

Annual Progress Report

(April, 2017- March, 2018)



Submitted by

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

APR SUMMARY

(Note: While preparing summary, please don't add or delete any row or columns)

1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	47	742	358	1100
Rural youths				
Extension functionaries	4	62	-	62
Sponsored Training	2	84	-	84
Vocational Training				
Total	53	879	367	1246

2. Frontline demonstrations

Enterprise	No. of Farmers	Area (ha)	Units/Animals
Oilseeds	25	10.00	
Pulses	60	22.15	
Cereals	10	1.00	
Vegetables			
Other crops (Barseem)	16	2.13	
Hybrid crops			
Total	111	35.28	
Livestock & Fisheries			
Other enterprises			
Total			
Grand Total	111	35.28	

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	05	16	16
Livestock	01	05	05
Various enterprises			
Total	06	21	21
Technology Refined			
Crops			
Livestock			
Various enterprises			
Total			
Grand Total	06	21	21

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	964	5845
Other extension activities	05	86
Total	969	5931

5. Mobile Advisory Services

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

6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	175	599400/-
Planting material (No.)	20195	2380/-
Bio-Products (kg)		
Livestock Production (No.)		
Fishery production (No.)		

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil	552	-
Water		
Plant		
Total		

8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	4
2	Conferences	2
3	Meetings	
4	Trainings for KVK officials	2
5	Visits of KVK officials	
6	Book published	
7	Training Manual	
8	Book chapters	1

9	Research papers	
10	Lead papers	
11	Seminar papers	1
12	Extension folder	
13	Proceedings	
14	Award & recognition	3
15	On-going research projects	
16	Edited book	1

DETAIL REPORT OF APR-2017-18

1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E-mail	Website
	Office	Fax		
Mahayogi Gorakhnath Krishi Vigyan Kendra, Chauk Mafi (Pepeganj), Jangal Kaudia, Gorakhpur, (U.P.)	0551- 2255453 2255454	0551- 2255455	gorakhpurkvk2@ gmail.com	www.mgkvk.in

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

Address	Telephone		E-mail
	Office	FAX	
Guru Gorakshnath Sewa Santhan, Sri Gorakhnath Mandir, Gorakhpur	0551-2255453, 54	0551-2255455	gorakhpurkvk2@gmail.com

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

Name	Telephone / Contact		
	Residence	Mobile	E-mail
Dr. Rajendra Pratap Singh	-	9532460717 9648448405	gorakhpurkvk2@gmail.com

1.4. Year of sanction: 2016

1.5. Staff Position (as on 19th Aug, 2018)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale (Rs.)	Present basic (Rs.)	Date of joining	Permanent /Temporary	Category (SC/ST/OBC/Others)	Mobile no.	Age	Email id
1	Sr. Scientist and Head	Dr. Rajendra Pratap Singh	Sr. Scientist and Head	Plant Pathology	37400-67000	46400	26/05/2017	Temporary	Others	9648448405 9532460717	48	rpskvk.22@gmail.com
2	Subject Matter Specialist	Dr. Vivek Pratap Singh	SMS	Animal Husbandary and Dairying	15600-39100	21000	31/07/2017	Temporary	Others	9415745095		vpslpm@gmail.com
3	Subject Matter Specialist	Dr. Pratiksha Singh	SMS	Home Science	15600-39100	21000	01/08/2017	Temporary	Others	9982597404		pratifrm@gmail.com
4	Subject Matter Specialist	Dr. Ajit Kumar Srivastava	SMS	Horticulture	15600-39100	21000	01/08/2017	Temporary	Others	8787264166		ajiticar@gmail.com
5	Subject Matter Specialist	Dr. Rahul Kumar Singh	SMS	Agri. Extension	15600-39100	21000	01/08/2017	Temporary	Others	9454054072		rahulrrext91@gmail.com
6	Subject Matter Specialist	Mr. Avanish Kumar Singh	SMS	Agronomy	15600-39100	21000	01/08/2017	Temporary	Others	9792099943		avanishsinghicar@gmail.com
7	Subject Matter Specialist	Mr. Sandeep Prakash Upadhyay	SMS	Soil Science	15600-39100	21000	01/08/2017	Temporary	Others	9690475529		sandeepupadhyay383@gmail.com
8	Programme Assistant Computer	Gaurav Kumar Singh	Programme Assistant-Computer	IT	9300-34800	4200	14/08/2017	Temporary	Others	9838674999		vishengaurav@gmail.com
9	Programme Assistant (Lab. Tech.)	Jitendra Kumar Singh	Programme Assistant	Lab. Technician	9300-34800	4200	14.08.2018	Temporary	OBC	9956912021		jitendra.s273158@gmail.com

10	Farm Manager	Ashish Kumar Singh	Programme Assistant	Farm Manager	9300-34800	4200	14.08.2018	Temporary	Others	7752941868		ashishksingh1994@gmail.com
11	Assistant	Shubham Pandey	Assistant	Assistant	9300-34800	4200	14.08.2018	Temporary	Others	7752941868		luckywatson123@gmail.com
12	Stenographer-III	Gangesh Giri	Stenographer Grade-III	Stenography	5200-20200	2400	14.08.2018	Temporary	OBC	7309018154		gangeshgiri1012@gmail.com
13	Driver-cum-Mechanic	Sanjay Kumar Yadav	Driver-cum-Mechanic	Driver	5200-20200	2000	14.08.2018	Temporary	OBC	9415853387		
14	Driver-cum-Mechanic	Dinesh Rao	Driver-cum-Mechanic	Driver	5200-20200	2000	14.08.2018	Temporary	OBC	9695713464		dineshgkp1991@gmail.com
15	Supporting staff Grade-I	Jai Prakash Singh	Supporting Staaf Grade-I	Skilled Supporting Staaf	5200-20200	1800	14.08.2018	Temporary	Others	8545003001		jaiprakashsingh1005@gmail.com
16	Supporting staff Grade-I	Abhimanyu Kumar Verma	Supporting Staff Grade-I	Skilled Supporting Staff	5200-20200	1800	14.08.2018	Temporary	OBC	9918989802		abhimanyuverma0808@gmail.com

1.6. Total land with KVK (in ha): 20.056 ha :

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

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	-	-	-	July, 2017	-	Under construction
2.	Farmers Hostel	ICAR	-	-	-		-	Under construction
3.	Staff Quarters (1)	-	-	-	-	-	-	Under construction
4.	Demonstration Units (2)	-	-	-	-	-	-	-
		-	-	-	-	-	-	-
5	Fencing	-	-	-	-	-	-	-
6	Rain Water harvesting system	-	-	-	-	-	-	-
7	Threshing floor	-	-	-	-	-	-	-
8	Farm godown	-	-	-	-	-	-	-

B) Vehicles:

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Tractor (UP-53 CL-5201)	2017	9.55	600	Good Condition

C) Equipment's & AV aids: to be sanction and purchase: sanction and to be purchase

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
	.		

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

Sl.No.	Date	Name and Designation of Participants	Salient Recommendations	Action taken
1.	23/03/2018	<ol style="list-style-type: none"> 1. Dr Pradeep Kumar Rao, Chairman of SAC meeting 2. Dr US Gautam, Director, ICAR-ATARI, Kanpur 3. Prof. PK Singh, NDUAT, Faizabad, UP 4. Ret. Prof. Ranjeet Singh, NDUAT, Faizabad, UP 5. Dr CP Singh, Asso. Prof. Fisheries, Fisheries Entrepreneurship Training Center, Gonda 6. Dr UP Singh, AD Animal Science, Gorakhpur 7. Dr Sanjay Singh, DDA/Secretary ATMA, Gorakhpur 8. Dr SP Patel, Dy. CVO, Gorakhpur 9. Sri Harishchandra Rai, Dy PPO, Gorakhpur 10. Dr DP Singh, Representative of Director Extension, NDUAT, Faizabad, UP 11. Dr Vinod Singh, Asso. Prof. , NDUAT, Faizabad, UP 12. Dinesh Kumar, Pradhan, Ranadeeh 13. Sri Keshav Prasad Tiwari, Principal, Digvijaynath Intercollege, Chaukmafi 14. Sri Virendra Kumar Pandey, Incharge UP Seed Corporation, Gorakhpur 15. Dr Sanjay K. Singh, VO, Jangal Kaudiya 16. Sri Ram Manohar Singh, 17. Sri Manoj Kumar Mishra 18. Smt. Nohra Devi, Mahila Krishak 19. Sri Mritunjay Singh, Pradhan Badhyachauk 20. Dr SP Singh, Scientist, KVK, Belipar, Gorakhpur 21. Sri Shriram, S Hort. Inspector, Gorakhpur 22. Sri Rajman Yadav, Soil Conservation, Gorakhpur 23. Sri Ugrasen Singh, Project Director, UP Seed Corporation, Gorakhpur 24. Dr RP Singh, Senior Scientist and Head, MGKVK, Gorakhpur 	<ol style="list-style-type: none"> 1. There is need to protect crop from wild animal by plantation of Jangali Jalebi/karonda etc. 2. Follow agroforestry system at kvk farm for income generation. 4. Adopt colocasia crop in low line area. 5. There is need to quality seed to the farmers in time and cautious to the farmers from mixed seeds 6. Recent released variety grow in crop cafeteria 7. More emphasis should be given to adopt recommended varieties of seeds in their cultivation practices for higher production 8. Establish a better linkage among seed producing company/NSC to enhancing income of farmers 9. More emphasis should be given to adopt recommended varieties of seeds in their cultivation practices for higher production 10. There is need to educate the farmers to adopt crop's varieties on the basis of climate change 11. Establish a better linkage between line department and active participation is needed for successful of Kisan Mela and other extension allied activities related to farmers. 12. There need to grow green fodder round the year at kvk farm and educate the peasant regarding income generation 13. There is need to disseminate wheat variety DBW 17 and 107 among farming community 14. There is need to demonstrate OFTs & FLDs at farmers' field considering the increase of income doubled. 15. Provides various micro-farming systems in the district according to the needs of farmers. 16. Provide seeds from IIVR, Varanasi for kitchen gardening and tell women about its importance 17. Follow PRA in adopted 10 villages and prepare their action plan 18. Establish IFS model at KVK farm and propagate their importance in adopted villages 19. More emphasis should be given to soil testing to minimize cost of cultivation and improve soil fertility status, OFT and FLD adopt on the basis of soil testing. 20. Promote intercropping with banana 	-

			<p>and other crops for income doubling</p> <p>21. Home scientist perform their work with another scientist and SHG</p> <p>22. Home Scientist adopt /propagate agarbatti making, removing banana fibers, food promotion, price tag and other technology among SHG women to increase their targeted income doubled by 2022.</p> <p>23. Disseminate good agronomical practices among farming community which could be increase their income. Record timely & late crop planting/sowing data of the district with the help of ATM/BTM and prepare their action plan after analyzing the data. Promote drip irrigation in the district and technology demonstrate/propagate as convergence mode. Start three tire cropping system at kvk farm and grow green fodder round the year as a model at kvk farm and also demonstrate such model at farmers field. Encourage to the farmers for bamboo (Var. Lota bamboo) cultivation for income generation.</p> <p>24. Every scientist must be attend two training program and two seminar, prepare lists accordingly and send to ATARI, Kanpur.</p> <p>25. To adopt Government's agricultural scheme, hundred percent at ground level. Report and presentation should be in a proper way, construction work finish under targeted time, changes agriculture scenario/livelihood/nutritional security/income of 10 selected villages through technological interventions after that disseminate the technology in other blocks, immediate prepare kvk web site and upload kvk programs, start publication e.g. folder, pamphlet and minimum pages and informative magazine, write SAC proceeding and send to all members to take their knowledge and experiences for preparation of action plan, decide target oriented work and freely perform their work, there is no need of benefit to governing body but recent technological interventions should be spread among farming community whereby improve their livelihood and nutritional security. Chairman also said that decide their target to make when will be best the kvk and performed their work in target-oriented time. More emphasis should be given on self-employment generated training program. Farmers will be benefited more if the kvk provide all pesticides as well as seeds and fertilizers from one place.</p>	
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Note : This yellow mark may be treated as an example

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

2. DETAILS OF DISTRICT (2017-18)

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

S. No	Farming system/enterprise
1.	Crop Production + Livestock
2.	Crop Production + Poultry
3.	Crop Production + Fisheries
4.	Crop Production + Vegetable Production
1.	Crop Production + Livestock

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

S. No	Agro-climatic Zone	Characteristics
1.	AES-1 (Sandy loam)	Poor water holding capacity
2.	AES-2 (Silty loam, Khadar Soil)	Medium water holding capacity
3.	AES-3 (Clay Loam)	Good water holding capacity

2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1.	AES-1	Soil Type-Sandy loam	160952
2.	AES-2	Soil Type-Silty loam, Khadar Soil	121714
3.	AES-3	Soil Type-Clay Loam	52651

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

S. No	Crop	Area (thousand ha)	Production (thousand ton)	Productivity (Qtl /ha)
A	FIELD CROPS INCLUDING OIL SEEDS AND PULSES			
1.	Paddy	152497	202895	15.26
2.	Maize	3299	4281	12.98
3.	Jowar	27	37	13.70
4.	Bajra	369	-617	16.72
5.	Arhar	8659	4978	5.75
6.	Urd	24	09	3.73
7.	Moong	02	01	2.77
8.	Ground Nut	2547	1508	5.92
9.	Til	75	12	1.62
10.	Wheat	190499	448884	23.89
11.	Barley	708	1388	19.60
12.	Gram	668	544	8.15
13.	Pea	2766	3587	12.97
14.	Lentil	2275	2067	9.08
15.	Mustard	3492	2373	6.80

16.	Linseed	47	02	4.20
17.	Sugarcane	3955	209034	528.53
B	FRUITS			
1.	Banana	6600	264000	40.00
2.	Mango	5500	38500	07.00
3.	Guava	1550	15500	10.00
4.	Litchi	200	13000	06.50
5.	Jamun	100	500	05.00
6.	Papaya	50	500	10.00
7.	Jackfruit	40	360	09.00
8.	Citrus	20	160	08.00
C	VEGETABLES			
1.	Potato	5000	125490	250.90

2.5. Weather data

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

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

Category	Population (2012)	Production (2016-17) 000mt	Productivity
Cattle			
<i>Crossbred+ Indigenous</i>	288765	366.21	-
Buffalo	279122		
Sheep	7894	Wool 7.22 (000Kg)	
Crossbred			
<i>Indigenous</i>			
Goats	196224	62.45 lakh Kg	
Pigs	18032		
<i>Crossbred</i>			
<i>Indigenous</i>			
Rabbits			
Poultry	682246	Eggs 538.3 (lakh)	
Hens			
<i>Desi</i>			
<i>Improved</i>			
Ducks			
Turkey and others			

Category	Area	Production	Productivity
Fish			
<i>Marine</i>			
<i>Inland</i>			
Prawn			
Scampi			
Shrimp			

2.7 Details of Operational area / Villages (2017-18)

Sl.No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Campierganj	Jungle Kaudia	Chauk Mafi, Badhyachouk, Madaha, Rajabari, Rananadiha, Majhauna Sakhi,	Rice, Wheat, Arhar, Mustard, Gram, Potato, Tomato, Bitter Gourd, Cucumber, Pumpkin, Ridge Gourd & Cattle	Low Yield, Anestrus and malnutrition in animal, weed infestation, pod-borer in pea, chick pea, Pigeon pea, soil erosion, less use of organic manure, Lack of awareness on post-harvest technology, value addition and drudgery reduction, Lack of timely information and technical guidance, Lack of knowledge about identification of insect-pest and different symptoms of diseases and pest attack	To improve productivity per unit area through Introduction of HYV, Integrated Nutrient Management, Integrated Disease Management, Integrated Weed Management, Seed production technology Maintenance of Old Orchard, Integrated pest management, Resource Conservation Technology, Kitchen gardening for production of nutritional food by women farmers, Raising productivity of livestock by upgrading the genetic potential by artificial insemination and use of mineral mixture, proper feeding and management, Post-Harvest management of food grain seed, fruits, vegetables, milk and milk products, less use of organic manure
2.	Campierganj	Campierganj	Bhaghi bhari, Atkawa, Mithouri, Kalyanpur, Ramchaura, Bhagwanpu	Rice, Wheat, Arhar, Mustard, Gram, Potato, Tomato, Cucumber, Pumpkin, Banana, Mango	Incidence of insect-pest and diseases in cereals, pulses, oilseeds, fiber, sugarcane, forage, vegetable, fruit and ornamental crops, Lack of awareness about production and management of livestock's, vaccination and important disease problem in livestock	do

3.	Sadar	Bhathat	Sarhare, Tikariya, Jungle dumri Chakjalal Aurangabad	Gram, Potato, Tomato, Bottle Gourd, Cucumber, Pumpkin	Lesser adoption of Good Agronomical Practices (GAP) like summer ploughing and destruction of stubbles, line sowing and raised bed planting method, intercropping, crop rotation, green manuring and application of neem cake, ground nut cake for pest management, Lack of knowledge about HYV of horticultural crops and latest production technology	do
4.	Sahjanwa	Pali	Usri, Madar, Bharpahi, Bhaksa, Musthafabad ,	Rice, Wheat, Arhar, Mustard, Gram, Potato, Tomato, Ridge Gourd, Banana, Mango, Cattle	Lesser adoption of seed treatment technique and use of higher doses of pesticides in vegetables and cereals. Low consumption and injudicious use of pesticides in rice, wheat, pulses, fiber and fruit plants. Higher doses and frequently usage of chemical pesticides in vegetable crops.	do
5.	Sadar	Chargawan	Bisunpur, Jangal aurahi, Lakshmipur, Parmesharpur, Jungle Dhushan, Siktor, Maniram, Sonbarsha	Wheat, Arhar, Mustard, Gram, Potato, Tomato, Bottle Gourd, Cucumber, Pumpkin, Ridge Gourd, Banana, Mango	do	do

6.	Sadar	Pipraich	Mohanpur, Baraipur, Bela, Bhaisaha, Gaura, Gopalpur, Kushmi	Arhar, Mustard, Gram, Potato, Tomato, Bottle Gourd, Cucumber, Pumpkin, Ridge Gourd, Banana, Mango, Buffalo	do	do
7.	Chauri Chaura	Sadar Nagar	Bardi, Bhagwanpur ,Chaura, Devipur, Sariyaiya, Bhauapar	Rice, Wheat, Arhar, Mustard, Gram, Potato, Tomato, Bottle Gourd, Cucumber, Pumpkin, Ridge Gourd, Banana, Mango, Cow	do	do
8.	Sadar	Khorabar	Bhumihari, Amhiya, Bhaisaha	Rice, Wheat, Arhar, Mustard, Gram, Potato, Tomato, tree plantation, Mango, goat	do	do
9	Sahjanwa	Sahjanwa	Keshokurha, Bhimapar, Keshavpur, Gahashad, basia bhagaura	Rice, Wheat, Arhar, Mustard, Gram, Potato, Tomato, Pumpkin, Ridge Gourd, Banana, Mango, Buffalo, cow	do	do

2.8 Priority/thrust areas

SN	Crop/Enterprise	Thrust area
1	Crop Production	Production Technology for kharif, rabi and zaid crop. Improved Production Technology through mechanization
2	RCT	Promotion of resource conservation technology
3	Entrepreneurship	Entrepreneurship development in rural youth
4	Drudgery reduction	Drudgery reduction technology and Drudgery reducing farm implements among farm women
5	Horticultural crops	Promotion of high value horticultural crop, Quality seed/planting material production
6	Live stock	Raising productivity of livestock, upgrading genetic potential through artificial insemination, use of mineral mixture, disease and parasitic control, proper feeding and management
7	Organic inputs production	NADEP and Vermi-composting
8	IPM	Promotion of Integrated Pest Management strategies for safe food production and environment protection
9	INM	Promotion of site specific nutrient management through INM for sustainable soil health
11	Kitchen Gardening	Nutritional security through kitchen gardening
12	Cucurbitaceous (bottle gourd, pumpkin, sponge gourd, bitter gourd etc.), groundnut, potato	Introduction of HYV, integrated disease/pest management, integrated nutrient management
13	Rice, Wheat, Pulses (Pigeon pea, chick pea, lentil, field pea, urd and moong)	Introduction of HYV, Integrated Nutrient Management, Integrated Disease Management, Resource Conservation Technology, Integrated Weed Management, Seed production technology
14	Cole crop(cauliflower, cabbage), Tomato, Okra, Chilli	Introduction of HYV, integrated pest and disease management, integrated nutrient management

* An example for guidance only

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

Demonstrations

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

OFT (Technology Assessment and Refinement)				FLD (Oilseeds, Pulses, Cotton, Other Crops/Enterprises)			
1				2			
Number of OFTs		Total no. of Trials		Area in ha		Number of Farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
10	06	44	21	36	35.28	200	111

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	77	47	1530	1100	1024	960	7165	5409
Rural youth	10	-	150	-				
Extn. Functionaries	18	4	280	62				

Seed Production (Qtl.)			Planting material (Nos.)		
5			6		
Target	Achievement	Distributed to no. of farmers	Target	Achievement	Distributed to no. of farmers
200	175	-	23000	20195	25

I.A TECHNOLOGY ASSESSMENT

Summary of technologies assessed under various crops by KVKs

Thematic areas	Crop	Name of the technology assessed	No. of trials	No. of farmers
Integrated Nutrient Management	Chickpea	Assessment of boron with balanced dose of fertilizer in chick pea	3	3
	Wheat	Assessment of HYV of wheat with application of 20% less fertilizer + bio fertilizer for yield maximization	3	3
Varietal Evaluation	Wheat	Assessment of high yielding varieties of wheat	3	3
Integrated Pest Management	Chickpea	Assessment of IPM strategies for pod borer management in chick pea	3	3
Integrated Crop Management				
Integrated Disease Management	Paddy	Assessment of false smut management in paddy	4	4
Small Scale Income Generation Enterprises				
Weed Management				

Resource Conservation Technology				
Farm Machineries				
Integrated Farming System				
Seed / Plant production				
Post Harvest Technology / Value addition				
Drudgery Reduction				
Storage Technique				
Others (Pl. specify)				
Total			16	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
Disease Management				
Evaluation of Breeds				
Feed and Fodder management				
Nutrition Management				
Production and Management	Buffalo	Assessment of feeding of mineral mixture and dewormer to enhance milk production	5	5
Others (Pl. specify)				
Total				

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

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

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

I.B. TECHNOLOGY REFINEMENT

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

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

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

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

Summary of technologies refined under various enterprises by KVKs

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

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

I.C. TECHNOLOGY ASSESSMENT AND REFINEMENT IN DETAIL

PEST AND DISEASE MANAGEMENT (Paddy) OFT-1

Problem definition: False smuts have recently become an important disease in paddy and causes both quantitative and qualitative losses.

Technology Assessed or Refined (as the case may be): False smut management in paddy.

The disease can occur in areas with high relative humidity (>90%) and temperature ranging from 25–35 °C. Rain and high humidity and soils with high nitrogen content also favor disease development. The pathogen also survives through alternate host viz., barnyard grass (*Echinochloa crusgalli*) and common rice weed *Digitaria marginata*. Wind can spread the fungal spores from plant to plant. False smut symptoms produced are visible after flowering only. The integrated approaches i.e. recommended dose of nitrogen (120kg/ha), weed management with Bispyribac-sodium 10% EC @ 250ml/ha at 20 days after transplanting and Copper hydroxide (Kocide) 77% wp @ 2.5g/liter water at panicle emergence were comprised under on farm trial. The incidence of false smut in paddy was recorded 5.50% in demonstration plot while it was 8.50% in farmers practice. The average yield of 50.25/ha was obtained from the demonstration plot whereas 42.00 q/ha from farmer practices and yield was increased by 19.64 per cent. Farmers accepted and appreciated technology.

Table:- Performance of integrated approach

Technology Option	No. of Trials	Avg. infected panicle/hill	Avg. infected panicle/m ²	Yield (q/ha)	%increase in yield over farmers practice	Disease incidence (%)
1	2	3	4	5	6	
Farmers practice (No control measure adopted/improper use of fungicides) (FP)	04	2.0	3.50	42.00	-	8.50
Use of integrated approach		1.25	2.50	50.25	19.64	5.50

Gross Cost (Rs/ha)	Gross Return (Rs/ha)	Net Returns (Rs/ha)	B:C Ratio
7	8	9	10
26500.00	65100.00	38600.00	2.45
28250.00	77887.50	49637.50	2.76

PEST AND DISEASE MANAGEMENT

(Chick Pea) *OFT-2*

Problem definition: Low yield of Chick Pea due to severe infestation of pod borer and it accounting for 75% pod damage in crop.

Technology Assessed: Assessment of IPM strategies for pod borer management in chick pea

Chick Pea is a major pulse crop of Rabi season. The low yield of chick pea was recorded due to severe infestation of pod borer (*Helicoverpa armigera* Hubner). The problem was identified with concerned village persons during survey and KVK conducted on farm trial to assess the control measures. The different IPM strategies i.e. proper tillage, line sowing and inter cropping with coriander/linseed, HYV GNG 1581, seed treatment with Carbendazim @ 2gm/kg of seed for management of collar rot and spray of indoxacarb 15.8% EC @ 1ml/liter water at 50% flowering and at 50% pod filling stage were comprised under on farm trial. There was less infestation of plants/m² and pod/plant with introduction of IPM strategies. The average yield of **18.73q/ha** was obtained from the demonstration plot whereas **12.36** q/ha from farmers practice and yield was increased by **51.53** per cent.

Table:- Performance of management strategies of Pod borer in Chick Pea

Technology Option	No. of Trials	% of Affected plants/m ²	% of damaged pod/plant	Yield (q/ha)	%increase in yield over farmers practice
1	2	3	4	5	6
Indiscriminate use of pesticide	03	14.00	12.50	12.36	-
Use of IPM strategies		08.00	6.00	18.73	51.53

Gross Cost (Rs/ha)	Gross Return (Rs/ha)	Net Returns (Rs/ha)	B:C Ratio
7	8	9	10
17253	49440	32187	2.87
21171	74920	53749	3.54

VARIETAL EVALUATION

(Wheat) *OFT-3*

Problem definition: Lower Productivity and profitability in wheat cultivation due to use of old and mixed varieties.

Technology Assessed: Assessment of high yielding variety of wheat

Wheat is one of most important Rabi crop, widely cultivated throughout the country. Wheat variety PBW-343 is most popular among the farmers of district Gorakhpur. Lower productivity problem has been identified in this variety. The Krishi Vigyan Kendra, MGKVK, Gorakhpur conducted on farm trial to assess the HYV of wheat HD-2967 and PBW-343 to enhance the productivity and profitability to the farmers. Higher grain yield 46.3q/ha and net return Rs. 50384.5/ha was recorded in HD-2967 as compared to the farmers practice with average yield 39.19 q/ha and net return of Rs. 29184/ha in PBW-343.

Table:-Performance of HYV Wheat Varieties HD-2967 and PBW-621 under Timely Sown Irrigated Condition

<i>Technology Option</i>	<i>No. of Trials</i>	<i>No of tillers/hill</i>	<i>Plant height (cm)</i>	<i>No of Grain /spike</i>	<i>Grain Yield q/ha</i>	<i>% Increase in Yield</i>	<i>Gross Cost Rs/ha</i>	<i>Gross Returns Rs/ha</i>	<i>Net Returns Rs/ha</i>	<i>B:C Ratio</i>
<i>Wheat Variety PBW-343 (Farmers Practice)</i>	03	9.0	95.00	63.0	39.19	–	29616	58800 @15/kg	29184	1.99
<i>HD-2967</i>		14.0	99.00	81.0	46.30	18.11	29946	80330.5 @17.35/kg	50384.5	2.68

INTEGRATED NUTRIENT MANAGEMENT

(Wheat) *OFT-4*

Problem Definition: Low yield in wheat due to use of imbalanced dose of fertilizer

Technology Assessed: Assessment of HYV of wheat with application of 20% less fertilizer + bio fertilizer for yield maximization.

Wheat (*Triticum aestivum*) is one of the most common cereals crops grown in Rabi season under irrigated condition. The yield of wheat is being lowered down due to imbalanced dose of chemical fertilizer and no use of Azotobacter. MGKVK Gorakhpur conducted On Farm Trial for enhancing the wheat production with balanced nutrients management practices. The assessed technology of balanced dose of chemical fertilizer @(100:40:40::N:P:K) kg/ha in HD-2967 were found to be better with and 26.46 % increase in yield over farmers practice. The highest benefit cost ratio i.e. 2.76 was recorded with the application of balanced dose of chemical fertilizer and Azotobacter biofertilizer and lowest 2.20 was recorded in farmers practice i.e. due to imbalanced use of chemical fertilizer and no use of Boron micronutrient.

Table: Effect of Balanced Dose of Chemical Fertilizer and Azotobacter in wheat

Technology Option	No.of trials	Yield (q/ha)	No of tillers/plants	No of grains/spike	Plant height(cm)	%increase in yield	B:C Ratio
T-1: Farmers Practice (170:40:0::N:P:K)kg/ha and no use of PSB culture	03	38.40	10	59	94	-	2.20
T-2: HYV:HD-2967+ Use of 20% less chemical Fertilizer(100:40:40::N:P:K)kg/ha and Azotobacter (@ 2 liter/ha.(soil application)		48.56	15	84	101	26.46	2.76

INTEGRATED NUTRIENT MANAGEMENT

(Chickpea) *OFT-5*

Problem Definition: Low yield of chickpea due to no use of boron in chickpea.

Technology Assessed: Assessment of boron with balanced dose of fertilizer in chick pea.

Chickpea (*Cicer arietinum*) is one of the most common pulse crops grown in Rabi season under irrigated condition. It also plays an important role in sustainable agriculture enriching the soil through biological nitrogen fixation. The yield of chickpea is being lowered down due to imbalanced dose of chemical fertilizer and no use of micronutrient (Boron). MGKVK Gorakhpur conducted on farm trial for enhancing the chickpea production with balance nutrient management practices and use of micronutrient (Boron). The assessed technology of balanced dose of chemical fertilizer @ (20:40:30:30::N:P:K:S) kg/ha + Boron (20%) @ 0.15% solution 3 foliar application in GNG 1581 were found to be better percent increase in yield over farmers practice. Results were found to be better with 44.32 per cent increase in yield over farmers' practices. The highest benefit cost ratio i.e 2.95 was recorded with the application of balanced dose of chemical fertilizer @ (20:40:30:30::N:P:K:S) kg/ha + Boron (20%) @ 0.2% solution 2 foliar application and lowest was recorded in farmers practice i.e. 2.51 due to imbalanced use of chemical fertilizer and boron micronutrient deficiency.

Boron plays important role in cell division and in pod and seed formation. Boron deficiency causes flower drop and consequently poor podding in chickpeas and poor yields. Foliar and soil application of micronutrient is effective to control the flower drop, increase quality of pods and increase chickpea total dry matter and improve seed yield.

Table: Effect of Balanced Dose of Chemical Fertilizer and use of boron micronutrient in chick pea

Technology Option	No.of trials	No of pods per plants	Plant height (cm)	No of seeds/pod	Yield(kg/ha)	%increase in yield	B:C Ratio
T-1: Farmers Practice Imbalanced dose of chemical fertilizer and no use of boron micronutrient	03	65	45.5	2	10.83	-	2.51

T-2: HYV:GNG 1581+ Balanced Dose of chemical Fertilizer(20:40:30:30:: N:P:K:S)kg/ha + Boron (20%) @ 0.2% solution 2 foliar application		98	57.0	2	15.63	44.32	2.95
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LIVE STOCK ENTERPRISES
(Buffalo) OFT-6

Problem definition: Low milk yield in dairy animals' due to deficiency of micronutrients and infestation of endo-parasite

Technology Assessed or Refined (as the case may be): Feeding of mineral mixture and dewormer to enhance milk production

Buffalo play significant role in ensuring livestock security to the million of small and marginal farmer, landless labourers and rural folk. Deficiency of micronutrient and infestation of endo-parasites is the major problem of dairying in Gorakhpur district, however its low milk production is due to deficiency of micronutrient in feeds. The MGKVK Gorakhpur conducted on farm trial to find out suitable control measure for low milk yield in dairy animals'. The assessed technology i.e. Mineral mixture (50gm per animal per day) and dewormer (1 Tab per 3 month per animal) were used. The result was found best with the application of mineral mixture and dewormer.

Technology option	No of trial	Occurrence of heat after parturition (days)	No of animals conceive after parturition	% of animals conceive after parturition	Milk yield (lit/day/animal)	Additional milk yield (lit/day/animal)
Use of common salt (farmers practice)	5	32	2	40	5.25	-
Use of mineral mixture + dewormer		14	5	100	6.49	1.24

Gross Cost (Rs/animal/day)	Additional cost local practice Rs/day)	Gross Return (Rs/animal/day) @ Rs. 40/liter	Net Returns (Rs/animal/day)	B:C Ratio
170	-	210.00	40.00	1:1.24
178	8.00	259.60	81.60	1:1.46

II. FRONTLINE DEMONSTRATION

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

List of technologies demonstrated during previous year and popularized during 2016-17 and recommended for large scale adoption in the district : **Not applicable**

S. No	Crop/Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha

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

b. Details of FLDs implemented during **2017-18** (Information is to be furnished in the following **three tables** for each category i.e. **cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.**)

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ Demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1.	Pigeon pea	Varietal evaluation	NA-2 + Seed treatment with carbendazim @ 2g/kg seed	Khari f 2017 -18	20	20	04	46	50	-
2.	Mustard	Varietal evaluation	Seed (giriraj)+ seed treatment	Rabi 2017 -18	10	10	0	25	25	-
3	Chickpea	VE	GNG 1581+ Seed treatment with carbendazim @ 2g/kg seed +PSB culture @5gm/kg seed	Rabi 2017 -18	2.50	2.15	0	10	10	-
4	Paddy	INM	Recommended dose of fertilizer 120:60:40 kg NPK/ha (farmer share) + Znso4 @ 25kg/ha	Khari f 2017	1.00	1.00	4	6	10	
5	Barseem	VE	Seed (BB-2)	Rabi 2017 -18	2.00	2.13	0	16	16	

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Pigeon pea	Kharif 2017	irrigated	Sandy loam	Low	Low	Medium	Wheat	26 June-10 July 2017	8-17 April, 2018		
Mustard	Rabi 2017	irrigated	Sandy loam	Low	Low	Medium	Paddy	25 Oct-8 Nov 2017	12-28 March 2018		
Chick pea	Rabi 2017	Rabi 2017	Sandy loam	Low	Low	Medium	Paddy	12-20 Nov. 2017	8-15 April, 2018		
Paddy	Kharif 2017	irrigated	Sandy loam	Low	Low	Medium	Wheat	2-14 July, 2017	15-27 NOV, 2017		
Barseem	Rabi 2017	irrigated	Sandy loam	Low	Low	Medium		2-24 NOV, 2017	14-18 April, 2018		

Technical Feedback on the demonstrated technologies

S. No	Feed Back
Mustard	
1	It is suitable for 10-25 October sowing, 2.5-3.5 kg/ha seed is sufficient
2	It is suitable for irrigated conditions
3	It is of long maturity (137-153 days)
Pigeon pea	
1	Variety NA-2 has been found better than non-identified local variety
2	Variety NA-2 with fertilizer response appreciated by the farmers
Chickpea	
1	Chick Pea Variety GNG 1581 is resistant to water logging condition and tolerant against wilt, Ascochyta blight, stunt and root rot, medium height and semi erect plant
2	Use of carbendazim as a seed treatment resulted to control collar rot/wilt
3	Application of balanced dose of fertilizer found effective in higher production
4	There is a need to develop a method to know the effectiveness and activeness of microbes in bio-agents at local level
5	No use of balanced dose of fertilizer is a major constraint for production of chick pea
6	Lack of awareness about IPM strategies
Paddy	
1	Use of balanced dose of fertilizer (120:60:40kg/ha N:P:K::+ZnSO ₄ 25kg/ha) found an important role in higher sustainable production
2	Application of ZnSO ₄ is useful to control of Khaira disease and also it enhances the photosynthetic rate of plant resultantly enhance the production of paddy
Berseem	
1	Variety BB-2 is highly productive and multi-cut variety
2	Dark green leaves and tolerant to acidic condition
3	This variety flowers in 150-160 days and matures in 180-190 days.

Farmers' reactions on specific technologies

S. No	Feed Back
Mustard	
1.	Farmers were happy with HYV Giriraj
2.	Giriraj may be sown with in 15 th October that reduces the aphid infestation and resultantly increase the production
3.	Farmers appreciated the demonstration
Pigeon Pea	
1.	NA-2 seed is not available in market but this variety is better than others
2.	No of pods are higher in comparison to other varieties
Chickpea	
1	Variety GNG 1581 appreciated by farmers because seed size is slightly bold
2	Farmers accepted fertilizer dose as recommended by scientists
3	Attack of Neelgai during the maturity of crops is a constraint for chick pea production
Paddy	
1.	Farmers are not aware about improved production technology of paddy
2.	Recommended dose of fertilizer along with Zinc Sulphate is appreciated by the farmers
3.	Imbalanced use of fertilizer is a major constraint for production of paddy
Berseem	
1	Farmers were happy to grow this variety, they received higher quantity of forage
2	Farmers' appreciated the demonstration due to more cutting of this variety (5-6 cuts)

Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	2 (Mustard & barseem)	19 & 20 march, 2018	48	
2	Farmers Training	09 (Paddy, chickpea, pigeon pea, mustard, berseem)	27.9.17, 30.8.17, 28.9.17, 16.0.17, 25.9.17, 23.9.17, 8.11.17, 29.1.18, 26.8.17,	181	
3	Media coverage	4	28.5.17, 21.3.18, 16.11.17, 13.10.17	mass	
4	Training for extension functionaries	-	-	-	

Performance of Frontline demonstrations

Frontline demonstrations on oilseed crops

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Groundnut																		
Sesamum																		
Mustard	ICM	Seed (giriraj)+ seed treatment	DRMRIJ31	25	10	21.15	17.50	20.03	14.62	37	21606	80120	58514	2.71	21300	43860	22560	2.06
Toria																		
Linseed																		
Sunflower																		
Soybean																		

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

** BCR= GROSS RETURN/GROSS COST

Frontline demonstration on pulse crops

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Pigeonpea	ICM	NA-2 + Seed treatment with carbendazim @ 2g/kg seed	NA-2	50	20	16.23	12.44	14.64	10.27	42.55	20192	73200	53008	3.63	18537	51350	32813	2.77
Blackgram																		
Greengram																		
Chickpea	ICM	GNG 1581+ Seed treatment with carbendazim @ 2g/kg seed +PSB culture @5gm/kg seed	GNG 1581	10	2.15	18.30	15.65	16.95	11.88	42.67	21171	74580	53409	3.52	17253	47520	30267	2.75
Fieldpea																		
Lentil																		
Horsegram																		

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

** BCR= GROSS RETURN/GROSS COST

FLD on Other crops

[illegible]

[illegible]

[illegible]

[illegible]

Sheep & Goat																	
Vaccination																	

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

** BCR= GROSS RETURN/GROSS COST

FLD on Fisheries

[illegible]

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

**** BCR= GROSS RETURN/GROSS COST**

FLD on Other enterprises

[illegible]

[illegible]

FLD on Women Empowerment

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

FLD on Farm Implements and Machinery

[illegible]

FLD on Other Enterprise: Kitchen Gardening

[illegible]

FLD on Demonstration details on crop hybrids *(Details of Hybrid FLDs implemented during 2016-17)*

Crop	technology demonstrated	Hybrid Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)			
					Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Average						
Oilseed crop													
Pulse crop													
Cereal crop													
Vegetable crop													
Fruit crop													
Other (specify)													

Note : Remove the Enterprises/crops which have not been shown

III. Training Programme

Farmers' Training including sponsored training programmes (on campus)[illegible]

[illegible]

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										
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	1	3	18	21	5	2	7	8	20	28
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths	1	19	-	19	1	1	2	20	1	21
WTO and IPR issues										
Others (pl specify)										
Total	2	22	18	40	6	3	9	28	21	149
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
Total										
GRAND TOTAL	14	181	114	295	24	37	61	205	151	356

[illegible]

[illegible]

[illegible]

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	2	19	1	20	1	22	23	20	23	43
Mobilization of social capital	1	4	-	4	10	11	21	14	11	25
Entrepreneurial development of farmers/youths	1	9	1	10	6	-	6	15	1	16
WTO and IPR issues										
Others (pl specify) Sanitation	1	26	-	26	2	-	2	28	-	28
Total	5	58	2	60	19	33	52	77	35	112
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
Total										
GRAND TOTAL	33	470	111	581	67	96	163	537	207	744

[illegible]

Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl specify)										
Total (b)	1	12	6	18	-	3	3	12	9	21
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	1	9	3	12	4	5	9	13	8	21
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)	1	9	3	12	4	5	9	13	8	21
GT (a-g)										
III Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated Nutrient Management	3	41	21	62	9	3	12	50	24	74
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops	1	17	1	18	2	0	2	19	1	20
Nutrient Use Efficiency										
Balance use of fertilizers	1	13	6	19	0	1	1	13	7	20
Soil and Water Testing	4	63	12	75	14	2	16	77	14	91
Others (pl specify)										
Total										
IV Livestock Production and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Disease Management										
Feed & fodder technology										
Production of quality animal products										
Others (pl specify)										
Total										
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	2	-	53	53	-	17	17	-	70	70
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet	1	-	12	12	-	9	9	-	21	21
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs	1	10	7	17	1	-	1	11	7	18
Storage loss minimization techniques	1	31	-	31	-	-	-	31	-	31
Value addition	1	-	11	11	-	9	9	-	20	20

Women empowerment										
Location specific drudgery reduction technologies	2	3	30	33	-	-	14	3	44	47
Rural Crafts										
Women and child care										
Others (pl specify) Post harvest management	1	1	1	2	1	17	18	2	18	20
VI Agril. Engineering	9	45	114	159	2	66	68	47	180	227
Farm Machinery and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl specify)										
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										
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	1	3	18	21	5	2	7	8	20	28
Group dynamics										
Formation and Management of SHGs	2	19	1	20	1	22	23	20	23	43
Mobilization of social capital	1	4	-	4	10	11	21	14	11	25
Entrepreneurial development of farmers/youths	2	28	1	29	7	1	8	35	2	37
WTO and IPR issues										
Others (pl specify) Sanitation for human and soil	1	26	-	26	2	-	2	28	-	28
Total	7	80	20	100	25	36	61	105	56	161

Training for Rural Youths including sponsored training programmes (Off campus)[illegible]**Training for Rural Youths including sponsored training programmes – CONSOLIDATED (On + Off campus)**[illegible]

[illegible]**Training programmes for Extension Personnel including sponsored training programmes (on campus)**

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management										
Integrated Nutrient management	1	11	0	11	0	0	0	11	0	11
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	1	23	0	23	1	0	1	24	0	24
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify) Production technology of veg. crops	2	18	9	27	0	0	0	18	9	27
TOTAL	4	52	9	61	1	0	1	53	9	62

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

[illegible]

IV. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	218	218	-	218
Diagnostic visits	25	25	-	25
Field Day	4	130	-	130
Group discussions				
Kisan Ghosthi	10	2210	20	2230
Film Show	02	500	40	540
Self -help groups	03	33	0	33
Kisan Mela/Exhibition	2	1350	75	1425
Exhibition	2	70	10	80
Scientists' visit to farmers field	464	517	-	517
Farmers' visit to kvk farm	214	214	-	214
Plant/animal health camps	01	20	10	30
Farm Science Club				
Ex-trainees Sammelan				
Farmers' seminar/workshop				
Method Demonstrations	10	60	-	60
Celebration of important days	9	343	-	343
Special day celebration				
Exposure visits				
Others (pl. specify)				
Total	964	5690	155	5845

Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	
Extension Literature	
News paper coverage	57
Popular articles	02
Radio Talks	13
TV Talks	
Animal health camps (Number of animals treated)	01
Others (pl. specify) WhatsApp's group (Kisan mobile Sandesh) one	01
You Tube video	06
Facebook	06
Total	86

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Marketing	Aware-ness	Other enterprise	
	Text only							
	Voice only							
	Voice & Text both							
	Total Messages							
	Total farmers Benefitted							

V. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS

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

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

Production of seeds by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Quantity of seed (q)	Value (Rs) Expect.	Number of farmers
Cereals	Paddy	CO-51		5	15000.00	
		Sanbha Sab-1		60	210000.00	
	Wheat	DBW 107		90	315000.00	
		HD 2967		10	28000.00	
Oilseeds	Mustard	Giriraj		2	8000.00	
		Pusa vijay		1	4000.00	
		Pitambari		1	4000.00	
Pulses	Pigeon pea	NA-2		1	5400.00	
	Chickpea	GNG 1581		1	4400.00	
Commercial crops						
Vegetables	Potato	K. khyati		4	5600	
Flower crops						
Spices						
Fodder crop seeds						
Fiber crops						
Forest Species						

Others						
Total				175	599400.00	

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	Kashi sharad		4650	1860	11
	Onion	ALR		15200	380	8
	Chilli	K Anmol		200	80	1
	Brinjal	K. Taru		125	50	3
	Cabbage	F-1		10	5	1
	Broccoli	F-1		10	5	1
Fruits						
Ornamental plants						
Medicinal and Aromatic						
Plantation						
Spices						
Tuber						
Fodder crop saplings						
Forest Species						
Others						
Total				20195	2380	25

Production of Bio-Products

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

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)
Soil	58	552	06	-
Water				
Plant				
Manure				
Others (pl.specify)				
Total	58	552	06	

VIII. SCIENTIFIC ADVISORY COMMITTEE

Name of KVK	Number of SACs conducted
MGKVK, Gorakhpur	One on dated 23.03.2018

IX. NEWSLETTER/MAGAZINE

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

X. PUBLICATIONS

Category	Number
Research Paper	03
Technical bulletins	-
Technical reports	3
Others (pl. specify)	

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

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

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

Introduction of alternate crops/varieties

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

[illegible]

Total												

XIII. DETAILS ON HRD ACTIVITIES

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

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

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

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

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

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

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

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

Name of the KVK

TITLE

Introduction

KVK intervention

Output

Outcome

Impact

Case study

Name of the KVK: MGKVK, Chaukmafi, Peppeganj, Gorakhpur, UP

Title: Enhancing mustard production for livelihood security through varietal replacement of HYV Giriraj

Situation analysis/ Problem statements:- Gorakhpur district is a part of the North Eastern Plain Zone of Uttar Pradesh. The soils of district are alluvial, calcareous and salt affected. The district has a large number of streams, ponds and rivers, which brings tremendous flood during the rainy season and miseries to the human and animal population. The average annual rainfall is about 132.09 mm but it varies in various part of the district. The maximum and minimum temperature varies from 48 to 04 °C. This makes agriculture the most important profession of people. One day a progressive farmer Shri Balwant Singh village Usari, Post: Pali block: Pali, came in contact with the scientists of the KVK. He said that “we grow 1-2 acre of mustard crop but getting yield of mustard approximately 10-14 q/ha”. Thereafter KVK’s Scientists have analyzed the main cause of low production of mustard viz. use of non-descriptive old mixed variety varuna and undescriptive variety, continuously use imbalanced use of fertilizer, improper weed management technique, late sowing, broadcasting method, no seed treatment, higher seed rate, indiscriminate use of insecticide. To combat the causes of yield erosion in mustard, MGKVK Gorakhpur selected to Mr. Balwant Singh for frontline demonstration (FLD) programmes under technology demonstration for harnessing oilseed productivity of Mustard through varietal replacement of HYV Giriraj with good agronomical practices under real farmer’s conditions.

Plan, Implement and Support:-

MGKVK Gorakhpur tries to make them aware regarding scientific cultivation of mustard. That starts from land preparation to harvesting. This KVK has encouraged the farmer for soil testing and on the basis of that farmer was advised for balanced dose of chemical fertilizer with high yielding varieties Giriraj. That was sown on 28-10-2017 with line sowing and fertilizer application was done with basal application in which half dose of nitrogen full dose of SSP and full dose of MOP as recommended. Rest nitrogen used after first irrigation. Regular field visits were also made by the Subject Matter Specialists under the leadership of Senior Scientist and Head of KVK. Field days and Kisan gosthi were also organized at his field.

Output:- Mr. Balwant Singh adopted the balanced dose of chemical, fertilizer (N:P:K:S::150:40:40:30) kg/ha in mustard crop as per suggestion of KVK’s scientist for his one acre land. His local yield was 5.60 qt with recommended technology. His yield increased by 53.57% with yield 8.60 qt. The economic gain in terms of per unit expenditure gross income, net return and BCR are recorded. Rs 8640, Rs. 34400, Rs. 25760 and 3.98 correspondingly.

Outcome:- Mustard crop is the major oilseed crop of the district. This variety has been disseminated in 09 villages of the district in area of approximately 10 ha. The outcome of this demonstration motivated the farming communities` to replace their old varieties, non-descriptive

varieties. Mr. Balwant Singh is very happy on improvement in their income, livelihood and set forth example for others.

Impact:- Mr. Balwant Singh is becoming one of the progressive and learned farmers for others with regards to popularization of Giriraj. This technology helps him for livelihood, empowerment and make him enthusiastic regards oilseed production. He is one of the progressive farmer after a becoming a part of KVK activities and get their effectiveness for his own development. Mr. Singh is very happy with this improved production and management technology and set forth example for other farmers of the district.

Case Study in Glimpses

Director ICAR-ATARI, Dr U.S. Gautam
Delivered Lecture on training of Mustard



Seed Distribution of Cluster Frontline Demonstrations on
Mustard by Dr U.S. Gautam, Director ICAR-ATARI on
16.10.2017



A view of Demonstrated field



A view of field day program

XIV. AGRICULTURAL TECHNOLOGY INFORMATION CENTRE

A. Details on ATICs

S. No	Name of the ATIC	Name of the Host Institute	Name of the ATIC Manager

B. Details on Farmer's visit

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

C. Facilities in the ATIC which are in operation

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

D. Technology information provided

D.1. Details on technology information

[illegible]

D.2 . Publications (Print & Electronic media)

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

E. Technology Products provided

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

F. Technology services provided

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

XV. TECHNOLOGICAL BACKSTOPPING BY DIRECTORATES OF EXTENSION

States covered:

Number of Directorates of Extension:

A. Details on Directors of Extension

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

B. Workshops / meetings organized

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

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

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

D. Overseeing of KVKs activities

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

E. Publication on Technology inventory

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

F. Technological Products provided to KVKs

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

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