# KRISHI VIGYAN KENDRA, KATIHAR

(Bihar Agricultural University, Sabour)

# **ACTION PLAN, 2020**

#### GENERAL INFORMATION ABOUT THE KVK

**Introduction:** 

Name of the KVK: KVK, Katihar

Address	Telephone	E mail
KRISHI VIGYANKENDRA, TINGACHHIYA,	06452-246875	katiharkvk@gmail.com
KATIHAR, PIN-854105		_

#### 2.Name of host organization:

Address	Telephone		E mail
	Office	FAX	
Bihar Agricultural University, Sabour, Bhagalpur, Bihar	0641- 2452606	0641-2452614	vcbausabour@gmail.com

#### **Staff Position**

SI. No.	Sanctioned post	Name of the incumbent	Designation	Permanent/Temporary	Category (SC/ST/ OBC/ Others)
1	Senior		Sr. Scientist & head	Permanent	OBC
	Scientist&	Dr. Reeta Singh			
	Head				
2	Subject Matter	Dr. Sushil	Subject Matter	Permanent	OBC
	Specialist	Kumar Singh	Specialist		
3	Subject Matter	Smt. Nandita	Subject Matter	Permanent	OBC
	Specialist	Kumari	Specialist		
4	Subject Matter	Dr.	Subject Matter	Permanent	OBC
	Specialist	Kamleshwari	Specialist		
		Singh			
5	Subject Matter	Sri Pankaj	Subject Matter	Permanent	EBC
	Specialist	Kumar	Specialist		
6	Subject Matter	Dr. Rama Kant	Subject Matter	Permanent	Gen

	Specialist	Singh	Specialist		
7	Subject Matter				
	Specialist				
8	Programme	Smt. Swarn	Programme Assistant	Permanent	OBC
	Assistant	Prabha Reddy	(Lab. Tech)		
9	Computer	Sri Amarendra	Programme Assistant	Permanent	Gen
	Programmer	Kumar Vikas	(Computer)		
10	Farm Manager	Sri Om Prakash	Farm Manager	Permanent	EBC
		Bharti			
11	Accountant /	Sri Mukesh	Assistant	Permanent	EBC
	Superintendent	Kumar			
12	Stenographer	Sri Biswajit	Stenographer	Permanent	Gen
		Datta			
13.	Driver	Sri Ram Jee	Driver	Permanent	OBC
14.	Driver	Sri Manoj	Driver	Permanent	Gen
		Kumar			
		Prajapati			
15.	Supporting				
	staff				
16.	Supporting				
	staff				

### 3. Total land with KVK (in ha)

S. No.	Item	Area (ha)	
1	Under Buildings	1.50	
2.	Under Demonstration Units	0.50	
3.	Under Crops	4.50	
4.	Orchard/Agro-forestry	1.2	
5.	Others with details	12.3	
	Total	20.00	

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### 4. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No.	Farming system/enterprise
1	. Paddy-Wheat based farming system
2	Paddy-Maize based farming system
3	Paddy- Mustard- Boro paddy based farming system
4	Fish Culture
5	Bamboo Production & Processing
6	Mushroom Production & its Value added products
7	Makhana Cultivation and primary processing
8	Poultry production
9	Vermi Compost production
10	Tissue Culture Banana

# 5. About District

DEMOGRAPHIC FEATURES				
Area (in ha.)	291349000			
No. of Sub-Division	03			
No. of Block	16			
No. of Gram Panchayat	244			
No. of Village	1543			
Total Population	3071029			
Population Density (per sq. km.)	1005			
SC Population	263100			
ST Population	179971			
Sex Ratio	919			
Literacy rate	52.24			

Source: As per 2011 Census

# 6. Description of Agro-climatic Zone & major agro ecological situations (based on soil and Topography)

S.	Agro-climatic	Characteristics
No	Zone	
1	Zone-II (North –	High Temperature, High Humidity, Sandy to clay soil, Flood Prone
	East Alluvial Plain)	area

#### 7. Agro ecological situation

S. No	Agro	Area (ha)	Characteristics		
	ecological situation				
1	Up land sandy soil	-	Suitable for maize, wheat, Banana, vegetables & fruits		
2	Medium Sandy loam soil	-	Wheat, Maize, Jute, Rice, Oil seeds & pulses & vegetable & fruits cultivation		
3	Low lying clay soil -	-	with flood & water lodging condition Suitable for Boro paddy, Makhana & paira cropping Diara land of Kosi, Ganga and Mahananda with sandy		
4	loamy soil	-	suitable for Rabi Maize, wheat, oil seeds pulses & cucurbitaceous vegetable flooded during Kharif Season		

#### 8. Soil types

S. No	Soil type	Characteristics	Area in ha
1	Up land sandy soil-	Suitable for vegetables wheat, maize, Banana	-
2	Medium Loamy Soil	Well drained rich in organic carbon suited for wheat, Maize, oil seeds and pulses & vegetables	-
3	Low lying clay soils	Suitable for Makhana, Boro paddy & fishery	-
4	New alluvial diara land soil	Deposition of clay soil year after year good for Rabi crops.	-

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

S. No	Crop	Productivity (q/ha)	
1.	Rice	41	
2.	Maize	72	
3	Wheat	33	
4	Pigeonpea	13	
5	Mustard	12	
6	Pulses (others) (lentil)	10.80	
7	Potato	16.36	
8	Okra	12.79	
9	Jute (Fibre)	22	
10	Cauliflower	16.69	
11	Brinjal	20.80	
12	Banana	48.00	
13	Tomato	19.79	
14	Cabbage	16.90	
15	Chili	11.60	
16	Mango	7.90	
17	Guava	8.00	
18	Lichi	7.58	
19	Onion	19.86	
20	Merigold	8.0	

### 10. Details of operational area / villages

Sl.No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.		Korha	Musapur	Vegetable Banana Paddy Maize Oil Seeds	Lack of high yielding varieties, pest & diseases control	Varietal Improvement, Promotion of IPM Practices
2.		Katihar	Sirsa	Banana, Makhana, Wheat, Paddy , Maize, Vegetables	Women empowerment, Lack of high yielding varieties, Pest & Disease control	Varietal Improvement, Promotion of IPM Practices Promotion of Banana Makhana based farming system and jute cultivation
3.	Katihar	Katihar	Pokhariya	Vegetables, Paddy, Maize, Boro Paddy	Lack of high yielding varieties, pest & diseases control	Varietal Improvement, Promotion of IPM Practices Promotion of Banana Makhana based farming system and jute cultivation
4.		Dandkhora	Barua Tola	Maize, Pulses, Paddy, Wheat, Vegetables	Lack of high yielding variety, pest & diseases control, INM	Varietal Improvement, Promotion of IPM Practices Promotion of INM Practices
5.		Mansahi	Lahsa	Vegetable Boro Paddy, Oil Seeds Maize	Lack of high yielding variety, pest & diseases control, INM	Varietal Improvement, Promotion of IPM Practices Promotion of INM Practices

11. Priority thrust areas

S. No	Thrust area
1.	Soil test based nutrition management in crops of the district
2.	Development of Suitable cropping system for diara, tal land of the district
3.	Implementation of women programmes in relation to food, nutrition and drudgery
4.	Promotion of Entrepreneurship development
5.	Soil test based nutrition management in crop plants of the district.
6.	Promotion of Banana, Makhana based farming system and jute cultivation.
7.	Promotion and adoption of Integrated farming system for the district.
8.	Technology dissemination through production and supply of plant and seed materials
9.	Identification & Popularization of good quality vegetable seeds

#### 12. Training program to be organized (January 2020 to December 2020)

### 1. Home Science

		Q		Venue				P	artic	ipant	s/Tra	inees	3	
Thematic Area	Title of Training	r. N	Dur atio	OFF/O n	Tentativ e	S	С	S	T	Ot	her		Tota	1
		0	n	Campus	Date	M	F	M	F	M	F	M	F	T
Practicin	g Farmer													
Income Generation	Preparation of potato chips, badi and papad	1	2	On/Off	3- 4.01.202 0	0	3	0	2	0	20	0	25	25
Income Generation	Preparation of potato chips, badi and papad	1	1	On/Off	8.01.202 0	0	3	0	2	0	20	0	25	25
Capacity building	Nutritional Practices in Dietary pattern women & Children	1	2	On/Off	05-06- 02.2020	0	3	0	2	0	20	0	25	25
Capacity building	Nutritional Practices in Dietary	1	2	On/Off	26- 27.02.20 20	0	3	0	2	0	20	0	25	25

	pattern women &													
Gender mainstrea ming	Children Gender mainstreaming and formation of SHGs	1	2	OFF	18- 19.03.20 20	0	2	0	3	0	20	0	25	25
Gender mainstrea ming	Gender mainstreaming and formation of SHGs	1	3	OFF	29- 31.03.20 20	0	2	0	3	0	20	0	25	25
Rural Crafts	Cutting and stitching of garment and embroidery works/ Tie Die and Textile design	1	2	On/Off	03- 03.04.20 20	0	3	0	2	0	20	0	25	25
Rural Crafts	Cutting and stitching of garment and embroidery works/ Tie Die and Textile design	1	2	On/Off	21- 22.04.20 20	0	3	0	2	0	20	0	25	25
Drudgery reduction	Location specific drudgery reduction technologies in Agriculture	1	2	On/Off	05- 06.05.20 20	0	3	0	2	0	20	0	25	25
Drudgery reduction	Location specific drudgery reduction technologies in Agriculture	1	2	On/Off	19- 20.05.20 20	0	3	0	2	0	20	0	25	25
Drudgery reduction	Location specific drudgery reduction technologies in Agriculture	1	2	On/Off	03- 04.06.20 20	0	3	0	2	0	20	0	25	25
Value addition	Preservation of seasonal fruits pineapple and	1	2	On/Off	23- 24.06.20 20	0	2	0	3	0	20	0	25	25

	others													
Value addition	Preservation of seasonal fruits pineapple and others	1	2	On/Off	08- 09.07.20 20	0	2	0	3	0	20	0	25	25
Women and child care	Importance and use of balanced diet for children and women.	1	2	On/Off	28- 29.07.20 20	0	3	0	2	0	20	0	25	25
Women and child care	Importance and use of balanced diet for children and women.	1	1	On/Off	04- 05.08.20 20	0	3	0	2	0	20	0	25	25
Minimizati on of nutrient loss in processing	Preparation of energy efficient diet	1	2	On/Off	18- 19.08.20 20	0	3	0	2	0	20	0	25	25
Minimizati on of nutrient loss in processing	Preparation of energy efficient diet	1	2	On/Off	03- 04.09.20 20	0	3	0	2	0	20	0	25	25
Enterprise developme nt	Enterprise development through Mushroom cultivation	1	2	On/Off	16- 17.09.20 20	0	3	0	2	0	20	0	25	25
Enterprise developme nt	Enterprise development through Mushroom cultivation	1	2	On/Off	05- 06.10.20 20	0	3	0	2	0	20	0	25	25
Household food security by kitchen gardening	Importance of Nutritional Kitchen gardening and management	1	2	On/Off	19- 20.10.20 20	0	3	0	2	0	20	0	25	25
Household food security by kitchen gardening	Importance of Nutritional Kitchen gardening and management	1	2	On/Off	02- 03.11.20 20	0	3	0	2	0	20	0	25	25
Designing	Preparation of	1	2	On/Off	15-	0	3	0	2	0	20	0	25	25

and developme nt for high nutrient efficiency diet	weaning food for better child growth				16.12.20 20									
Rural Y	outh													
Post Harvest Technolog Y	Preparation of potato chips, papar and other products	1	4	ON/OFF	10- 13.02.20 20	-	3	ı	2	-	20	1	25	25
Rural Craft	Tie, dye &Fabric painting &cloth designing	1	4	ON/OFF	23- 26.03.20 20	-	3	-	2	1	20	ı	25	25
Value Addition	Preservation of seasonal fruits	1	4	ON/OFF	27- 30.04.20 20	-	3	-	2	-	20	-	25	25
Tailoring and Stitching	Cutting,, stitching and embroidery of women garments	1	4	ON/OFF	04- 07.05.20 20	_	3	-	2	-	20	-	25	25
Mushroom Production	Mushroom cultivation for income generation	1	4	ON/OFF	07- 10.09.20 20	-	3	-	2	-	20	-	25	25
Rural Craft	Production of decorative items from locally available materials	1	4	ON/OFF	16- 19.06.20 20	-	3	-	2	ı	20	1	25	25
Value Addition	Preservation of seasonal vegetables	1	4	ON/OFF	25- 28.08.20 20	-	3	-	2	-	20	-	25	25

House Hold Food Security	Importance of nutritional kitchen gardening and its	1	4	ON/OFF	24- 27.1120 20	-	3	-	2	-	20	-	25	25
Mushroom Production	Different mushroom type, production procedures, and Mushroom products	1	4	ON/OFF	15- 18.12.20 20	-	3	-	2	-	20	1	25	25
				Extension	Functionar	ies								
Household food security	Nutritional backyard kitchen gardening.	1	1	ON/OFF	12.03.20 20	-	3	-	2	-	20	-	25	25
Gender main streaming	Entrepreneurs hip development and women empowerment	1	1	ON/OFF	16.04.20 20	-	3	-	2	-	20	1	25	25
Women and Child Care	Women and Child Care Practices	1	1	ON/OFF	20.10.20	_	3	-	2	-	20	-	25	25
Rural Craft	Training on different type of State Embroidery	1	1	ON/OFF	12.11.20 20	-	3	-	2	-	20	-	25	25

# 2. **Agronomy**

		Q		Venu				Pai	rtic	ipan	ts/T	raine	es	
Thematic	Title of	r. N	Dur atio	e OFF/	Tentativ	S	С	S	Γ	Oth	er		Tota	1
Area	Training	0	n n	On Camp us	e Date	M	F	M	F	M	F	M	F	Т
Practicing	Farmer													
Nursery Management	Nursery Management of Paddy	1	1	ON/O FF	03.01.20	7	1	1	4	9	3	17	8	25
Cropping system	Management of Rice-wheat /maize cropping system	1	1	ON/O FF	04.02.20 20	9	1	1	4	8	2	18	7	25
ICM	Agronomic management practices of Jute	1	1	ON/O FF	02.03.20	7	2	1	4	8	3	16	9	25
Crop diversificatio n	Diversification of Rice-Wheat Cropping system	1	1	ON/O FF	17.03.20 20	9	1	1	4	8	2	18	7	25
Resource conservation Technology	Cultivation of Direct Seeded Rice	1	1	ON/O FF	24.04.20 20	7	2	1	4	8	3	16	9	25
Weed management	Weed management in Kharif Crops	1	1	ON/O FF	20.05.20	8	2	1	4	8	2	17	8	25
Water Management	Water management in Paddy	1	1	ON/O FF	13.06.20 20	7	2	1	4	8	3	16	9	25
Seed Production	Seed Production of Wheat	1	1	ON/O FF	23.06.20 20	8	1	1	4	9	2	18	7	25

Weed management	Weed management in Rabi crops	1	1	ON/O FF	03.07.20 20	7	1	1	4	10	2	18	7	25
ICM	Scientific Cultivation of Rabi pulses	1	1	ON/O FF	22.07.20 20	9	1	1	4	8	2	18	7	25
Fodder management	Scientific Cultivation of fodder	1	1	ON/O FF	02.09.20 20	8	2	1	4	8	2	17	8	25
Integrated crop Management	Agronomic management practices of Boro Paddy	1	1	ON/O FF	28.10.20 20	7	2	1	4	9	2	17	8	25
Weed Management	Weed Management on Boro Rice	1	1	ON/O FF	18.11.20 20	9	1	1	4	8	2	18	7	25
Integrated farming	Development integrated farming practices	1	1	ON/O FF	29.12.20 20	8	2	1	4	8	2	17	8	25

# **Rural Youth**

Crop diversificatio n	Diversification of Rice Wheat Cropping system	1	4	ON/O FF	14- 17.01.20 20	9	1	1	4	8	2	18	7	25
Seed production	Seed Production of Paddy	1	4	ON/O FF	12- 15.05.20 20	7	2	1	4	8	3	16	9	25
ICM	Agronomic management practices of Maize	1	4	ON/O FF	13- 16.10.20 20	9	1	1	4	8	2	18	7	25
Integrated farming System	Integrated farming System	1	4	ON/O FF	10- 13.02.20 20	8	2	1	4	8	2	17	8	25

			Exte	ension Fu	ınctionarie	S								
ICM	Agronomic Management practices of Jute	1	1	ON/O FF	05.03.20 20	7	2	1	4	11	5	19	11	30
Productivity enhancemen t in field crops	Agronomic Management practices of paddy	1	1	ON/O FF	08.05.20 20	8	2	1	4	11	4	20	10	30
RCT	Sowing of Wheat by technology	1	1	ON/O FF	05.10.20 20	7	2	1	4	11	5	19	11	30
Integrated farming system	Integrated farming system	1	1	ON/O FF	17.11.20 20	8	2	1	4	11	4	20	10	30

# 3. Horticulture

		Q	_	Venue				Pa	rtic	ipan	ts/T	raine	es	
Thematic Area	Title of Training	r. N	Dur atio	OFF/O n	Tentativ e	S	С	S	Γ	Oth	er		Tota	1
Alca	Hammg	0	n	Campu s	Date	M	F	M	F	M	F	M	F	T
				Practicing	g Farmer									
Seed production	Nursery raising and seed production of vegetable crops	1	1	ON/OFF	09.01.20 20	3	-	2	ı	20	-	25	0	25
Training and Pruning	Training & pruning of Horticultural crop	1	1	ON/OFF	21.01.20	3	-	2	-	20	-	25	0	25
INM	INM in Fruit & vegetable crops	1	1	ON/OFF	14.02.20 20	2	-	3	-	20	-	25	0	25
Export potential Fruit	Scientific Cultivation of Broccole and Sproufig	1	1	ON/OFF	13.03.20 20	3	-	2	ı	20	-	25	0	25
Production of crop	Scientific cultivation of summer vegetable	1	1	ON/OFF	03.03.20	5	-	-	ı	20	-	25	0	25
Cultivation of Vegetable	Scientific Cultivation of Brinjal and Bhindi	1	1	ON/OFF	17.04.20 20	3	-	2	-	20	-	25	0	25
Plant Propagatio n	Different methods of propagation	1	1	ON/OFF	27.05.20 20	3	-	2	-	20	-	25	0	25
Nursery Raising	Nursery raising for summer vegetable	1	1	ON/OFF	04.06.20 20	3	-	2	_	20	-	25	0	25
Layout and Manageme nt of Orchard	Establishment and management of new Orchard.	1	1	ON/OFF	14.07.20 20	3	-	2	-	20	-	25	0	25
Protected	Cultivation of	1	1	ON/OFF	05.08.20	2	_	3	-	20	-	25	0	25

cultivation	Vegetable under shed net				20									
	and poly tunnel.													
Cultivation of Cole's Crops	Scientific Cultivation of Cauliflower and Cabbage.	1	1	ON/OFF	13.08.20 20	3	-	2	1	20	-	25	0	25
Disease managemen t	IDM of vegetables	1	1	ON/OFF	16.09.20 20	3	-	2	ı	20	-	25	0	25
Cultivation of Fruits	Scientific cultivation of Tomato	1	1	ON/OFF	24.09.20 20	5	-	-	1	20	-	25	0	25
Low volume high value crop	Cultivation of flower for income generation	1	1	ON/OFF	19.09.20 20	3	-	2	1	20	-	25	0	25
Production Technology	Production and management for Medicinal, aromatic plants.	1	1	ON/OFF	22.10.20 20	3	-	2	ı	20	1	25	0	25
Seed production	Seed production techniques of potato	1	1	ON/OFF	29.10.20 20	3	-	2	1	20	-	25	0	25
Production and manageme nt	Scientific cultivation of garlic and spices crops	1	1	ON/OFF	01.10.20	5	-	-	1	20	-	25	0	25
Production of Medicinal and Aromatic Crops	Scientific cultivation of Medicinal and Aromatic Crops	1	1	ON/OFF	03.12.20 20	5	-	-	-	20	-	25	0	25
				Rural	Youth									
Commercia I fruit production	Scientific Cultivation of elephant fruit	1	4	ON/OFF	10- 13.06.20 20	3	1	1	-	20	-	24	1	25

Commercia I fruit production	Production, care and Management of Banana	1	4	ON/OFF	23- 26.06.20 20	3	1	1	-	20	-	24	1	25
Seed Production	Seed Production of vegetables	1	4	ON/OFF	27- 30.07.20 20	3	1	2	1	19	1	24	1	25
Planting Material Production	Plant Propagation techniques of fruit crops	1	4	ON/OFF	21- 24.09.20 20	3	1	2	1	19	-	24	2	26
Nursery Manageme nt	Nursery management of vegetable crop and poly tunnel technology	1	4	ON/OFF	15- 18.07.20 20	3	1	1	ı	20	ı	24	1	25
Protected cultivation	Protected cultivation of vegetable crops and Simla Mirch	1	4	ON/OFF	27- 30.10.20 20	3	1	2	-	19	-	24	1	25

# **Extension Functionaries**

ICM	Package and practices of Jute	1	1	ON/OFF	27.03.20 20	-	1	2	-	22	-	24	1	25
Planting Material Production	Plant Propagation techniques in fruit crop	1	1	ON/OFF	08.06.20 20	2	1	2	1	20	-	24	1	25
Crop Production	Scientific Cultivation of Cauliflower	1	1	ON/OFF	20.07.20	7	2	1	4	11	5	19	11	30
Protected cultivation	Protected cultivation of Tomato, Simla mirch, cucumber, garden pea	1	1	ON/OFF	03.08.20	3	1	2	-	19	-	24	1	25

Care and manage fruit Orchard	Proper care and management of fruit Orchard	1	ON/OFF	29.09.20 20	3	1	2	_	19	_	24	1	25	
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# 4. Extension Education

		Q		Venu				Pa	rtic	ipan	ts/T	raine	es	
Thematic	Title of	r. N	Dur atio	e OFF/	Tentativ e	S	C	S	Γ	Oth	er		Tota	1
Area	Training	0	n	On Camp us	Date	M	F	M	F	M	F	M	F	Т
Practicing	g Farmer													
Group Dynamics	Formation and management of SHGs/JIGS	1	1	ON/O FF	20.01.20	8	2	1	4	8	2	17	8	25
Group Dynamics	Establishment and strengthening of Farmers Club	1	1	ON/O FF	28.01.20 20	9	1	1	4	8	2	18	7	25
Leadership development	Leadership development for technology dissemination	1	1	ON/O FF	19.02.20 20	8	2	1	4	8	2	17	8	25
Group Dynamics	Formation and management of SHGs/JIGS	1	1	ON/O FF	09.03.20 20	9	1	1	4	8	2	18	7	25
PRA	Agro ecosystem analysis of adopted village	1	2	ON/O FF	15- 16.04.20 20	8	2	1	4	8	2	17	8	25
Group Dynamics	Formation and Management of SHGs/JIGS	1	1	ON/O FF	21.04.20 20	9	1	1	4	8	2	18	7	25

Mobilization of social capital	Income generation activities among group members	1	1	ON/O FF	28.04.20 20	8	2	1	4	8	2	17	8	25
Entrepreneuri al development of farmers/youth s	Entrepreneurs hip Development though poultry	1	1	ON/O FF	04.05.20 20	9	1	1	4	8	2	18	7	25
WTO and IPR issues	Awareness and use of market intelligence	1	2	ON/O FF	04- 05.06.20 20	8	2	1	4	8	2	17	8	25
Production Technology	DSR	1	1	ON/O FF	09.06.20 20	9	1	1	4	8	2	18	7	25
Entrepreneuri al development of farmers/youth s	Entrepreneurs hip Development though Beekeeping	1	1	ON/O FF	18.06.20 20	8	2	1	4	8	2	17	8	25
Production technologies	Productivity enhancement of field crops	1	1	ON/O FF	19.08.20 20	8	2	1	4	8	2	17	8	25
Group Dynamics	Formation and management of SHGs/JIGS	1	1	ON/O FF	25.09.20 20	9	1	1	4	8	2	18	7	25
Group Dynamics	Formation and Management of SHGs/JIGS	1	1	ON/O FF	12.10.20 20	8	2	1	4	8	2	17	8	25
Entrepreneuri al development of farmers/youth	Entrepreneurs hip Development though poultry	1	1	ON/O FF	07.12.20 20	9	1	1	4	8	2	18	7	25

				Rural `	Youth									
Entrepreneuri al development of farmers/youth s	Entrepreneurs hip Development through fisheries	1	4	ON/O FF	03- 06.08.20 20	8	2	1	4	8	2	17	8	25
Entrepreneuri al development of farmers/youth s	Entrepreneurs hip Development through dairy	1	4	ON/O FF	14- 17.09.20 20	9	1	1	4	8	2	18	7	25
Entrepreneuri al development of farmers/youth s	Entrepreneurs hip Development through Beekeeping	1	4	ON/O FF	21- .24.09.20 20	8	2	1	4	8	2	17	8	25
Entrepreneuri al development of farmers/youth s	Entrepreneurs hip Development through Beekeeping	1	4	ON/O FF	03- 06.11.20 20	8	2	1	4	8	2	17	8	25
Entrepreneuri al development of farmers/youth s	Entrepreneurs hip Development through Poultry	1	4	ON/O FF	24- 27.11.20 20	9	1	1	4	8	2	18	7	25
Entrepreneuri al development of farmers/youth	Entrepreneurs hip Development through fisheries	1	1	ON/O FF	21- 24.12.20 20	8	2	1	4	8	2	17	8	25

			Exte	ension Fu	ınctionarie	8								
Formation and Management of SHGs	Formation and Management of kisan club and SHGs and JLGS	1	1	ON/O FF	13.03.20 20	7	2	1	4	11	5	19	11	30
Leadership development	Leadership development for Agro tech dissemination	1	1	ON/O FF	15.07.20 20	8	2	1	4	11	4	20	10	30
Information networking among farmers	ICT practices for information and networking among farmers	1	1	ON/O FF	16.10.20 20	7	2	1	4	11	5	19	11	30
Entrepreneuri al development of farmers/youth s	Entrepreneuria I development of farmers/youth s	1	1	ON/O FF	10.11.20 20	8	2	1	4	11	4	20	10	30

# 5. Soil Science

Thematic	Title of	Q	Dur	Venue	Tentativ			Pa	rtic	ipan	ts/T	raine	es	
Area	Training	r. N	atio n	OFF/On Campus	e Date	S	С	S	Γ	Oth	er		Tota	1
		0		<b> </b>	2	M	F	M	F	M	F	M	F	T
Practic	ing Farmer	ſ												
Soil and water testing	Methods of soil sampling and analysis	1	1	ON/OFF	09.01.20 20	8	2	2	-	14	-	24	2	26
Production and use of organic inputs	Vermi compost Production techniques, and its use in crops and cropping system Technique	1	1	ON/OFF	13.02.20 20	8	2	1	4	8	2	17	8	25
Production and use of organic inputs	Methods of Bio fertilizer production and its uses	1	1	ON/OFF	12.03.20 20	9	1	1	4	8	2	18	7	25
Soil fertility manageme nt	Fertilizer management in Paddy	1	1	ON/OFF	24.04.20 20	9	1	1	4	8	2	18	7	25
Micro nutrient deficiency in crops	Micro nutrient deficiency symptoms and its management in crops	1	1	ON/OFF	21.05.20 20	8	2	1	4	8	2	17	8	25
INM	INM in Paddy	1	1	ON/OFF	25.06.20 20	9	1	1	4	8	2	18	7	25
INM	INM in Maize	1	1	ON/OFF	20.08.20	9	1	1	4	8	2	18	7	25
Nutrient use efficiency	Soil & Crop management practices to increase NUE	1	1	ON/OFF	15.09.20 20	8	2	1	4	8	2	17	8	25
Organic farming	To develop knowledge and understanding of organic farming	1	1	ON/OFF	12.10.20 20	9	1	2	3	8	2	19	6	25

Soil and water testing	Soil health Management in crops on Soil test basis	1	1	ON/OFF	10.11.20 20	9	1	2	3	8	2	19	6	25
Soil fertility Manage ment	Fertilizer management in Boro paddy	1	1	ON/OFF	21.10.20 20	8	2	1	4	8	2	17	8	25
Rural Y	Youth													
Bio- fertilizer production	Bio-fertilizer production marketing	1	4	ON/OFF	13- 16.05.20 20	9	1	1	4	8	2	18	7	25
Vermi- compost production	Vermi- compost production and marketing	1	4	ON/OFF	21- 24.07.20 20	7	2	1	4	8	3	16	9	25
Vermicultu re	Vermi composting for income generation	1	4	ON/OFF	22- 25.09.20 20	7	2	1	4	8	3	16	9	25
Bio- fertilizer production	Bio-fertilizer production Techniques & marketing	1	4	ON/OFF	19- 22.10.20 20	9	1	1	4	8	2	18	7	25
Organic manures production	Organic manures production techniques & marketing	1	4	ON/OFF	9- 12.11.20 20	9	1	1	4	8	2	18	7	25
		Ex	xten	sion F	unctio	ıar	ie	S						
INM	Green mannuring and use of bio fertilizer	1	1	ON/OFF	19.03.20 20	8	2	1	4	11	4	20	10	30
Soil and Water Testing	Methods of soil sampling and analysis	1	1	ON/OFF	05.05.20 20	7	2	1	4	11	5	19	11	30
INM	INM in crops and cropping system	1	1	ON/OFF	01.07.20 20	7	2	1	4	11	5	19	11	30

system

Production	Methods of					8	2	1	4 11	4			
and use of organic inputs	vermi compost Production and its use in crops	1	1	ON/OFF	17.10.20 20						20	10	30

Sl.	Season	Crop	Variety	Area in ha.	No. of
No					Demonstration
1	Kharif	Jute	Seed JRO-8432	8	20
2	Kharif	Paddy	Sabour Shree	04	10
3	Kharif	Paddy &	Sabour Ardhjal,	04	10
		Biofertilizer	Azotobactor & PSB	04	10
4	Kharif	Brinjal	PH-6	01	10
5	Kharif	Bottle Gourd	Narendra Rashmi	01	10
6	Kharif	Cauliflower	Sabour Agrim	01	10
7	Kharif	Sorghum	CSV-33MF	04	10
8	Rabi	Women Empowerment	Consumption pattern of drumstick leaves in the diet of Adolescent girl, Pregnant women to protect against anemia	0	25
9	Rabi	Enterprise development	Oyster mushroom	0	25
10	Rabi	Wheat/Bio-fertilizer	Sabour Shrestha, Azotobactor & PSB	04	10
11	Rabi	Wheat	Sabour Shrestha	04	10
				31	150

**Crop**: Paddy

**Thrust Area**: Development of need based efficient and profitable cropping system

**Thematic Area**: ICM **Season**: Kharif

Farming Situation: Paddy- Wheat/ Maize

Sl.	Crop &	Proposed	Technology	Parameter (Data)	in	Cost o (Rs.)	f Cul	tivation	No.	of fa	rmers	/ de	monst	ratio	n		
No.	variety /	Area (ha)/	package for	relation	to	Name	Dem		SC		ST		Othe	er	Tota	ıl	
NO.	Enterprises	Unit (No.)	demonstration	technology		of		Local	М	Б	М	F	M	Б	М	Б	т
				demonstrated		Inputs	О		IVI	Г	IVI	Г	IVI	Г	IVI	Г	1
1.	Paddy /	4.0	seed	Grain Yie	eld,	Seed			2	1	2	1	2	2	6	4	10
	Sabour Shree			B:C ratio													

Activity	Title of	No.	Clientel	Duration	Venue	No. of Participants								
	Activity		e		On/Off	S	SC	S	T	Ot	her		Tota	1
						M	F	M	F	M	F	M	F	T
Training	Scientific	1	PF	01	OFF	3	0	2	0	20	0	25	0	25
	Cultivation of													
	Paddy													
Field day	Agronomic	1	PF	01	OFF	6	0	4	0	40	0	50	0	50
	Package of													
	practices of													
	Paddy crop													

**Crop**: Paddy

**Thrust Area**: Development of need based efficient and profitable cropping system

**Thematic Area**: ICM **Season**: Kharif

Farming Situation: Paddy- Wheat/ Maize

CI	Crop &	Proposed	Technology	Parameter (Data) in	Cost o (Rs.)	f Cul	tivation	No.	of fa	rmers	/ de	mons	tratio	n		
Sl. No.	variety /	Area (ha)/	package for	relation to	Name	Dem		SC		ST		Othe	er	Tota	ıl	
No.	Enterprises	Unit (No.)	demonstration	technology demonstrated	of Inputs	0	Local	M	F	M	F	M	F	M	F	Т
1.	Paddy /	4.0	seed	Grain Yield,	Seed,			2	1	2	1	2	2	6	4	10
	Sabour			B:C ratio	Bioferti											
	Ardhajal,				lizers											
	Biofertilizers				(Azo +											
	(Azo + PSB)				PSB											

Activity	Title of	No.	Clientel	Duration	Venue	No. of Participants								
	Activity		e		On/Off	S	C	S	T	Ot	her		Total	l
						M	F	M	F	M	F	M	F	T
Training	Scientific Cultivation of Paddy	1	PF	01	OFF	3	0	2	0	20	0	25	0	25
Field day	Agronomic Package of practices of Paddy crop	1	PF	01	OFF	6	0	4	0	40	0	50	0	50

**Crop**: Brinjal

Thrust Area: Identification & Popularization of good quality vegetable seeds

Thematic Area: Vegetable Production

**Season**: Kharif

Farming Situation: Vegetable-Vegetable

			Technology	Parameter	Cost of C	Cultivation	n (Rs.)	No.	of fa	rmer	s/d	emon	strati	on		
Sl.	Crop &	Proposed	package for	(Data) in	Name			SC		ST	,	Oth	er	Tota	al	
No.	variety / Enterprises	Area (ha)/ Unit (No.)	demonstrati on	relation to technology demonstrated	of Inputs	Demo	Local	M	F	M	F	M	F	M	F	Т
1.	Brinjal PH-6	01	10	Productivity	Seed											10

Activity	Title of Activity	No.	Clientele	Duration	Venue									
					On/Off	S	C	S	T	Ot	her		Total	
						M	F	M	F	M	F	M	F	T
Training	Scientific Cultivation of Brinjal	01	PF	01	OFF	3	2	3	2	10	5	16	9	25
field day	Assessment of Brinjal Production	01	PF	01	OFF	6	4	6	4	20	10	32	18	50

**Crop**: Bottle gourd

**Thrust Area**: Identification & Popularization of good quality vegetable seeds

Thematic Area: Vegetable Production

**Season**: Kharif

Farming Situation: Vegetable-Vegetable

		Propose		Parameter	Cost of C	Cultivation	n (Rs.)	No. of	farm	ers /	demoi	nstrat	ion			
Sl.	Crop &	d Area	Technology	(Data) in				SC		ST	,	Oth	er	To	tal	
No .	variety / Enterprise s	(ha)/ Unit (No.)	package for demonstratio n	relation to technology demonstrate d	Name of Inputs	Demo	Local	M	F	M	F	M	F	M	F	Т
1.	Bottle Bourd Narendra Rashmi	01	10	Productivity	Seed							10		1 0		10

Activity	Title of Activity	No.	Clientele	Duration	Venue	No. of Participa		ants						
					On/Off	S	C	S	T	Ot	her	To	tal	
						M	F	M	F	M	F	M	F	T
Training	Scientific Cultivation of Bottle Bourd	01	PF	01	OFF	3	2	3	2	10	5	16	9	25
Field day	Assessment of Bottle Bourd Production	01	PF	01	OFF	6	4	6	4	20	10	32	18	50

**Crop**: Cauliflower

Thrust Area: Identification & Popularization of good quality vegetable seeds

Thematic Area: Vegetable Production

Season: Rabi

Farming Situation: Vegetable-Vegetable

		Duonaga		Parameter	Cost of C	ultivatio	n (Rs.)	No. of	f farm	ers / c	lemoi	ıstrat	ion			
Sl.	Crop &	Propose d Area	Technology	(Data) in				SC		ST		Oth	er	Tot	al	
No.	variety / Enterprise s	(ha)/	package for demonstratio n	relation to technology demonstrate d	Name of Inputs	Demo	Local	M	F	M	F	M	F	M	F	Т
1.	Cauli flower Sabour agrim	01	10	Productivity	Seed							10		1 0		10

Activity	Title of Activity	No.	Clientel	Duration	Venue	No.	of Pa	rticipa	ants					
			e		On/Off	S	C	S	T	Ot	her	To	otal	
						M	F	M	F	M	F	M	F	T
Training	Scientific Cultivation of Cauli flower	01	PF	01	OFF	3	2	3	2	10	5	16	9	25
field day	Assessment of Cauli flower Production	01	PF	01	OFF	6	4	6	4	20	10	32	18	50

Crop: JUTE

Thrust Area: Management of Jute, Banana and Makhana based cropping system

**Thematic Area**: ICM **Season**: Zaid

Farming Situation: Jute-Paddy

Sl.	Crop &	Proposed	Technology package for	Parameter (Data) in	Cost of (Rs.)	f Cultiv	ation	No.	of far	mers	/ den	nonst	ratior	1		
No.	variety /	Area (ha)/	package for demonstratio	relation to	Name		Loc	SC		ST		Oth	er	Tota	ıl	
110.	Enterprises	Unit (No.)	n	technology	of	Demo	al	M	F	M	F	M	F	М	E	т
			11	demonstrated	Inputs		aı	141	1	171		171	I.	141	1	
1.	Jute/ JRO-	10	Seed	Fibre Yield,	Seed			03	02	05	05	05	05	13	12	25
	8432															

Activity	Title of	No.	Clientele	Duration	Venue	No. of Participants								
	Activity				On/Off	S	C	S'	Г	Otł	ier		Total	
						M	F	M	F	M	F	M	F	T
Training	Training on Jute Production	01	PF	02	ON	3	0	2	0	20	0	25	0	25
Field day	Crop Condition of Jute( JRO- 204)	02	PF	01	OFF	6	0	4	0	40	0	50	0	50

**Crop**: Sorghum

Thrust Area: Emphasis on Fodder requirement

**Thematic Area**: Fodder Production

**Season**: Kharif

Farming Situation: Paddy/Fodder-Maize/ Wheat

	Crop &	Propose	Technolog	Parameter	Cost of C	Cultivation	(Rs.)	No. of	farm	ers / c	lemor	ıstrat	ion			
Sl.	Crop & variety /	d Area	y package	(Data) in	Name			SC		ST		Oth	er	Tot	tal	
No ·	Enterprise s	(ha)/ Unit (No.)	for demonstr ation	technology demonstrated of Input		Demo	Local	M	F	M	F	M	F	M	F	Т
1.	Sorghum /	4	Seed &	Multi cut Yield,	Seed			02	00	1	1	4	02	1	0	10
	CSV-		Literature	Leaf Stem Ratio,										0		
	33MF			Tolerance to												
				Water Stress and												
				Water Lodging												
				Condition, Yield												

Activity	Title of Activity	No.	Clientele	Duration	Venue	No.	of Pa	rticipa	nts					
					On/Off	S	C	S	T	Otl	her	To	tal	
						M	F	M	F	M	F	M	F	T
Training	Training on Fodder Production	01	PF	02	ON	3	0	2	0	20	0	25	0	25
Field day	Crop Condition & yield of Sorghum(CSB33MS)	02	PF	01	OFF	6	0	4	0	40	0	50	0	50

**Crop**: Mushroom

Thrust Area: Mushroom Production
Thematic Area: Income Generation

**Season**: Rabi **Farming Situation**: Irrigated

		Proposed		Parameter	Cost of Cult	tivation (	Rs.)	No. of farr	ners /	demo	nstrat	ion				
Sl.	Crop &	Area	Technology	(Data) in				SC		ST		Othe	er	Tot	al	
No	variety /	(ha)/	package for	relation to	Name of	Demo	Loc									
	Enterprises	Unit	demonstration	technology	Inputs	Demo	al	M	$\mathbf{F}$	M	$\mathbf{F}$	M	F	M	$\mathbf{F}$	$\mathbf{T}$
		(No.)		demonstrated												
1.	Mushroom	25 unit	Spwan,	Yield of	Spwan,			-	3	0	2	0	20	0	15	25
			Polythene	Mushroom	Polythene											
			bag, Bevistin,		bag,											
			Rope,Etc.		Bevistin,											
					Rope,Etc.											

Activity	Title of Activity	No.	Clientele	Duration	Venue	No.	of Pa	ırticipa	nts					
					On/Off	S	С	S'	Γ	Ot	her	To	otal	
						M	F	M	F	M	F	M	F	T
Training	Mushroom	01	PF	01	OFF	3	2	3	2	10	5	16	9	25
	cultivation and													
	its importance													
Field day	yield	01	PF	01	OFF	6	4	6	4	20	10	32	18	50
	Assessment of													
	Mushroom													

Crop/ Enterprise : Women Empowerment
Thrust Area: Household food Security

**Thematic Area**: Nutritional security **Season**: Kharif/ Rabi

**Season**: Kharif/ R **Farming Situation**: Irrigated

Sl.	Crop &	Proposed	Technology	Parameter (Data) in	Cost of	Cultiva (Rs.)	tion	No.	of fa	rmers	s / de	mons	tratio	n		
No.	variety /	Area (ha)/	package for	relation to	Name of	Dem	Loca	SC	1	ST	1	Othe	er	Tota	1	
	Enterprises	Unit (No.)	demonstration	technology demonstrated	Inputs	О	1	M	F	M	F	M	F	M	F	T
1.	Women	25	Consumption	Heamoglobin				0	5	0	1	-	1	-	2	25
	Empowerme		pattern of drum	,Grip strength,							0		0		5	
	nt		leaves in the diet													
			of adolescent	working												
			girls, Pregnant	efficiency												
			women to													
			protect against													
			anemia													

Activity	Title of Activity	No.	Clientele	Duration	Venue	No	. of Pa	rticipa	nts					
					On/Off	S	C	S	T	Ot	her	To	otal	
						M	F	M	F	M	F	M	F	T
Training	Importance of Nutritional Kitchen gardening and management	01	PF	01	OFF	3	2	3	2	10	5	16	9	25
Field day	Assessment Women Empowerment	01	PF	01	OFF	6	4	6	4	20	10	32	18	50

**Crop**: Wheat

**Thrust Area**: Development of need based efficient and profitable cropping system

**Thematic Area**: ICM **Season**: Rabi

Farming Situation: Paddy- Wheat/ Maize

Sl.	Crop &	Proposed	Technology	Parameter (Data) in	Cost of (Rs.)	Cultiv	ation	No.	of fa	rmers	/ dei	monst	ration			
No.	variety /	Area (ha)/	package for	relation to	Name	Dom	T o	SC		ST		Oth	er	Tota	al	
No.	Enterprises	Unit (No.)	demonstration	technology demonstrated	of Inputs	Dem o	Lo cal	M	F	M	F	M	F	M	F	T
1.	Wheat / Sabour Shrestha	4.0	Seed	Grain Yield, B:C ratio	Seed			2	1	2	1	2	2	6	4	10

Activity	Title of	No.	Clientele	Duratio	Venue				No. o	f Parti	cipant	S		
	Activity			n	On/Off	S	C	S	T	Ot	her		Total	
						M	F	M	F	M	F	M	F	T
Training	Scientific Cultivation of wheat	1	PF	01	OFF	3	0	2	0	20	0	25	0	25
Field day	Agronomic Package of practices of wheat crop	1	PF	01	OFF	6	0	4	0	40	0	50	0	50

**Crop**: Wheat/Bio-fertilizer

Thrust Area: Adoption of Integrated Nutrient Management for sustainable agriculture

**Thematic Area**: INM **Season**: Rabi

Farming Situation: Paddy-Wheat/maize

		Propose		Parameter	Cost of Cul	tivatio	n (Rs.)	No. of	f farm	ers / c	demoi	ıstrat	ion			
Sl.	Crop &	d Area	Technology	(Data) in				SC		ST		Othe	er	Tot	tal	
No .	variety / Enterprise s	(ha)/ Unit (No.)	package for demonstratio n	relation to technology demonstrate d	Name of Inputs	De mo	Local	M	F	M	F	M	F	M	F	Т
1	Wheat & Sabour Shrestha / Bio-fertilizers	04 ha	25	Plant height, Tillers, Grain Yield, Straw yield, B:C ratio	Seed			1	0	1	0	8	0	1 0	0	10
	TOTUMECTS			Tutto	Bio- fertilizers											

Activity	Title of	No.	Clientele	Duration	Venue	No.	of Pa	rticipa	nts					
	Activity				On/Off	S	C	S	T	Ot	her	To	tal	
						M	F	M	F	M	F	M	F	T
Training	Impact of bio-fertilizers on wheat yield	1	PF	1	ON/OFF	3	0	2	0	20	0	25	0	25
Field Days	Asses the bio-fertilizers on wheat yield	1	PF	1	OFF	6	0	4	0	40	0	50	0	50

### a) Seed and planting material production by utilization of instructional farm (Crops / Enterprises)

Name of the	•	Period	Area (ha.)		De	etails of Production	on	
Crop / Enterprise	Туре	From to		Type of Produce	Expected Production (quintals)	Cost of inputs (Rs.)(including man power)	-	Expected Net Income (Rs.)
Paddy	Sabour Shree C/S	July to Oct 2020	4.0	Seed	100	1,60,000.00	370000	2,10,000
Wheat	Sabour Shrestha	Nov to April 2020-21	4.4	Seed	105	1,32,000.00	4,20,000	2,88,000

### b) Village Seed Production Programme

Name of	Variety /	Period	Area	No. of			Details of Pa	oduction	
the Crop / Enterprise	Туре	Fromto	(ha.)	farmers	Type of Produce	Expected Production(q)	Cost of inputs (Rs.)	Expected Gross income (Rs.)	Expected Net Income (Rs.)

### 14. Extension Activities

### **Extension Activities**

Name of Extension Activities	No.	Participants
Field Day	15	350
Kisan Mela	1	500
Kisan Ghosthi	5	250
Kisan Chaupal	20	500
Exhibition	1	100
Film Show	6	150
Method Demonstrations	1	75
Farmers Seminar	1	50
Workshop	1	150
Group meetings	5	200
Scientific visit to farmers field	50	250
Farmers visit to KVK	500	500
Diagnostic visits	10	150
Exposure visits	1	50
Ex-trainees Sammelan	1	50
Soil health Camp	2	100
Animal Health Camp	2	150
Self Help Group Conveners meetings	8	150
Celebration of important days	5	300
Total	635	4025

### 15. Revolving Fund (in Rs.)

Opening balance of 2019-2020 (As on 01.04.2019)	Amount proposed to be invested during 2020-21	Expected Return
1650072.09	2,92,000.00	4,98,000.00

### 16. Expected fund from other sources and its proposed utilization

Project	Source	Amount to be received (Rs. in lakh)
GKMS	ICAR	17,00,000.00
BioTech Kisan Hub	ICAR	15,00,000.00
BSDM	BAMETI	6,00,000.00
Kisan Chaupal	Bihar Government	5,20,000.00

# 17. On-farm trials to be conducted\* ON FARM TRIAL (2020-21)

### **OFT-1 Agronomy**

1.	Title of On farm Trial	Weed management in jute
2.	Problem diagnosed	Weed causes huge reduction (upto 70 %) in fibre yield of jute as it
		reduces input efficiency, interferes with agricultural operations and
		impairs quality and acts as alternate hosts for several insects and pests
3.	Details of technologies	TO <sub>1</sub> : Farmers Practice (one hand weeding at 25-30 DAS)
	selected for	TO <sub>2</sub> : Pendimethaline 30% EC @ 525gm a.i./ha ( within 48 hours
	assessment/refinement	of sowing) + one hand weeding at 15 DAS
	(Mention either	TO <sub>3</sub> : Quizalofop ethyl 5 % EC @ 600 gm a.i./ha + Ethoxy sufuron
	Assessed or Refined)	15% WDG @ 50 gm a.i./ha at 15 DAS + one hand weeding at 30
		DAS
4.	Source of Technology	JRS, Katihar
	(ICAR/	
	AICRP/SAU/other, please	
	specify)	
5.	<b>Production system and</b>	Jute-Maize/ Mustard and Weed management
	thematic area	
6.	Performance of the	(i)Weed biomass(gm/m <sup>2</sup> ) at 15 DAS, 35 DAS and 45 DAS
	Technology with	(ii) Plant height (cm), basal diameter (cm)
	performance indicators	(iii) Fiber yield (q/ha)
		(iv) Gross return (Rs./ha), net return (Rs./ha), B:C ratio
7.	Design	RBD
	Plot Size	0.1 ha
	Replication	10
8.	Constraints identified and	
	feedback for research	
9.	Process of farmers	
	participation and their	
	reaction	

### OFT (Agronomy)

in nursery eld potential due to nted growth g cold injury in & 1.0 kg K <sub>2</sub> O/100
nted growth g cold injury in
g cold injury in
& 1.0 kg K₂O/100
& 1.0 kg K₂O/100
<u> </u>
00 m <sup>2</sup> area)
let out water in

### **OFT – 1: Soil Science**

Title	Assessment of Boron and Molybdenum on Growth, Yield and Quality of
	Cauliflower ( <i>Brassica oleraceaL</i> . var. botrytis)
Thematic Area	Integrated Nutrient Management
Problem diagnosed	Death of young leaves, stem becomes hollow with the cavity surrounded by water
	soaked tissues and some curds change to rusting brown in Mo & B deficient Soil.
<b>Important Cause</b>	Hollow Heart diseases
<b>Production system</b>	Vegetable- Vegetable based production system.
Micro farming	Vegetable- vegetable
system	
Technology for	Assessment of Boron and Molybdenum in Cauliflower
Testing	
<b>Existing Practice</b>	Farmers practice
Hypothesis	Improve Farmer income
Objective	To management of Hollow Heart Disease of Cauliflower
Treatments	TO <sub>1</sub> – Farmer Practices (180:40:20 :: N:P:K)
	$TO_{2}^{1} - 120:60:60 :: N:P:K) + 20 t/ha FYM$
	$\mathcal{L}$
	TO <sub>3</sub> – 120:60:60 :: N:P:K) + 20 t/ha FYM + 20 kg/ha Borex and 2 kg/ha Mo
Critical Inputs	Seed, Nutrients, chemicals
Unit Size	0.10 ha
No of Replications	10
Monitoring	Technical Observation:
Indicator	Initial and Final Soil Nutrient Status, Plants growth and yield attributes {Days after
	50 % Curd Initiation(DACI), Days after 50 % Curd Maturity (DACM), Curd
	Maturity Duration (CMD), Marketablecurd weight (g), Curd length (cm), Plant
	height (cm), Curd diameter (cm), Yield of marketable curd(t ha <sup>-1</sup> ) }
	Economic Indicators:
	Net return, B:C ratio
Source of	IIVR Varanasi
Technology	

Title	Assessment the liquid and carrier based bio-fertilizers on performance of transplanted rice and soil properties	
Thematic Area	Integrated Nutrient Management	
	Less uses of bio-fertilizers and deficient of soil properties	
Problem diagnosed	1 1	
Important Cause	Higher doses of urea application	
<b>Production system</b>	Rice based production system.	
Micro farming	Rice-Wheat-Green gram	
system		
Technology for	Assessment of Liquid bio-fertilizers in Paddy	
Testing		
<b>Existing Practice</b>	Farmers practice	
Hypothesis	Application of liquid fertilizers may increase the yield of rice & improve the soil health.	
Objective	To improve rice yield and soil health.	
Treatments	TO <sub>1</sub> : Farmers Practice (150:20:10 :: N:P:K with minimum uses of bio-fertilizers)	
	TO <sub>2</sub> : RDF [120:60:40] (80% of N +80 % of P + 100% of K) + Soil application of liquid	
	bio-fertilizer (750 ml/ha Liquid azotobactor + 750 ml/ha Liquid PSB)	
	TO <sub>3</sub> : RDF [120:60:40] (80% of N +80 % of P + 100% of K) + Soil application of bio-	
	fertilizer (5kg/ha azotobactor + 5kg/ha PSB)	
Critical Inputs	Seed, Bio-fertilizers and Fertilizer	
_		
Unit Size	0.10 ha	
No of Replications	10	
Unit Cost		
Total Cost		
Monitoring	Technical Observation:	
Indicator	Initial and Final Soil Nutrient Status, plant growth and yield attributes (Height (cm),	
	Number of tillers/hill, Number of Panicles/m <sup>2</sup> , 1000 Grain Weight), Yield (q/ha)	
	Economic Indicators:	
	Net return, B:C ratio	
Source of	BAU, Sabour	
Technology		

### **OFT – 3: Soil Science**

Title	Evaluation of Azolla and BGA on rice yield and soil health.
Thematic Area	Integrated Nutrient Management
Problem	Poor soil fertility status in soil.
diagnosed	
Important Cause	Low rice yield due poor soil fertility status.
	N (180-230 kg/ha) P (7.6-10.2 kg/ha) K (110-118 kg/ha)
Production system	Rice based production system.
Micro farming	Rice-Wheat-Green gram
system	
Technology for	Application of Azolla and BGA in low land rice field.
Testing	
Existing Practice	No application of BGA and Azollain rice field.
Hypothesis	Application of BGA and Azollamay increase the yield of rice & improve the soil health.
Objective	To improve rice yield and soil health.
Treatments	TO <sub>1</sub> : Farmers' Practice (96:56:16 kg/ha N:P <sub>2</sub> O <sub>5</sub> :K <sub>2</sub> O)
	TO <sub>2</sub> : FP+BGA @ 10 kg/ha
	TO <sub>3</sub> : RDF 75% N (90:60:40 kg/ha N:P <sub>2</sub> O <sub>5</sub> :K <sub>2</sub> O)+BGA@ 10Kg/ha
	TO <sub>4</sub> : RDF 75%N (90:60:40 kg/ha N:P <sub>2</sub> O <sub>5</sub> :K <sub>2</sub> O)+ Azollz@10ton/ha
Critical Inputs	Seed, Liquid fertilizers and Fertilizer
Unit Size	0.10 ha
No of Replications	10
Monitoring	Technical Observation:
Indicator	Initial and Final Soil Nutrient Status, plant growth and yield attributes (Height (cm), Number
	of tillers/hill, Number of Panicles/m², 1000 Grain Weight), Yield (q/ha)
	Economic Indicators:
	Net return, B:C ratio
Source of	BAU, Sabour
Technology	

### **OFT – 4: Soil Science**

Title	Evaluation of ST-TY (Soil Test Targeted Yield ) based on nutrient
	management in Jute
Thematic Area	Integrated Nutrient Management
Problem diagnosed	Low yield due to imbalance application of nutrients
Important Cause	Injudicious Uses of Fertilizer
Production system	Jute-Mustard based production system.
Micro farming	Jute-mustard- rice
system	
Technology for	STTY
Testing	
Existing Practice	Farmers practice
Hypothesis	Targeted yield (35 qtha <sup>-1</sup> )
Objective	Improve the area of jute
Treatments	TO <sub>1</sub> – Farmer Practices (23:20:15 :: N:P:K)
	TO <sub>2</sub> – ST-TY (35 q/ha) = 123:49:27:: N:P:K
	$TO_3$ - ST-TY (35 q/ha) = 83:35:19:: N:P:K + FYM @ 5 t/ ha
Critical Inputs	Seed, Nutrients, chemicals
Unit Size	0.10 ha
No of Replications	10
Unit Cost	
Total Cost	
Monitoring Indicator	Technical Observation:
	Initial and Final Soil Nutrient Status, Plants growth and fiber yield attributes
	(Height (cm), Diameter of tillers), , fiber Yield (q/ha)
	Economic Indicators:
	Net return, B:C ratio
Source of Technology	BAU, Sabour

### **OFT -1 Horticulture**

S.N.	Topic	Description
1.	Title	Enhancement of fruit set and reduction in fruit drop through foliar application of
		Boron and Sorbitol in Mango
2.	Problem Diagnose	Minimum the fruit set and maximum fruit drop as well as low fruit yield
3.	Detail the	Technology Option
	technology	Famers Practice- No Spray
	selected for	TO <sub>1</sub> - Boric Acid (B0.02%)
	assessment /	TO <sub>2</sub> - Boric Acid (B0.02%)+ Sorbitol(2.0 % fine sorbitol)
	refinement	*when 50 % of the flowers on the inflorescence bloomed.
4.	Source of	BAU, Sabour and AICRP on Fruits, Bangaluroo
	technology	
5.	Replication	07
6.	Technical indicator	1. Date of First Furit set
		2. Fruit drop(%)
		3. No. of the fruit/plants
		4. Average fruit weight
		<ul><li>5. Fruit yield (t/ha)</li><li>6. Benefit Cost Ratio</li></ul>
		o. Delicit Cost Natio

# OFT -2 Horticulture

S.N.	Topic	Description
1.	Title	Measures to management of Panama Wilt of Banana.
2.	Farming Situation	Irrigated
3.	Hypothesis	Suitable plant protection technique reduces yield loss due to disease.
	formulated	
4.	Experiment Design	RBD
5.	Detail the	Technology Option
	technology	TO <sub>1</sub> - Carbendazim 50WP @3g/ liter of water (Drenching the soil near root zone at 15
	selected for	days interval for three times in standing crop)
	assessment /	TO <sub>2</sub> - Application of Trichodermaharzianum @ per liter of water (Drenching the soil
	refinement	near root zone at 15 days interval for three times in standing crop)
		TO <sub>3</sub> - Mass multiplication of trichoderma with FYM (Trichodermaharzianum1 Kg +
		FYM 50 Kg) applied near root zone of the plants @ 250 g per plant at one month
		interval for four times.
		TO <sub>4</sub> - Mass multiplication of trichoderma with compost (Trichodermaharzianum 1 Kg
		+ decomposed banana pseudo stem 50 Kg) applied near root zone of the plants @
		250 g per plant at one month interval for four times.
6.	Replication	BAU, Sabour
7.	Plot Size	0.4 ha
8.	Observation	1. Disease (%)
	Parameter	2. Yield q/ha
		3. B:C ratio
10.	Critical Input	Fungicide (Carbendazim 50WP) & Bio – agents

## Field Study-1 Extension Education

Field Study 1. Assessment of know	ledge gain by farmers in respect to paddy production technology through
whats App messages.	
Problem Diagnose	Lack of Technical knowledge for farmers as per need
Thematic Area	Information communication technology
Detail of technology	Farmers participated in whats App group
Farmers Practices(T)	Existing agricultural technical knowledge
Recommended Tech(T)	KVK Whats App messages
Performance parameter	<ol> <li>Need and time based information.</li> <li>Use of soil Health Card</li> <li>Application of the whats App messages</li> <li>Knowledge gain by the farmers</li> <li>Selection of variety</li> <li>Weed Management</li> <li>Insect Pest Management</li> <li>Harvesting</li> <li>Yield</li> <li>Marketing</li> </ol>

# Field Study -2 Extension Education

Field study II Study on awareness and perception of farmers regarding Soil Health Card							
Problem Diagnose	Farmers unawareness about soil health card						
Thematic Area	Soil fertility Management						
Detail of technology	Production technologies						
Farmers Practices(T <sub>1</sub> )	Farmers not using Soil Health card (100 farmers)						
Recommended Tech(T)	Farmers using soil health card (100 farmers)						
Performance parameter	Difficulty in calculating fertilizer dose on the basis of nutrient status of soil						
	2. Time gap between soil samples taken & issuing cards was too high						
	3. Received SHC after crop harvest						
	4. Collection of soil sample was not done in presence of farmer						
	5. Inability to understand all the information given in the card						
	6. Use of fertilizers Pattern						
	7. Use of Micronutrients Pattern						
	8. Increase in Productivity						

#### 18. List of Projects to be implemented by funding from other sources (other than KVK fund)

Sl. No.	Name of the project	Fund expected (Rs.)
1	GKMS	17,00,000.00
2	BioTech Kisan Hub	15,00,000.00
3	BSDM	6,00,000.00
4	Kisan Chaupal	5,20,000.00

### 19. No. of success stories proposed to be developed with their tentative titles - 05

- 1) Beekeeping
- 2) Mushroom Production
- 3) Vermi Compost Production
- 4) Pulse Production
- 5) High Value crop Cultivation (Dragon fruit, Strawberry, etc)

#### 20. Scientific Advisory Committee

Date of SAC meeting held during 2019-20	Proposed date during 2020-21
26.07.2019	15-12-2020

#### 21. Soil and water testing

<b>Details</b> N	No. of	No. of Farmers								No. of	No. of SHC	
S	Samples	SC	C ST Other Total			Villages	distributed					
		M	F	M	F	M	F	M	F	T		
pH, ECe, OC, N, P, K,Ca, Mg, Na, CO3,HCO3, SO4, Cl, Fe, Mn, Zn, B.	1000	-	-	-	-	-	-	900	100	1000	80	1000

#### 22. Fund requirement and expenditure (Rs.)\*

Item	Fund required for 2020-21
Pay & Allowance	1,25,00,000.00
Contingency	12,00,000.00
Equipment & furniture	10,00,000.00

<sup>\*</sup> Any additional requirement may be suitably justified.

# 23. Every KVK should bring a brief write-up supported by quality photographs about the technology having wide acceptability among the farming community of the district with factual data

SI. No.	Name of the Technology	Brief Details of Technology (3- 5 bullet points)	Net Return to the farmer (Rs.) per ha per year due to the technolog y	No. of farmers adopted the technolog y in the district	One high resolution 'Photo' in 'jpg' format for each technology
1	Bee Keeping with improved technologie s	<ul> <li>Italian Bee         Keeping</li> <li>Processing of         honey at farmers         group level</li> <li>Marketing         through group         approach / FPO</li> <li>Branding at         farmer's end</li> </ul>	80,000- 1,00,000	200-300	
2	Seed production through group approach	<ul> <li>Seed production technology transferred to farmers through training programme.</li> <li>Seed provided to farmers during various FLD and CFLD and encourage them to keep and sell the produced seed to other farmers in the next season</li> <li>Farmers are getting improved seed</li> </ul>	20,000- 50,000	350-600	

3	Organic	• Uses of gre	en 60,000-	700-800	
		mannuring,	70,000	700 000	
	Farming	_	Bio   70,000		
	Practices	fertilizers, azo			
		for soil and cr			
		health	- F		THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TWI
		management.			ight mining stem
		• Uses of low Co	ost		Will street States Ros fet instante view
		organic			
		_	ith		
		the use of Co			
		Urine, dung	&		
		neem etc.			
		• Uses of low co	ost		
		nutrient			
		management i	.e.		
		Jivamrit etc.			
4	Microbial	• This	is 8,000-	300-400	
	Consortium	consortium w	ith 10,000		TO SELLATOR
	for	microbial			The second secon
	improved	formulation us	ed		अगिक परित प्रत्यक्षण
	-	retting proce	ess		grad of the first program of t
	retting of	of jute	in		
	Jute	stagnant water			AND THE RESIDENCE OF THE PROPERTY OF THE PROPE
		It can reduce t	he		The state of the s
		retting period	bv		
		5-7 days fro	- I		
		conventional			
		retting process			
		= -	he		
		yield by 15-20%			
		<ul> <li>Improves qual</li> </ul>			
		of fibre by 1	-		
		grade point a			
		ultimately			
		increase farme	r's		
		income			
5	Micro	It Shave war	er 70,000-	300-400	
	Irrigation in	and energy	80,000		
	Banana	• Less Labo	-		
	Dalidlid	require in a u			
		of land resulti			
		minimising co	-		
		of cultivating			
		Less infesting	of		
		weeds Sha			
		weeds sna weeding cost			
		_	ng		
		<ul> <li>Minimise wilti</li> </ul>	ııg		

6	Integrated Farming	disease of banana  Fruit quality improve as fruit weight long fruit size resulting income increase  Uses different synergic blending of Crop,	2,00,000	200-300	
	System	Horticultural, Dairy, Fisheries, Poultry etc  Employment to other local farmers  Decrease cost of cultivation  Multiple uses of resource and providing much needed resilience for predicated climate change, scenario			
7	Backyard poultry	<ul> <li>Rearing high yielding dual purpose breed like Vanraja (30 - 40 bird per unit)</li> <li>Feeds uses for the purpose low cost locally available feed</li> <li>Scientific management of poultry (proper vaccination and medication)</li> </ul>	20,000- 30,000	200-300	

8	Mushrom Production	<ul> <li>Income and Employment generation</li> <li>provide food and nutritional security</li> <li>Quick and high return</li> </ul>	73000(one thousand Bags)	300-400	
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