Annual Action Plan
(April 2018 - March 2019)

Krishi Vigyan Kendra Manpur, Gaya

Directorate of Extension Education

Bihar Agricultural University,
Sabour Bhagalpur

1. Name of the KVK**: KRISHI VIGYAN KENDRA, MANPUR, GAYA**

2. Name of the host organization**: B.A.U., SABOUR, BHAGALPUR, BIHAR**

3. Training Programme to be organized (April 2018 - March 2019)

(a) Practising farmer /Farm women

Thematic Area	Title	Duration	No. of participants			
			SC	ST	Others	Total
Crop Production						
Integrated Crop Management	Improved package of production for summer mongbean	1	4	-	21	25
Production of organic inputs	Importance of green manure crops for organic production system	1	5	-	20	25
Weed Management	Weed management in summer mongbean	1	4	-	21	25
Integrated Crop Management	Importance of deep summer ploughing to reduce pest population	1	3	-	22	25
Cropping Systems	Production technique for direct seeded rice	1	4	-	21	25
Resource Conservation Technologies	Different methods for recharging/conserving ground water	1	2	-	23	25
Nursery management	Technique for MAT type nursery raising in paddy	1	4	-	21	25
Nursery management	Technique for raising paddy nursery under deficient/delayed rainfall condition	1	4	-	21	25
Integrated Crop Management	Production technique for kharif maize	1	4	-	21	25
Production of organic inputs	Bio-fertilizers-a tool for sustainable /organic crop production	1	4	-	21	25
Productivity enhancement	Production technique for late sown wheat	1	4	-	21	25
Integrated Farming	IFS models for doubling farmers income	1	4	-	21	25
Nutrient management	Fertilizer and irrigation management in wheat	1	4	-	21	25
	Total	**13**	**50**	**-**	**275**	**325**
Home Science						
Gender main streaming through SHGs	Capacity building of farm women through SHGs	1	3	-	22	25

Storage loss minimization	Home scale method of Safe grain storage	1	5	-	20	25
Women & Child care	Management and preventive measures against malnutrition among children	1	1	-	24	25
Income generation	Different avenues of farm women entrepreneurship	1	5	-	20	25
Design and development of low/minimum cost diet	Nutritional upliftment by low cost locally available less familiar foods	1	4	-	21	25
Household food security by kitchen gardening	Nutrition garden to maintain food & nutrition security	1	4	-	21	25
Minimization of nutrients loss in processing	Prevention of nutrition loss during cooking process	1	3	-	22	25
Income generation & empowerment of women	Mushroom production	1	3	-	22	25
Value addition	Post harvest management of fruits & vegetables	1	1	-	24	25
Value addition	Preparation of products from Amla	1	4	-	21	25
Value addition	Value addition of tomato	1	3	-	22	25
Value addition	Value addition of potato	1	3	-	22	25
Women and child care	Importance of nutrients and their deficiency management	1	3	-	22	25
Women and child care	Adulteration in common food materials	1	5	-	20	25
Women and child care	Nutritional requirement for pregnant and lactating women	1	1	-	24	25
	Total	**15**	**48**	**0**	**327**	**375**
Veterinary Science						
Dairy Management	Management of dairy animals during summer	1	5	-	20	25
Disease Management	HS & BQ in dairy animals	1	5	-	20	25
Disease Management	Vaccination schedule in dairy animals	1	5	-	20	25
Poultry Management	Income generation through backyard poultry	1	5	-	20	25
Poultry Management	Commercial broiler farming	1	5	-	20	25
Feed Management	Formulation of balanced ration	1	5	-	20	25
Goat farming	Small scale goat farming	1	5	-	20	25
Fodder production	Fodder production round the year	1	5	-	20	25
Disease Management	Management of common disease	1	5	-	20	25
Dairy Management	Clean milk production	1	5	-	20	25

Dairy Management	Management of cattle in winter season	1	5	-	20	25
Disease Management	Infertility in dairy animals	1	5	-	20	25
Disease Management	Common disease of goat	1	5	-	20	25
Feed Management	Treatment of straw with urea	1	5	-	20	25
	Total	**14**	**70**	**0**	**280**	**350**
Extension Education						
Group dynamics	socio- economic upliftment through farmers group	1	2	-	18	20
Group dynamics	Farmers field school is the need of the time for farmers	1	2	-	18	20
Organic farming	Organic farming is the need of the time for farmers	1	2	-	18	20
Information networking	Use of electronic media for market update	1	2	-	18	20
Information networking	availability of markets for sale of farmers produce	1	2	-	18	20
Capacity building	Capacity building of farmers & farm women for seed production	1	2	-	18	20
Capacity building	Capacity building for vegetable seed production	1	2	-	18	20
Formation and management of SHGs	Increasing income through SHGs	1	2	-	18	20
Formation and management of SHGs	Doubling farmers income through group formation	1	2	-	18	20
Gender mainstreaming	Gender mainstreaming by means of group activities	1	2	-	18	20
Entrepreneurial development	Generating income through vermicomposting	1	2	-	18	20
Entrepreneurial development	Increasing income by means of value addition	1	2	-	18	20
Entrepreneurial development	Entrepreneurship development in agriculture	1	2	-	18	20
	Total	**13**	**26**	**0**	**234**	**260**

(b) Rural Youth

Thematic Area	Title	Duration	No. of participants			
			SC	ST	Others	Total
Crop Production						
Seed production	Seed production techniques of field crop (cereals/pulse/oilseed)	6	4	-	21	25
	Total	**6**	**4**	**-**	**21**	**25**
Extension Education						
Entrepreneurship development	Vermi composting is the means of developing entrepreneurship	6	2	-	18	20
Beekeeping	Doubling income through beekeeping	6	2	-	18	20
	Total	**12**	**4**	**-**	**36**	**40**
Home Science						
Value addition	Fruits & vegetables processing	6	5	-	15	20
Entrepreneurship development	Mushroom production	6	3	-	17	20
	Total	**12**	**8**		**32**	**40**
Veterinary Science						
Dairy Management	Dairy Management	5	5	-	20	25
Goatry Management	Goatry Management	4	5	-	20	25
	Total	**9**	**10**	**-**	**40**	**50**

(c) Extension Functionaries

Thematic Area	Title	Duration	No. of participants			
			SC	ST	Others	Total
Crop Production						
Productivity enhancement	Technical knowhow on ‘App” based fertilizer	2	4	-	21	25
Productivity enhancement	Package of practices for rabi crop production	2	3	-	22	25
Home Science						
Kitchen gardening & human health	Household food security by kitchen gardening	2	5	-	20	25
Veterinary Science						
Dairy Management	Scientific management of dairy animal for improvement in milk production	2	5	-	20	25
Extension Education						
Entrepreneurship development	Doubling income through vermicompost production	2	2	-	18	20
Entrepreneurship development	Beekeeping is the means of increasing income	2	2	-	18	20

Extension Activities 2018-19

Nature of Extension Activity	No. of activities	Farmers			Extension Officials			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	10	300	50	350	10	-	10	310	50	360
Kisan Mela	3	-	-	-	-	-	-	-	-	Mass
Kisan Ghosthi /Kisan chaupal	40	700	100	800	25	10	35	725	110	835
Exhibition	1	-	-	-	-	-	-	-	-	mass
Method Demonstrations	6	60	10	70	3	2	5	63	12	75
Workshop	1	-	-	-	-	-	-	-	-	Mass
Lectures delivered as resource persons	25	600	20	620	25	15	40	625	35	660
Newspaper coverage	30	-	-	-	-	-	-	-	-	Mass
Radio talks	04	-	-	-	-	-	-	-	-	Mass
TV talks	05	-	-	-	-	-	-	-	-	Mass
Popular articles	03	-	-	-	-	-	-	-	-	Mass
Extension Literature	05	-	-	-	-	-	-	-	-	-
Advisory Services	500	400	100	500	-	-	-	-	-	500
Scientific visit to farmers field	100	60	30	90	10	-	10	70	30	110
Farmers visit to KVK	500	400	100	500	-	-	-	-	-	500
Diagnostic visits	10	40	15	15	-	-	-	40	15	55
Exposure visits	5	150	-	-	-	-	-	-	-	150
Soil health Camp	5	-	-	-	-	-	-	-	-	mass
Animal Health Camp	10	400	-	400	-	-	-	-	-	400
Soil test campaigns	4	-	-	-	-	-	-	-	-	4
Celebration of important days (specify)	10	-	-	-	-	-	-	-	-	mass

Any Other (Specify)	-	-	-	-	-	-	-	-	-	-
Krishi Vikas Utsav	-	-	-	-	-	-	-	-	-	-
Technical bulletin	**1**	-	-	-	-	-	-	-	-	**1**
Total	**1261**	**2820**	**425**	**3105**	**73**	**27**	**100**	**1833**	**252**	**3360**

Action plan of FLD for the year 2018-19

(A) FRONT LINE (Cluster) DEMONSTRATION OILSEEDS AND PULSES (2018-19)

S. N.	Crop	Previous crop and cropping system			Farming situation		Area (ha)	Variety	Sowing time	Technology Demonstrated	Input of demonstration cost. (Rs.)
		Summer	Kharif	Rabi	Rain fed	Irrigated					
Kharif Pulse											
1.	Pigeon pea						10	NA-1/ Malvi 16	Jun-July	Bio fungicide + seed+insecticide	110000
Oilseed											
1.	Mustard	Moong	Paddy	Rai	-	-	10	Pusa Mahak /R.Suflam	October-December	Seed+ Sulphur+ insecticide	60000
Pulses											
1.	Lentil	Moong	Paddy	Lentil	Rainfed	-	50	Arun/ HUL 57	Nov.	Seed+ Rhizobium /Trichoderma	175000
2.	Chickpea						20	As per variety available	Oct.	Seed+ Rhizobium /Trichoderma	200000
3.	Moong	Moong	Paddy	Wheat		Irrigated	30	PDM-139	March	Seed+treatment material+ sulpher	15000
Total											**390000**

(B)FRONT LINE DEMONSTRATION OTHER THAN OILSEED & PULSES (2018-19)

S. N.	Crop	Previous crop and cropping system			Farming situation		Area (ha)	Variety	Sowing time	Technology Demonstrated	Input of demonstration cost.
		Summer	Kharif	Rabi	Rain fed	Irrigated					
1.	Paddy	Vegetable	Paddy	Wheat	-	Rainfed/Irrigated	10	Sahbhagi/R. Sweta	June-August	Seed+ ZnSo4	25000
2.	Wheat	Moong	Paddy	Wheat	-	Irrigated	20	HD 2985/ HI1563	Nov.	Late sown variety + Herbicide	150000
3.	Kitchen garden	Veg.	Veg.	Veg.		Irrigated	50 nos.	Veg. seeds	July-Feb.	Seeds+ seedlings	20000
4.	Mushroom Production	-	-	-	-	-	50 nos.	Oyster	Oct./Nov.	Seed/spawn+chemicals	20000
5.	Animals	-	-	-	-	Irrigated	1	Makhan grass	Sep/Oct	Fodder seed	10000
6.	Paddy	insecticides					5 ha	Insecticide	Jul - Sep		12000
7.	Cabbage	Moong	Maize	Vegetable	-	Irrigated	2ha	Hybrid	Sept.-Nov.	Seed	32000
Total											**269000**

ACTION PLAN FOR ON FARM TRIAL 2018-19

OFT-1

Title of on farm trial: Assess the foliar application of potassium nitrate in late sown wheat for mitigation of terminal heat stress

Problem diagnosed: Low yield in late sown wheat due to terminal heat stress

Thematic Area: ICM

Details of technology

Technical option:

Technology option 1: Farmers Practice: General cultivation of late sown wheat (during 2nd fortnight of Dec.) without any foliar spray

Technology option 2: Foliar spray 0.5% KNO3 at booting and 0.5% KNO3 at anthesis stage

Technology option 3: Foliar spray 1.0 % KNO3 at anthesis stage

Source: BAU, Sabour

Plot size: 250 sq. m. each farmer

No. of Replication: 06 (Farmers)

Performance Indicator:

1. No. of grains/ earhead
2. Test weight (gram)
3. Green yield Q/ha
4. Economics

OFT-2

Title of on farm trial: Assess the Chickpea for enhancing the profitability

Problem diagnosed: Low profitability

Source: BAU, Sabour

Thematic Area: ICM

Details of technology

Technological Option:-

Technology option 1: PG 186

Technology option 2: Sabour Chana-1

Technology option 3: BGM 547

Replication: 10

Performance Indicator:

1. Plant height at 30,60,90 days and at maturity
2. Days to 50% flowering and days to maturity
3. No. of branches per plant, pods/plant and 100 seed weight (g)
4. Seed yield (kg/ha), straw yield/ha and harvest index (%)
5. Disease occurrence(Name & severity)
6. Insect infestation(Name & severity)

OFT-3

Title of on farm trial: Assess the fertilizer dose in short duration paddy

Problem diagnosed: injudicious use of fertilisers

Source: BAU, Sabour

Thematic Area: ICM

Details of technology

Technological Option:-

Technology option 1: Current recommended dose of fertilizer (80:40:20Kg, N: P_2O_5: K_2O per ha)

Technology option 2: Proposed dose of fertilizer (100:45:30Kg, N: P_2O_5: K_2O per ha)

Technology option 3: Farmers practice (120:20:10::N:P_2O_5:K_2O)

Replication: 10

Performance Indicator:

1. No. of tillers/m^2
2. Grains per ear head
3. 1000 grain weight (gm)
4. Cost of cultivation (Rs/ha)
5. Yield (qt/ha)
6. B:C Ratio

OFT-4

Title of on farm trial: Assessment of Aonla pricking devices to minimize injuries

Problem diagnosed: Difficulty in hand pricking of Aonla (hand injuries)

Thematic Area: Drudgery

Details of technology

Technical option:

Technology option 1: Hand pricking with fork needle (farmer's practice)

Technology option 2: Hand operated Aonls pricking machine (HAU)

Technology option 3: Manually operated Aonla pricking technique (KVK model)

Plot size:

No. of Replication: 8

Source: HAU (Hissar)

Performance Indicator:

1. Capacity in (kg)/hr
2. Time taken in pricking/kg
3. Percentage hand injury/comfortability

OFT-5

Title of on farm trial: Assessment of potato varieties for value added products

Problem diagnosed: Excess supply of potatoes in harvesting season result in lower income and lack of knowledge about suitable variety for value added products and lack of storage facilities

Details of technology

Technical option:

Technology option 1: Value added product of Kufri Pukraj (F.P)

Technology option 2: Value added product of Kufri Khyati (CPRI)

Technology option 3: Value added product of Kufri Surya (CPRI)

Plot size:

No. of Replication: 10

Source of technology: CPRI

Performance Indicator:

1. Acceptability
2. Storability
3. B:C ratio

OFT-6

Title of on farm trial: Assessment of different extension teaching methods in enhancement of farmers

Problem diagnosed: Lack of knowledge of farmers with respect to modern technologies of Paddy cultivation

Source of technology: BAU, Sabour

Thematic Area: Differ of teaching

Details of technology

Technical option:

Farmers practice: No extension teaching methods

Technology option 1: Training

Technology option 2: Training + Demonstration

Technology option 3: Training + use of ICT

Plot size:

No. of Replication: 40 (10 in each)

Performance Indicator:

1 Adaptation quotation
2 Change in knowledge gap
3 Change in yield (qtl/ha)
4 Change in B:C ratio

OFT-7

Title of on farm trial: Assess the different levels of boron on qualities of cauliflower

Problem diagnosed: Production of poor quality curd of cauliflower in Gaya district

Source of technology: BAU, Sabour

Thematic Area: I.N.M.

Details of technology

Technical option:

Farmers practice: Soil application of borax @ 5kg/ha

Technology option 1: Soil application of borax @ 10kg/ha

Technology option 2: Soil application of borax @ 15kg/ha

Technology option 3: Soil application of borax @ 15kg/ha + foliar application of boron @ 0.2%

Plot size:

No. of Replication: 10

Performance Indicator:

1 Colour of curd
2 Weight of curd
3 Height of plant (cm)
4 Yield (qtl/ha)
5 B:C ratio

OFT-8

Title of on farm trial: Assessment of herbal drug and micro mineral supplement in postpartum anoestrus in cattle.

Problem diagnosed: Infertility in cattle

Source of technology: MAPSU, Maharastra

Thematic Area: Disease Management

Details of technology

Technical option:

Farmers practice: Feeding with germinated wheat

Technology option 1: Feeding with germinated wheat

Technology option 2: Use of herbal drugs on 1^{st} and 2^{nd} day and 10^{th} & 11^{th} day

Technology option 3: Albendazole + microminerals for 28 days + TO_1

No. of Replication: 10

Performance Indicator:

1 No. of animals come in heat

2 Nature of discharge

3 Conception rate (%)

OFT-9

Title of on farm trial: Effect of probiotic and prebiotic on productivity of dairy animals

Thematic Area: Feed management

Problem diagnosed: Low productivity

Source of technology: Dr. PDKV, AKOLA, Maharastra

Details of technology

Technical option:

Farmers practice: No use of probiotic and prebiotic

Technology option 1: Probiotic @ 10g/day (Saccharomyces cerevisiae)

Technology option 2: Probiotic + Prebiotic @15 g/day

Technology option 3: Albendazole + microminerals for 28 days + T_{O1} (Saccharomyces cerevisiae + MOS + β Glucans

No. of Replication: 10

Performance Indicator:

1 Milk production
2 Cost of milk production
3 Gross return
4 Net return
5 B:C ratio

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