T	Ma	Fe	T	M	Fe	T
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										

Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL										

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		
		M	Fe	T	Ma	Fe	T	M	Fe	T
Nursery Management of Horticulture crops										
Training and pruning of orchards	1	8	-	8	2	-	2	10	-	10
Protected cultivation of vegetable crops	1	8	-	8	2	-	2	10	-	10
Commercial fruit production										
Integrated farming										
Seed production	2	17	-	17	3	-	3	20	-	20
Production of organic inputs	2	16	-	16	4	-	4	20	-	20
Planting material production										
Vermi-culture	1	8	-	8	2	-	2	10	-	10
Mushroom Production	1	8	-	8	2	-	2	10	-	10
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements	2	17	-	17	3	-	3	20	-	20
Value addition	1	-	3	3	-	7	7	-	10	10
Small scale processing										
Post Harvest Technology	2	8	4	12	2	6	8	10	10	20
Tailoring and Stitching										
Rural Crafts (Tie & dye)										
Production of quality animal products										
Dairying	1	10	-	10	-	-	-	10	-	10
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production	1	10	-	10	-	-	-	10	-	10
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Income generation activities for employment of rural women (Printing & Designing)	1	-	6	6	-	4	4	-	10	10
TOTAL	**16**	**110**	**13**	**123**	**20**	**17**	**37**	**130**	**30**	**160**

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		
		M	Fe	T	M	Fe	T	M	Fe	T
Productivity enhancement in field crops	3	60	-	60	-	-	-	60	-	60
Integrated Pest Management	3	60	-	60	-	-	-	60	-	60
Integrated Nutrient management	2	40	-	40	-	-	-	40	-	40
Rejuvenation of old orchards	1	20	-	20	-	-	-	20	-	20
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements	3	60	-	60	-	-	-	60	-	60
Gender mainstreaming through SHGs										
Formation and Management of SHGs	1	-	12	12	-	8	8	-	20	20
Women and Child care	3	-	43	43	-	17	17	-	60	60
Low cost and nutrient efficient diet designing	3	-	35	35	-	25	25	-	60	60
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals	2	40	-	40	-	-	-	40	-	40
Livestock feed and fodder production	2	40	-	40	-	-	-	40	-	40
Household food security										
Seed Production	4	80	-	80	-	-	-	80	-	80
IDM	1	20	-	20	-	-	-	20	-	20
Micro irrigation system	1	20	-	20	-	-	-	20	-	20
Bio agent production	1	20	-	20	-	-	-	20	-	20
Nursery raising	2	40	-	40	-	-	-	40	-	40
Integrated farming	1	20	-	20	-	-	-	20	-	20
TOTAL	**33**	**520**	**90**	**610**	**0**	**50**	**50**	**520**	**140**	**660**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		M	Fe	T	M	Fe	T	M	Fe	T
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Seed Production										
IDM										
Micro irrigation system										
TOTAL										

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		
		M	Fe	T	M	Fe	T	M	Fe	T
Productivity enhancement in field crops	3	60	-	60	-	-	-	60	-	60
Integrated Pest Management	3	60	-	60	-	-	-	60	-	60
Integrated Nutrient management	2	40	-	40	-	-	-	40	-	40
Rejuvenation of old orchards	1	20	-	20	-	-	-	20	-	20
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements	3	60	-	60	-	-	-	60	-	60
Gender mainstreaming through SHGs										
Formation and Management of SHGs	1	-	12	12	-	8	8	-	20	20
Women and Child care	3	-	43	43	-	17	17	-	60	60
Low cost and nutrient efficient diet designing	3	-	35	35	-	25	25	-	60	60
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals	2	40	-	40	-	-	-	40	-	40
Livestock feed and fodder production	2	40	-	40	-	-	-	40	-	40
Household food security										
Seed Production	4	80	-	80	-	-	-	80	-	80
IDM	1	20	-	20	-	-	-	20	-	20
Micro irrigation system	1	20	-	20	-	-	-	20	-	20
Bio agent production	1	20	-	20	-	-	-	20	-	20
Nursery raising	2	40	-	40	-	-	-	40	-	40
Integrated farming	1	20	-	20	-	-	-	20	-	20
TOTAL	**33**	**520**	**90**	**610**	**0**	**50**	**50**	**520**	**140**	**660**

Table. Sponsored training programmes

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		M	Fe	T	M	Fe	T	M	Fe	T
Crop production and management										
Increasing production and productivity of crops										
Commercial production of vegetables										
Production and value addition										
Fruit Plants										
Ornamental plants										
Spices crops										
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										
Fisheries Nutrition										
Fisheries Management										
Others (pl. specify)										
Total										

Home Science										
Household nutritional security										
Economic empowerment of women										
Drudgery reduction of women										
Others (Pl specify)										
Total										
Agricultural Extension										
Capacity Building and Group Dynamics										
Others (pl. specify)										
Total										
GRAND TOTAL										

Table. Sponsored training programmes

Area of training	**No. of Courses**	**No. of participants**								
		General			**SC/ST**			**Grand Total**		
		M	**Fe**	**T**	**M**	**Fe**	**T**	**M**	**Fe**	**T**
Farmer's Technical Training	2	73	-	73	27	-	27	100	-	100
GRAND TOTAL	**2**	**73**	**-**	**73**	**27**	**-**	**27**	**100**	**-**	**100**

Name of sponsoring agencies involved

SN	**Sponsoring agency name**
1	State Govt. through university

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

Area of training	**No. of Courses**	**No. of Participants**								
		General			**SC/ST**			**Grand Total**		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Crop production and management										
Commercial floriculture										
Commercial fruit production										
Commercial vegetable production										
Integrated crop management										
Organic farming										
Others (pl. specify)										
Total										
Post harvest technology and value addition										
Value addition										
Others (Post- harvest processing and packaging of fruits & vegetables.)										
Total										
Livestock and fisheries										
Dairy farming										
Composite fish culture										
Sheep and goat rearing										
Piggery										
Poultry farming										
Others (Livestock prodn and mgt.)										
Total										
Income generation activities										
Vermi composting										
Production of bio-agents, bio-pesticides,										
bio-fertilizers etc.										
Repair and maintenance of farm machinery										
and implements										
Rural Crafts										
Seed production										
Sericulture										
Mushroom cultivation										

Nursery, grafting etc.										
Tailoring, stitching, embroidery, dying etc.										
Agril. para-workers, para-vet training										
Others (Orchard mgt. & maintenance)										
Total										
Agricultural Extension										
Capacity building and group dynamics										
Others (pl. specify)										
Total										
Grand Total										

Details of training programmes attached in **Annexure -I**

IV. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	89	859	28	**887**
Diagnostic visits	85	612	24	**636**
Field Day	8	135	22	**157**
Group discussions	1	35	02	**37**
Kisan Ghosthi	12	855	116	**971**
Kisan Mela	01	520	28	**548**
Exhibition	01	410	16	**426**
Scientists' visit to farmers field	280	1696	-	**1696**
Ex-trainees Sammelan	-	-	-	**0**
Method Demonstrations	01	25	04	**29**
Celebration of important days	03	112	02	**114**
Exposure visits	03	144	-	**144**
Lecture delivered	140	2280	-	**2280**
Farmers visit to KVK	315	315	-	**315**
Total	**939**	**7998**	**242**	**8240**

Details of other extension programmes

Particulars	Number
Extension Literature	04
News paper coverage	12
Research Paper	-
Popular articles	02
TV Talks	12
Leaflet	01
Technical Article	-
Technical Report	04
Total	**35**

Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marke -ting	Aware- ness	Other enterprise	Total
KVK, GB Nagar	Text only	32	08	-	06	38	52	136
	Voice only	112	22	08	20	42	46	250
	Voice & Text both	-	-	-	-	-	-	-
	Total Messages	**144**	**30**	**8**	**26**	**80**	**98**	**386**
	Total farmers Benefitted	**144**	**30**	**8**	**26**	**80**	**98**	**386**

V. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS – Not Carried out

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

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

Production of seeds (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
Cereals	Paddy Wheat	PB-1121 D.B. W.-90	-	20.20 30.45	67064.00 56028.00	By Auction
Oilseeds						
Pulses						
Commercial crops						
Vegetables						
Flower crops						
Spices						
Fodder crop seeds						
Fiber crops						
Forest Species						
Others						
Total						

Production of planting materials by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Commercial						
Vegetable seedlings	Tomato	Pusa Rohini	-	20800	5200	80
Fruits						
Ornamental plants						
Medicinal and Aromatic						
Plantation						
Spices						
Tuber						
Fodder crop saplings						
Forest Species						
Others						
Total						

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	No. of Farmers
Bio Fertilisers				
Bio-pesticide				
Bio-fungicide				
Bio Agents				
Others				
Total				

Table: Production of livestock materials

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

VII. DETAILS OF SOIL, WATER AND PLANT ANALYSIS

Note: - Funds needed for purchase of instruments and infrastructure development

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)
Soil				-
Water				
Plant				
Manure				
Others (pl.specify)				
Total				-

VIII. SCIENTIFIC ADVISORY COMMITTEE

Name of KVK	Number of SACs conducted
KVK, G.B. Nagar	**One on dated 13th February, 2019**

IX. NEWSLETTER

Name of News letter	No. of Copies printed for distribution

X. PUBLICATIONS

Category	Number
Research Paper	02
Technical bulletins	-
Leaflet	05
Technical Article	02
Technical Report	04

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

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

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

Introduction of alternate crops/varieties

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

Livestock components	Number of interactions	No.of participants
Total		

Animal health camps organised

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

Seed distribution in drought hit states

Crops	Quantity (qtl)	Coverage of area (ha)	Number of farmers
Total			

Large scale adoption of resource conservation technologies

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

Awareness campaign

	Meetings		Gosthies		Field days		Farmers fair		Exhibition		Film show	
	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers
Total												

XIII. DETAILS ON HRD ACTIVITIES - NA

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

B.

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

C. 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

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

a) ***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***

b) ***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***

c) ***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

Name of the KVK

TITLE

Introduction

KVK intervention

Output

Outcome

Impact

XIV. AGRICULTURAL TECHNOLOGY INFORMATION CENTRE - NA

XV. TECHNOLOGICAL BACKSTOPPING BY DIRECTORATES OF EXTENSION

----------XXXXXXX----------

Annexure 'A'

DETAILS OF TRAINING PROGRAMMES

1.1 On-Campus Training for Practicing farmers & Farm Women

Subject	Title of the training programme	Date	Duration in days	G. Total
	1st Quarter (April, 2018 - June, 2018)			
Crop production	Increase farm income by adopting integrated farming system approach	10.05.2018	1	20
Horticulture	Nursery raising technique of papaya	11.04.2018	1	20
Live stock production	H.S. disease: Its symptom and preventive measures.	25.06.2018	1	20
Agri. Engg.	Safe use of thresher during operation	27.04.2018	1	20
Home science	Processing of soybean to make different product for income generation	24.05.2018	1	20
Plant breeding	Seed Production technique of Urd.	26.04.2018	1	20
Plant breeding	Seed Production of scented rice.	25.06.2018	1	20
	2nd Quarter (July, 2018 – Sept.,2018)			
Crop production	Advance production technology of lentil	14.09.2018	1	20
Horticulture	Cultivation technique of cauliflower	17.07.2018	1	20
Live stock production	Symptom of heat and time of insemination in milch animal.	18.09.2018	1	20
Agri. Engg.	Use & importance of improved implement (Drum seeder) for paddy crop	26.07.2018	1	20
Home science	Preservation of fruits and vegetables	31.07.2018	1	20
Plant breeding	Seed production of Toria/Mustard.	14.09.2018	1	20
	3rd Quarter (Oct., 2018 – Dec., 2018)			
Crop production	Advanced production technology of wheat	19.10.2018	1	20
Horticulture	Protective nursery raising technique of cucurbitaceous crops	09.10.2018	1	20
Live stock production	Importance of green fodder in animal feed.	19.12.2018	1	20
Agri. Engg.	Use of Rotavator in paddy transplanting.	25.10.2018	1	20
Agri. Engg.	Raised bed planting technique by using Bed planter.	19.12.2018	1	20
Home science	Development, Maintenance and Importance of Nutritional Garden	02.11.2018	1	20
Plant breeding	Identification of rust resistant varieties of lentil & their seed production	06.11.2018	1	20
Plant breeding	Seed production technology of wheat crop.	14.11.2018	1	20
	4th Quarter (Jan., 2019 – March, 2019)			
Crop Production (SH)	Importance of manures and bio-fertilizer in crop production & soil health.	21.01.2019	1	20
Crop Production (SH)	Micro-nutrient deficiency in crops: Symptoms & correction	11.02.2019	1	20
Horticulture	Production technology of onion crops	06.02.2019	1	20
Live stock production	Infertility mgt. in dairy animals	05.02.2019	1	20
Agri. Engg.	Optimum use of ferti seed drill	12.02.2019	1	20
Agri. Engg.	Operation & maintenance of motor pump	26.02.2019	1	20
Home science	Method of preparation of different types of low cost Nutritious diet	29.01.2019	1	20
Plant breeding	Technique of roughing in wheat seed production	29.01.2019	1	20

1.2 Off Campus Training for Practicing farmers & Farm Women

Subject	Title of the training programme	Date	Duration in days	Total
	1st Quarter (April, 2018 - June, 2018)			
Crop production	Techniques of raising healthy paddy seedlings.	20.05.2018	1	20
Crop production	IWM in Rice	15.06.2018	1	20
Horticulture	Cultivation technique of early cauliflower	14.05.2018	1	20
Live stock production	Vaccination and dewarming in dairy animals.	27.04.2018	1	20
Live stock production	Importance of AI and mgt. of pregnant animals.	29.05.2018	1	20
Agri. Engg.	Use of repair, maintenance of plant protection equipments	14.06.2018	1	20
Home science	Formation and importance of Self Help Group (SHG) for generating income	27.04.2018	1	20
Plant breeding	Seed production of Moong bean	20.04.2018	1	20
	2nd Quarter (July, 2018 – Sept.,2018)			
Crop Production (SH)	INM in rice	03.07.2018	1	20
Crop production	Advanced prodn. Technology of toria & sarson.	24.08.2018	1	20
Horticulture	Layout & planting method of orchards	10.08.2018	1	20
Live stock production	Nutritional requirement of lactating, pregnant and dry animals.	24.07.2018	1	20
Live stock production	Control measures of Endo-Ecto parasitic infestation	28.08.2018	1	20
Agri. Engg.	Operation & maintenance of micro-irrigation system.	05.09.2018	1	20
Home science	Establishment and importance of zero energy cool Chamber (ZECC) to increase market value	18.08.2018	1	20
Plant breeding	Seed production of scented rice.	04.07.2018	1	20
Plant breeding	Seed production of toria	18.09.2018	1	20
	3rd Quarter (Oct., 2018 – Dec., 2018)			
Crop production	IWM in wheat	15.11.2018	1	20
Horticulture	Scientific cultivation technique of marigold.	19.11.2018	1	20
Live stock production	F.M.D.: Its symptoms and preventive measures.	30.10.2018	1	20
Live stock production	Care and feeding of newly born calf	27.11.2018	1	20
Agri. Engg.	Different type of equipment required for processing of fruit & vegetables.	11.10.2018	1	20
Agri. Engg.	Maintenance of seed drill and sowing equipments	30.11.2018	1	20
Agri. Engg.	Save water through sprinkler irrigation	26.12.2018	1	20
Home science	Safe Grain storage at household level to maintain the quality of grain	30.10.2018	1	20
	Drudgery Reduction of farm women through work simplification technique	01.11.2018	1	20
	Dehydration: Causes and dietary prevention	21.12.2018	1	20
Plant breeding	Technology of quality wheat seed production	23.10.2018	1	20
	4th Quarter (Jan., 2019 – March, 2019)			
Crop production	Advanced prodn. tech. of summer moong	03.02.2019	1	20
Crop Production (SH)	Dhaincha green mannuring to rice.	05.03.2019	1	20
Crop Production (SH)	Method of soil sampling and importance of fertilizer use on soil test basis.	10.03.2019	1	20
Horticulture	Cultivation technique of tomato crop	08.01.2019	1	20
Live stock production	Mastitis in milch animals: Its symptoms and control.	29.01.2019	1	20
Live stock production	Urea treatment of wheat straw for improving nutritive value	19.02.2019	1	20
Agri. Engg.	Save fuel operation of motor pump	16.01.2019	1	20
	Maintenance and care of ferti seed drill	18.03.2019	1	20
Home science	Malnutrition: Causes and dietary prevention	30.01.2019	1	20
Plant breeding	Technique of roughing in wheat seed production.	16.02.2019	1	20
Plant breeding	Quality seed production technique of cauliflower	15.03.2019	1	20

1.3 On campus Income and Employment Generating Training Programmes for Rural Youths

Crop / Enterprise	Training title*	Date / Month	Duration (days)	G.Total
	1st Quarter (April, 2018 - June, 2018)			
Tomato (Horti.)	Post Harvest Technology in tomato crops	04-08 June, 2018	5	10
Poultry production	Backyard Poultry farming	21-25 May, 2018	5	10
Ag. Engg.	Repair & maintenance of farm machinery & implements.	14-18 May, 2018	5	10
Food industry (H.Sc.)	Preparation of different types of Mango Product	04–08 June, 2018	5	10
	2nd Quarter (July, 2018 – Sept.,2018)			
Plant Breeding	Seed production of Basmati rice	24-28 July, 2018	5	10
	3rd Quarter (Oct., 2018 – Dec., 2018)			
(Crop Prodn.)	Production technology of vermi culture	22-26 Oct., 2018	5	10
Guava (Horti.)	Training & pruning of old guava orchard	13-17 Oct., 2018	5	10
Dairying	Scientific dairy farming	10-14 Dec., 2018	5	10
Ag. Engg.	Repair & maintenance of diesel engine	03-07 Dec., 2018	5	10
Textile (H.Sc.)	Technique of Tie and Dye	13-17 Nov., 2018	5	10
Pl. Protection	Mushroom production.	08-12 Oct., 2018	5	10
	4th Quarter (Jan., 2019 – March, 2019)			
(Crop Prodn.)	Production technology of vermi compost	18-22 Feb., 2019	5	10
Cucurbits (Horti)	Low cost poly house and low tunnel for cucurbits crops	07-11 Jan., 2019	5	10
Food industry (H.Sc.)	Preparation of different types of pickles	21-25 Jan., 2019	5	10
Pl. Protection	Bio-agent production.	12-16 Feb., 2019	5	10
Plant Breeding	Roughing technique in wheat seed production	15-19 Jan., 2019	5	10

1.4 In-service Extension worker's Training Programs

Clientele	Title of the training programme	Date	Duration in days	G. Total
	1st Quarter (April, 2018 - June, 2018)			
Crop Production	Advances in basmati rice production technology.	25.05.2018	1	20
Horticulture	Nursery raising technique of kharif vegetables.	16.05.2018	1	20
Livestock Prodn & Mgt.	Urea treatment of wheat straw for improving nutritive digestive value	28.06.2018	1	20
Agriculture Engineering	Importance of laser land leveling	29.06.2018	1	20
Home Science	Problem of anaemia during pregnancy: Causes and Prevention	18.05.2018	1	20
	Importance and schedule of immunization for child and pregnant women	28.06.2018	1	20
Plant Breeding	Seed production of moong bean.	19.04.2018	1	20
	2nd Quarter (July, 2018 – Sept.,2018)			
Horticulture	Fertilizer mgt in carrot crop.	19.09.2018	1	20
Livestock Prodn & Mgt.	Vaccination and deworming schedule in dairy animals	08.08.2018	1	20
Agriculture Engineering	Operation & maintenance of plant protection equipments.	28.08.2018	1	20
Home Science	Preparation and Importance of Amylase rich food	30.07.2018	1	20
	Formation, management and importance of Self Help Group (SHG)	16.08.2018	1	20
Plant Protection	Importance of biopesticides in prodn of vegetable	21.07.2018	1	20
	Insect pests of rice and their mgt.	16.08.2018	1	20
	IDM in rice.	13.09.2018	1	20
Plant Breeding	Seed production of scented rice.	19.07.2018	1	20
	3rd Quarter (Oct., 2018 – Dec., 2018)			
Crop Production	Advances in wheat production technology.	01.11.2018	1	20
Crop Production	Increase farm income by adopting IFS approach	21.12.2018	1	20
Horticulture	Nursery mgt. of ornamental plants	12.12.2018	1	20
Livestock Prodn & Mgt.	Use and importance of mineral mixture.	05.12.2018	1	20
Agriculture Engineering	Maintenance and care of ferti seed drill	13.10.2018	1	20
Home Science	Preparation of different types of low cost nutritious diet	25.10.2018	1	20
	Balanced Diet and its importance	04.12.2018	1	20
Plant Protection	Insect pest of toria/ mustard and their mgt.	18.10.2018	1	20
	Insect pest of brinjal and their mgt.	15.11.2018	1	20
Plant Breeding	Seed production technique of wheat.	21.11.2018	1	20
	4th Quarter (Jan., 2019 – March, 2019)			
Crop Production	Micronutrient deficiency in major crops and their correction.	19.02.2019	1	20
Horticulture	Production technology of bottle gourd	13.02.2019	1	20
Livestock Prodn & Mgt.	Care and feeding of newly born calf.	22.01.2019	1	20
Agriculture Engineering	Use of sprinkler irrigation for saving water	30.01.2019	1	20
Home Science	Malnutrition: causes and Prevention	18.03.2019	1	20
Plant Protection	IDM in okra.	17.01.2019	1	20
Plant Breeding	Seed production of cauliflower.	21.02.2019	1	20