# KRISHI VIGYAN KENDRA KISHANGANJ



# **ACTION PLAN**

(January to December 2023)

Submitted to

ICAR-ATARI, Patna, (Zone-IV)



# **BIHAR AGRICULTURAL UNIVERSITY**

# KRISHI VIGYAN KENDRA

# **KISHANGANJ (BIHAR)**

**ACTION PLAN, 2023** 

#### GENERAL INFORMATION ABOUT THE KVK

#### **Introduction:**

Krishi Vigyan Kendra, Kishanganj is an innovative centre of Indian Council of Agricultural Research (ICAR), Pusa, New Delhi sanctioned vides F. No. 61 /2004-AE-1dated 05.04.2006 under the administrative control of Bihar Agricultural University, Sabour, Bhagalpur, Bihar. This KVK was initially established at Thakurganj of Kishanganj district of Bihar in March, 2006 and then shifted to Hawai Adda Road Khagra, Kishanganj. It is a unique scheme of ICAR oriented to serve the farmers by being the fountain head of agricultural technologies at the district level. KVKs are the agricultural knowledge and resource centers for farmers, farmwomen, rural youth and extension functionaries. The centre has the mandated activities of conducting on farm testing/trials (OFTs) with emerging advances in agricultural research for assessing, refining and demonstration of recently released technology to develop location specific sustainable production system and dedicated to organize vocational training in agriculture and allied fields for practicing farmers, farm women and rural youth. The Kishangani district is quite suitable for cultivation of Rice, Maize, Jute, Makhana, Pineapple, Banana, Potato, Pulses, Oilseeds and Vegetables crops in different seasons of the year. The productivity enhancement of the field, fiber and horticultural crops and livestock with the concept of integrated farming system module is the major arena of thrust for development of agriculture in the district. KVK Kishanganj is working with following specific mandates and activities:

# **KVK System: Mandate and Activities**

The mandate of KVK is **Technology Assessment** and **Demonstration** for its **Application** and **Capacity Development**.

To implement the mandate effectively, the following activities are envisaged for each KVK

- 1. On-farm testing to assess the location specificity of agricultural technologies under various farming systems.
- 2. Frontline demonstrations to establish production potential of technologies on the farmers' fields.
- 3. Capacity development of farmers and extension personnel to update their knowledge and skills on modern agricultural technologies.
- 4. To work as Knowledge and Resource Centre of agricultural technologies for supporting initiatives of public, private and voluntary sector in improving the agricultural economy of the district.
- 5. Provide farm advisories using ICT and other media means on varied subjects of interest to farmers.

In addition, KVKs produce quality technological products (seed, planting material, bio-agents, livestock) and make it available to farmers, organize frontline extension activities, identify and document selected farm innovations and converge with ongoing schemes and programs within the mandate of KVK.

Address	Mobile No.	E mail
Krishi Vigyan Kendra, Hawai Adda Road,		
Khagra (Near BSF-SHQ) Kishanganj,	7903864332	kishanganjkvk@gmail.com
PIN- 855107		

# 1. Name of host organization:

Address	Telep	ohone	E mail
Address	Office	FAX	E man
Bihar Agricultural University	0641-2452611	0641-2452611	deebausabour@gmail.com
Sabour, Bhagalpur			<u>aeevausavour @ gman.com</u>

#### 2. Staff Position ( As on 01.01.2023)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Permanent/ Temporary	Category
1.	Senior Scientist & Head	Er. Manoj Kumar Roy	Senior Scientist & Head	Permanent	OBC
2.	Subject Matter Specialist	Dr. Niraj Prakash	Subject Matter Specialist (Entomology)	Permanent	OBC
3.	Subject Matter Specialist	Dr. Hemant Kr. Singh	Subject Matter Specialist (Horticulture)	Permanent	Other
4.	Subject Matter Specialist	Vacant	Subject Matter Specialist (Agronomy)	-	-
5.	Subject Matter Specialist	Vacant	Subject Matter Specialist (Home Sci.)	-	-
6.	Subject Matter Specialist	Vacant	Subject Matter Specialist (Animal Sci.)	-	-
7.	Subject Matter Specialist	Vacant	Subject Matter Specialist (Soil Sci.)	-	-
8.	Programme Assistant	Vacant	PA(Lab Technician)	-	-
9.	Programme Assistant	Anjum Hashim	PA(Computer)	Permanent	OBC
10.	Farm Manager	Smt. Sunita Kumari	Farm Manager	Permanent	OBC
11.	Accountant / Superintendent	Vacant	Assistant	-	-
12.	Stenographer	Sri Rakesh Mandal	Stenographer	Permanent	OBC
13.	Driver (Bolero)	Sri Niraj Kumar Singh	Driver	Permanent	Other
14.	Driver (Tractor)	Vacant	-	-	-
15.	Supporting staff	Vacant	Supporting Staff	-	-
16.	Supporting staff	Vacant	Supporting Staff	-	-

# 3. Total land with KVK (in ha)

S. No.	Item	Area (ha)
1	Under Buildings & Demo Units	1.5
3.	Under Crops	5.2
4.	Orchard	1.0
5.	Others with details (Canal)	2.3
Total		10.0

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

S. No.	Farming system/enterprise
1.	Paddy-maize based farming system
2.	Jute – Paddy based-vegetables farming system
3.	Paddy- Mustard/Potato- wheat -green gram based farming system
4.	Paddy-wheat based farming system
5.	Pineapple based farming system
6.	Makhana based farming
7.	Fish Farming
8.	Poultry/ goat farming
9.	Bee Keeping

#### 5. About District

Demographic Features				
Area (in ha.)	188682.34			
No. of Sub-Division	01			
No. of Block	07			
No. of Gram Panchayat	126			
No. of Village	771			
Total Population	1296348			
Population Density (per sq. km.)	688/ sq km			
SC Population	85818 6.62(%)			
ST Population	47057 3.63(%)			
Sex Ratio	940/1000			
Literacy rate	31.02 (%)			

Source: As per 2011 Census

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

S. No	Agro-climatic Zone	Characteristics
1	Zone-II (North – East Alluvial Plain)	The climate is sub-tropical and humid having mean maximum and minimum temperature between 41°C and 3.52°C respectively. The average annual rainfall of the district is about <b>2269.49 mm</b> . Kishanganj is the only one district that receive maximum rainfall with rainy days in Bihar

#### 7. Agro ecological situation

S. No	Agro ecological situation	Area (ha)	Characteristics				
1	Up land sandy soil	33700	Suitable for maize, wheat, vegetables & fruits				
2	Medium sandy loam soil	50700	Wheat, maize, jute, rice, oilseeds, pulses, vegetables & fruits cultivation				
3	Low lying clay soil	42979	Flood & water lodging condition suitable for Paddy, Boro-paddy & paira cropping				
4	Diara land of Mahananda flooded during rainy season with sandy and loamy soil	-	Suitable for rabi Maize, oilseeds and cucurbits				

# 8. Soil types

S. No	Soil type	Characteristics	Area in ha			
1	Very deep coarse loamy soil	Coarse loamy soil	63000			
2	Very deep sandy soil	Sandy soil	2200			
3	Very deep calcareous, coarse loamy soil	Calcareous loamy soil	8600			
4	Very deep fine soil	Fine soil	21900			
5	Very deep fine loamy soil	Fine loamy soil	85500			

# 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.		Kishanganj	Bairgachhi, Andhwakol, Singhia, Motihara Taluka, Kashipur Belwa, Chhagalia, Lohadanga and Farsadangi	Rice, Wheat, Maize, Jute, Potato, Fruits &Vegetables, Mustard, green gram, Mushroom, Livestock, goatry, and Backyard Poultry	seeds, injudicious use of fertilizers, incidence of weeds, diseases and pests, lack of scientific	ICM,WM,INM, Improved seed and seed treatment, Vermiculture, Mushroom Production, Capacity Building, Value Addition, Disease management in animals		
2.	Kishanganj	Pothia	Panasi	Rice, Wheat, Maize, Jute, Potato, pineapple &Vegetables, Mustard, green gram, Banana, Mushroom, Livestock, goatry, and Backyard	seeds injudicious use of fertilizers, incidence of weeds, diseases and pests, lack of scientific	ICM,WM,INM, Improved seed and seed treatment, Vermiculture, Mushroom Production, Capacity Building, Value Addition, Disease management in animals		
3.		Kochadhaman	Surang, Dogariya, Shitalnagar Purandaha	Rice, Maize, Makhana, Backyard Poultry		ICM, Weed Management, Integrated Nutrient Management		
4.		Thakurganj	Chapati, Patharia, Khanabari, Govindpur	Makhana, Banana,	Unavailability of quality seeds incidence of weeds, diseases and pests, lack of scientific knowledge of crop cultivation.	Natural Farming, ICM, Weed Management, Integrated Nutrient Management		
5.		Bahadurganj	Maltola- Bangama, Mahesh Bathna, Kharsel	Rice, Maize, Wheat, Green Gram, Makhana, Banana, Vegetables, Fish Culture and Backyard Poultry	seeds incidence of weeds, diseases and pests, lack of scientific knowledge of	ICM, Weed Management, Integrated Nutrient Management		

# 11. Priority thrust areas

S. No	Thrust area
1.	INM and IPM practices for sustainable agriculture.
2.	Management of Jute, Banana and Pineapple/ fruit orchard based cropping system.
3.	Popularization of Dragon Fruit
4.	Popularization of quality seed production.
5.	Income generation activities through beekeeping, mushroom production, vermi-composting, goatary, Poultry, and preservation of fruits and vegetables etc. & Farm women empowerment.
6.	Promotion and adoption of Integrated farming system in the district.
7	Enhancement of milk production through proper management of miltch animals.

# 12. Training program to be organized (May to December 2023)

# 1. Agronomy

	75°41 . 6	Title of Otra Donor	D 41		TD 4.4			No	o. of	Part	icipa	ants				
Thematic area	Title of Training	Qtr No.	(Days)		Duration (Days)	Venue On/Off	Tentative Date	SC		ST		Other		Total		ıl
area	Training	110.	(Days)	Oli/Oli	Date	M	F	M	F	M	F	M	F	T		
Practicing Fa	Practicing Farmers															
	AWD in paddy cultivation	Ħ	2	Off/On	24-25 May, 2023	2	1	1	1	15	5	18	7	25		
	WH & FB in paddy cultivation		2	Off/On	20-21 July, 2023	2	1	1	1	15	5	18	7	25		
	Weed management in paddy	Ш	2	Off/On	16-17 Aug, 2023	2	1	1	1	15	5	18	7	25		
	preparation of Jeevamrit and Amrit Jal and its uses in natural farming.		2	<del>Off/On</del>	21-22 Sept, 2023	2	1	1	1	15	5	18	7	<del>25</del>		

(FD) 4.	TT:41 . 6		D (1	<b>T</b> 7	TD 4.4	SC   ST   Other   Total								
Thematic area	Title of Training	Qtr No.	Duration (Days)	Venue On/Off	Tentative Date	S	C	S'	Т	Otl	ıer	,	Tota	ıl
area	11 dining	110.	(Days)	Onton	Date	M	F	M	F	M	F	M	F	T
	Maize cultivation by raised bed method	IV	2	Off/On	19-20 Oct, 2023	2	1	1	1	15	5	18	7	25
	Scientific cultivation of Mustard		2	Off/On	7-8 Nov, 2023	2	1	1	1	15	5	18	7	25
Rural Youth														
Seed production	Seed production	IV	4	Off/On	05-08 Dec, 2023	2	1	1	1	15	5	18	7	25
Extension Func	tionaries	l				I		I	I	I				
	Productivity enhancement in field crops	П	2	Off/On	24-25 Aug, 2023	2	1	1	1	15	5	18	7	25
INM	Integrated Nutrient management	IV	2	Off/On	10-11 Oct, 2023	2	1	1	1	15	5	18	7	25
	Total													

# 2. Agricultural Engineering

			D 41	*7	TD 4.4			No	o. of	Part	icipa	ints		
Thematic area	Title of Training	Qtr No.	Duration (Days)	Venue On/Off	Tentative Date	S	C	S	T	Otl	her	,	Tota	ıl
area	Truming	110.	(Days)	OII/OII	Date	M	F	M	F	M	F	M	F	T
Practicing Fa		Γ				1	1	ı	T	ı	1	ı	T	
Installation and maintenance of micro irrigation system	Installation and operation of micro- irrigation system	Ι	2	Off/On	06-07 Mar, 2023	2	1	1	1	15	5	18	7	25

			<b>D</b> (1)	*7	TD 4.4*			No	o. of	Parti	cipa	nts		
Thematic area	Title of Training	Qtr No.	Duration (Days)	Venue On/Off	Tentative Date	S	C	S	Т	Oth	ier		Γota	l
		110.	(Days)		Butt	M	F	M	F	M	F	M	F	T
Use of farm machinery and implements	Sowing of green gram by zero tillage machine		2	Off/On	05-06, April 2023	2	1	1	1	15	5	18	7	25
Micro irrigation water management	Importance of Micro irrigation system & its maintenance	II	2	Off/On	10-11 May, 2023	2	1	1	1	15	5	18	7	25
Use of farm machinery and implements	Direct Seeded Rice technology		2	Off/On	24-25 May, 2023	2	1	1	1	15	5	18	7	25
Use of farm machinery and implements	Use of improved tools for land preparation of paddy field		2	Off/On	20-21 July, 2023	2	1	1	1	15	5	18	7	25
Use of farm machinery and implements	Use of improved tools for weed management in Kharif crops	III	2	Off/On	16-17 Aug, 2023	2	1	1	1	15	5	18	7	25
Use of farm machinery and implements	Calibration of seed drill and zero till drill machine		2	Off/On	21-22 Sept, 2023	2	1	1	1	15	5	18	7	25
Use of farm machinery and implements	Use of raised bed planter for maize cultivation	IV	2	Off/On	19-20 Oct, 2023	2	1	1	1	15	5	18	7	25
Use of farm machinery and implements	Use of zero till drill machine for wheat cultivation.	IV	2	Off/On	7-8 Nov, 2023	2	1	1	1	15	5	18	7	25

Thematic	Title of	Qtr	Duration	Venue	<b>Tentative</b>									
area	Training	No.	(Days)	On/Off	Date	S	C	S'	Т	Oth	ier	•	Γota	l
	9	110	(= 0.5 2)	0 - 4, 0		M	F	M	F	M	F	M	F	T
Rural Youth														
Installation and maintenance of micro irrigation system	Installation and maintenance of micro irrigation system	IV	4	Off/On	05-08 Dec, 2023	2	1	1	1	15	5	18	7	25
Extension Func	tionaries													
Resource Conservation Technology	Calibration of zero till drill machine	II	2	Off/On	24-25 Aug, 2023	2	1	1	1	15	5	18	7	25
Water Management	Use of micro – irrigation for horticultural crops.	IV	2	Off/On	10-11 Oct, 2023	2	1	1	1	15	5	18	7	25
	Total		27			24	12	12	12	180	70	216	84	300

**No. of Participants** 

# 3. Plant Protection

			Duratio	Venue	Tentativ			No	o. of	Part	icipa	nts		
Thematic area	Title of Training	No ·	n (Days)	On/Of f	e Date	S	С	S		Othe	r	,	Tota	l
			(Days)	1	Date	M	F	M	F	M	F	M	F	T
Practicing Far	rmers													
Integrated Pest managemen t	Insects pest management in mango		2	Off/ On	03-04 Jan, 2023	2	1	1	1	15	5	18	7	25
Integrated disease managemen t	Disease management in mango	I	2	Off/ On	18-19 Jan, 2023	2	1	1	1	15	5	18	7	25
Natural Farming	Preparation and use of Jeewamrit 1,2,3 and Amrit Jal 1,2,3		2	Off/ On	02-03 Feb, 2023	2	1	1	1	15	5	18	7	25
Integrated	Storage pest		2	Off/	22-23	2	1	1	1	15	5	18	7	25

			Duratio	Venue	Tentativ	No. of Participants  SC S Other Total								
Thematic area	Title of Training	No ·	n	On/Of f	e Date	S	С	S		Othe	er		Tota	l
	_		(Days)	1	Date	M	F	M	F	M	F	M	F	T
pest managemen t	of grains and their control measures			On	Feb, 2023									
Bio-control of pest and diseases	Bio pesticide and their use in plant production		2	Off/ On	15-16 Mar, 2023	2	1	1	1	15	5	18	7	25
Integrated Pest managemen t	Management of insect pest by cultural practices in summer season		2	Off/ On	19-20 April, 2023	2	1	1	1	15	5	18	7	25
Integrated Pest managemen t	Management of insect pest of green gram	II	2	Off/ On	27-28 April, 2023	2	1	1	1	15	5	18	7	25
Integrated pest managemen t	Integrated pest management in jute		2	Off/ On	18-19 May, 2023	2	1	1	1	15	5	18	7	25
Integrated disease managemen t	Seed treatment of tuber crops		2	Off/ On	16-17 June, 2023	2	1	1	1	15	5	18	7	25
Natural Farming	Preparation and use of Jeewamrit 1,2,3 and Amrit Jal 1,2,3		2	Off/ On	06-07 July, 2023	2	1	1	1	15	5	18	7	25
Integrated disease managemen t	Management of sheath blight in kharif paddy	III	2	Off/ On	10-11 Aug, 2023	2	1	1	1	15	5	18	7	25
Integrated disease managemen t	Management of false smut in kharif paddy		2	Off/ On	23-24 Aug, 2023	2	1	1	1	15	5	18	7	25
Integrated disease managemen t	Disease management of banana		2	Off/ On	07-08 Sept, 2023	2	1	1	1	15	5	18	7	25
Integrated pest managemen t	Integrated pest management in maize	IV	2	Off/ On	11-12 Oct, 2023	2	1	1	1	15	5	18	7	25
Integrated disease	Early and late blight		2	Off/ On	16-17 Nov,	2	1	1	1	15	5	18	7	25

			Duratio	Venue	Tentativ			No	o. of	Part	icipa	nts		
Thematic area	Title of Training	No ·	n (Days)	On/Of f	e Date	S	С	S T		Othe	r		Tota	l
			(Days)	1	Date	M	F	M	F	M	F	M	F	T
managemen t	disease of potato and their management				2023									
Organic Farming	Use of bio- pesticides, PSB, Azotobacter and Vermi composting		2	Off/ On	13-14 Dec, 2023	2	1	1	1	15	5	18	7	25
Rural Youth														
Bee- keeping	Sustainable Beekeeping and Honey Production technique	I	4	Off/ On	10-13 Jan, 2023	2	1	1	1	15	5	18	7	25
Vermicultur e	Technique of vermicompo st production and its importance and application.	II	4	Off/O n	10-13 Apr, 2023	2	1	1	1	15	5	18	7	25
Production of organic input	Production of vermi wash and uses in vegetable crops.	III	4	Off/O n	02-05 Aug, 2023	2	1	1	1	15	5	18	7	25
Mushroom production	Mushroom cultivation technique.	IV	4	Off/O n	07-10 Nov, 2023	2	1	1	1	15	5	18	7	25
Extension Fun	ctionaries													
Integrated pest managemen t	Integrated pest management in Kharif crops.	II	2	Off/O n	27-28 June, 2023	2	1	1	1	15	5	18	7	25
Integrated pest managemen t	Integrated pest management in Rabi crops.	IV	2	Off/O n	26-27 Oct, 2023	2	1	1	1	15	5	18	7	25

			Duratio	Venue	Tentativ			No	o. of	Part	icipa	nts		
Them are	Title of Training	No ·	n (Days)	On/Of f	e Date	S	С	S T		Othe	r		Tota	I
			(2455)	1	2	M	F	M	F	M	F	M	F	T
	Total		52			44	2 2	22	2 2	33	11 0	39 6	15 4	55 0

# 4. Horticulture

TI 4	T:41 6	NI.	Duratio	Venue	Tentativ	entativ  No. of Participants  e SC ST Other Total								
Thematic	Title of Training	No	n	On/Of	e	S	C	S	T	Ot	her		Tota	1
area	Training	•	(Days)	f	Date	M	F	M	F	M	F	M	F	T
Practicing Far	mers									•		•		
Cultivation of fruits	Scientific cultivation of Pine apple		2	Off/On	12-13 Jan, 2023	2	1	1	1	15	5	18	7	25
Cultivation of fruits	Production management of Guava orchard		2	Off/On	13-14 Feb, 2023	2	1	1	1	15	5	18	7	25
Production and managemen t technology of tuber crops	Scientific cultivation of summer vegetables	I	2	Off/On	03-04 Mar, 2023	2	1	1	1	15	5	18	7	25
Cultivation of fruits	Production management of guava orchards		2	Off/On	13-14 Mar, 2023	2	1	1	1	15	5	18	7	25
Nursery raising	Nursery management of vegetable crops		2	Off/On	27-28 April, 2023	2	1	1	1	15	5	18	7	25
Yield increment	Scientific cultivation of elephant foot yam	II	2	Off/On	11-12 May, 2023	2	1	1	1	15	5	18	7	25
Cultivation of fruits	Scientific cultivation of Banana		2	Off/On	16-17 June, 2023	2	1	1	1	15	5	18	7	25
Plant propagation technique	Methods of plant propagation techniques of fruits	III	2	Off/On	03-04 July, 2023	2	1	1	1	15	5	18	7	25
Rejuvenatio n of old	Training and pruning of		2	Off/On	17-18 Aug,	2	1	1	1	15	5	18	7	25

Thematic	Title of	No	Duratio	Venue	Tentativ	•								
area	Training		n	On/Of	e	S	С	S'	T	Ot	her	,	Total	i
	g		(Days)	f	Date	M	F	M	F	M	F	M	F	T
orchard	old orchards				2023									
Production & managemen t technology of Vegetable	Scientific cultivation of solanaceous vegetables		2	Off/On	14-15 Sept, 2023	2	1	1	1	15	5	18	7	25
Production and managemen t technology of tuber crop	Scientific cultivation of potato		2	Off/On	19-20 Oct, 2023	2	1	1	1	15	5	18	7	25
Yield increments	Scientific cultivation of leafy vegetables	IV	2	Off/On	28-29 Nov, 2023	2	1	1	1	15	5	18	7	25
Yield increments	Production management of mango orchards		2	Off/On	07-08 Dec, 2023	2	1	1	1	15	5	18	7	25
Rural Youth														
Layout and managemen t methods	Establishmen t and methodology of new orchards	I	4	Off/On	01-04 Feb, 2023	2	1	1	1	15	5	18	7	25
Cultivation of fruit	Scientific cultivation of Dragon Fruit		2	Off/On	19-20 July, 2023	2	1	1	1	15	5	18	7	25
Cultivation of fruit	Organic cultivation of Dragon Fruit	III	5	Off/On	21-25 Aug, 2023	2	1	1	1	15	5	18	7	25
Layout and managemen t methods	High density planting system for fruit crops		3	Off/On	07-09 Sept, 2023	2	1	1	1	15	5	18	7	25
Export potential fruits	Production and management of Makhana and its processing	IV	4	Off/On	25-27 Oct, 2023	2	1	1	1	15	5	18	7	25
Planting	Technique of		4	Off/On	15-18	2	1	1	1	15	5	18	7	25

Thematic	Title of	No	Duratio	Venue	Tentativ			N	o. of	Par	ticipa	ants		
area	Training		n	On/Of	e	S	С	S'	T	Ot	her	,	Tota	l
	<u> </u>		(Days)	f	Date	M	F	M	F	M	F	M	F	T
propagation techniques	propagation of rootage and graftage in fruit crops				Nov, 2023									
Protected cultivation techniques	Nursery management of vegetable crops and poly tunnel technology		4	Off/On	04-07 Dec, 2023	2	1	1	1	15	5	18	7	25
Extension Fu	nctionaries													
Water Managemen t	Increasing water use efficiency and high productivity of horticultural crops.	II	2	Off/On	22-23 June, 2023	2	1	1	1	15	5	18	7	25
Protected cultivation	Production technology for growing off season vegetables and flowers.	IV	2	Off/On	08-09 Nov, 2023	2	1	1	1	15	5	18	7	25
	Total	l	55			44	2 2	22	2 2	33 0	11 0	39 6	15 4	55 0

# 12. (A) Skill Development training to be organized (January to December 2023)

Sl. No.	Job Role	Duration (hrs)	No. of participants	Remarks
1	Gardner	240	30	BSDM (RPL)

#### 13. Frontline demonstration to be conducted 2023

Sl. No	Season	Crop	Variety	Technology	Area in ha.	No. of Demonstration
1.	Summer	Jute	JRO – 204	Jute sowing by multi row jute	4.0	10

Sl. No	Season	Crop	Variety	Technology	Area in ha.	No. of Demonstration
				seed drill		
2.	Summer	(Pointed Gourd) Cucurbitace ous crop	Existing Farmer's Variety	Pheromone trap for management of fruit fly	4.0	20
3.	Kharif	Brinjal	Existing Farmer's Variety / Hybrid	Emamectin Benzoate 5 SG for management of Fruit and Shoot borer	4.0	20
4.	Kharif	Tea	Existing Farmer's Variety (T-24/25)	Yellow Sticky Trap	8.0	20
5.	Kharif	Finger Millet	Available Variety	Improved Seed	4.0	10
6.	Rabi	Pseudo Millet (Buck Wheat)	Him Priya	Improved Seed	4.0	10
7.	Rabi	Makhana	Sabour Makhana – 1	Improved Seed	7.0	7
8.	Rabi	Maize	Hybrid	Inter culturing by brush cutter cum weeder	2.0	10
9.	Rabi	Maize	Existing Farmer's Variety / Hybrid	Emamectin benzoate 5SG, Thiomethoxame and Lamdacyhalothrin for management of fall army worm	4.0	20
10.	Rabi	Pine apple	Existing Farmer's Variety / Joint Kew	Post emergence herbicide for weed control	4.0	10
			Total		37	125

**(1). Crop**: Jute

Thrust Area: Management of jute based farming system

**Thematic Area**: Farm Mechanization

**Season**: Summer **Farming Situation**: Irrigated

	Crop &	Propose	Technology	Parameter (Data) in	Cost (Rs.)	of Cult	ivation	No	of f	armo	ers /	dem	ons	tratio	n	
Sl. No	variety / Enterprise	d Area (ha)/	package for demonstratio	relation to technology	Name of	Dem	Loca	S	С	S	Г	Otl r	1e	Т	'otal	l
•	S	Unit (No.)	n	demonstrate d	Input s	0	1	M	F	M	F	M	F	M	F	T
1	Jute	4	Jute sowing by multi row jute seed drill	Field capacity, Yield	Seed, Jute Seed Drill	-	-	0	0	1	0	9	0	10	0	1 0

# **Extension and Training activities under FLD:**

	Title of				Venue			N	o. of	Part	icipa	nts		
Activity	Activity	No.	Clientele	Duration	On/Off	S	C	S	Γ	Ot	her	To	tal	
	110011109					M	F	M	F	M	F	M	F	T
Training	Scientific cultivation of jute	1	PF	2	Off	5	10	ı	1	5	10	10	20	30
Field Day	Scientific cultivation of jute	1	PF	1	Off	5	10	ı	1	5	10	10	20	30

(2). Crop/Technology: Cucurbitaceous crop/ Pheromone trap

Thrust Area: Integrated pest management for sustainable agriculture

Thematic Area: Integrated Pest Management

**Season**: Summer **Farming Situation**: Irrigated

		Propos		Parameter	Cost of Cu	ltivation	(Rs.)	N	lo. 0	f fai	·me	rs / d	lemo	nstr	atic	n
Sl.		ed	Technology	(Data) in				S	С	S	Γ	Otl	her	7	ota	al
N o.	Crop & variety / Enterprises	Area (ha) / Unit (No.)	package for demonstrati on	relation to technology demonstra ted	Name of Inputs	Dem o	Loc al	M	F	M	F	M	F	M	F	Т
1	Cucurbitaceous crop/ Pheromone trap	4	Pheromon e trap for managem ent of fruit fly	Yield	Pherom one trap	-	1	1	1	-	- 1	8	5	9	6	1 5

#### **Extension and Training activities under FLD:**

Activity	Title of	No.	Clientele	Duration	Venue	Pa	No. artici		S					
Activity	Activity	110.	Chemele	Duration	On/Off	S	C	S	Γ	Otl	her	To	tal	
						M	F	M	F	M	F	M	F	T
Training/	IPM in													
Field	cucurbitaceous	3	PF	4	ON/Off	10	20	-	-	10	20	20	40	60
Day	crop													

(3). Crop / Technology: Brinjal / Emamectin Benzoate 5 SG for management of Fruit and Shoot borer

Thrust Area: Integrated pest management practices for sustainable vegetable crops

Thematic Area: Integrated Pest Management

**Season**: Kharif **Farming Situation**: Irrigated

GI.	Crop &	Propos ed	Technology	Parameter (Data) in	Cost of	Cultiva (Rs.)	tion	N	No.	of fa	rme	ers /	deı	nonst	trati	on
Sl. N	variety / Enterpris	Area (ha)/	package for demonstrati	relation to technology	Name	Dem	Loc	S	С	S	Γ	Ot er		,	Γota	1
0.	es	Unit (No.)	on	demonstrat ed	of Inputs	0	al	M	F	M	F	M	F	M	F	T

1	Brinjal	4	Emamectin Benzoate 5 SG for management of Fruit and Shoot borer	Yield	Emame ctin Benzoat e 5 SG	-	-	2	2	2	2	8	4	12	8	20	
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#### Extension and Training activities under FLD:

Activity	Title of	No.	Clientele	Duration	Venue	P	No. artici		s					
Activity	Activity	110.	Chemele	Duration	On/Off	S	C	S	Γ	Otl	her	To	tal	
						M	F	M	F	M	F	M	F	T
Training	Scientific cultivation of vegetables	3	PF	3	Off	10	20	-	-	10	20	20	40	60

(4). Crop/ Technology: Tea / Yellow Sticky Trap

Thrust Area: IPM practices for sustainable agriculture.

Thematic Area: Integrated Pest Management

**Season**: Kharif **Farming Situation**: Irrigated

GI.	Crop &	Propose	Technolog	Parameter (Data) in	Cost	of Cultiv (Rs.)	ation	ľ	No. o	of far	rmei	rs / d	emo	nstra	atio	n
Sl. No	variety / Enterpris	d Area (ha)/	y package for	relation to technology	Nam e of	Dem	Loc	S	С	S	Г	Ot	-	7	Γota	ıl
•	es	Unit (No.)	demonstra tion	demonstra ted	Input s	0	al	M	F	M	F	M	F	M	F	T
1	Tea	8	Yellow Sticky Trap	Leaf Yield	Tin and Stick y Trap	-	-	4	-	-	-	1 2	4	1 6	4	2 0

#### **Extension and Training activities under FLD:**

Activity	Title of	No.	Clientele	Duration	Venue		No							
	Activity				On/Off	Off Participants SC ST			S					
						SC ST		Т	Oth	ier	To	tal		
						M	F	M	F	M	F	M	F	T
Field	Field	2	PF & EF	1	Off	15	5	-	-	25	5	40	10	50

Day	day and							
	Training							

(5). Crop/ Technology: Finger Millet

Thrust Area: Millet popularization.
Thematic Area: Millet cultivation

**Season**: Kharif **Farming Situation**: Irrigated

GI.	Crop &	Propos	Technology	Parameter (Data) in	Cost o	f Cultiv (Rs.)	ation	N	<b>lo.</b> a	f far	mei	rs / d	emo	nstr	atio	n
Sl. No	SI. voniety /	ed Area (ha) /	package for demonstrati	relation to technology	Nam e of	Dem	Loc	S	С	S	Γ	Ot r	he	7	Γota	ıl
•	· Enterpris es	Unit (No.)	on	demonstrat ed	Inpu ts	0	al	M	F	M	F	M	F	M	F	Т
1	Finger Millet	4	Available Variety	Yield	Seed	-	-	2	-	-	-	6	2	8	2	1 0

#### Extension and Training activities under FLD:

Activity	Title of	No.	Clientele	Duration	Venue		No	. of						
	Activity				On/Off	Pa	ırtic	ipan	ts					
						S	С	S	Т	Otl	ıer	To	tal	
						M	F	M	F	M	F	M	F	T
Field	Field day of	1	PF & EF	1	Off	15	5		_	25	5	40	10	50
Day	Millet	1	II' & LI	1	OII	13	)	_	_	23	)	40	10	30
Training	Popularization of millet	2	PF & EF	6		15	5	-	-	25	5	40	10	50

(6). Crop/ Technology: Pseudo Millet (Buck Wheat)
Thrust Area: Popularization of bio-fortified seed

Thematic Area: Nutritional security

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

Sl.	Crop &	Propos ed Area	Technology	Parameter (Data) in	Cost o	f Culti	vation	No	of	farm	ers	/ der	non	strat	tion	
No	No Enterpris	(ha)/ Unit	package for demonstrati	relation to technology	Nam e of	Dem	Loc	SC		ST		Otl r	ne	Tot	tal	
•	es	(No.)	on	demonstrat ed	Inpu ts	0	al	M	F	M	F	M	F	M	F	T
1	Pseudo Millet (Buck Wheat)	4	Cultivation technique of buck wheat	Yield	Seed	-	-	1	1	-	1	6	2	7	3	1 0

#### **Extension and Training activities under FLD:**

Activity	Title of	No.	Clientele	Duration	Venue		No.	of						
	Activity				On/Off	P	artici	pant	S					
						S	C	S'	Т	Ot	her	To	tal	
						M	F	M	F	M	F	M	F	T
	Scientific													
Training	cultivation	2	PF	2	ON/Off	5	10	_	_	5	10	10	20	30
Training	of buck		11	2	OI V/OII	)	10		_	3	10	10	20	30
	wheat													

(7). Crop/ Technology: Makhana

Thrust Area: Management of wet land Thematic Area: Wet land development

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

GI	Crop &	Propos	Technology	Parameter (Data) in	Cost of (Rs.)	f Culti	vation	No	of t	farm	ers	/ der	non	strat	ion	
No	No Enterpris	ed Area (ha)/ Unit	package for demonstrati	relation to technology	Nam e of	Dem	Loc	SC		ST		Otl r	ne	Tot	tal	
•	es	(No.)	on	demonstrat ed	Inpu ts	0	al	M	F	M	F	M	F	M	F	T
1	Makhana	1.0	Sabour Makhana - 1	Yield	Seed	-	-	1	1	-		4	0	5	0	5

#### **Extension and Training activities under FLD:**

Activity	Title of	No.	Clientele	Duration	Venue		No	. of						
	Activity				On/Off	Pa	rtic	ipant	ts					
						S	С	S	Г	Oth	ier	To	tal	
						M	F	M	F	M	F	M	F	T
Field	Cultivation	1	PF & EF	1	Off	15	5			25	7	40	10	50
Day	of makhana	1	FIXER	1	Oli	13	3	-	-	23	3	40	10	30

8). Crop/ Technology: Maize

**Thrust Area**: Popularization of farm machinaries

**Thematic Area**: Farm Mechanization

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

Sl. No	Crop & variety /	Propos ed Area	Technology package for	Parameter (Data) in	Cost o (Rs.)	f Culti	vation	No. of	farmers	/ demon	stration
110	Enterpris	(ha)/	demonstrati	relation to	Nam	Dem	Loc	SC	CT	Othe	Total
•	es	Unit	on	technology	e of	0	al	SC	31	r	าบเลา

		(No.)		demonstrat ed	Inpu ts			M	F	M	F	M	F	M	F	Т
1	Maize	2.0	Brush cutter cum weeder	Yield	Seed	-	-	2	1	-		8	0	1	0	1 0

#### **Extension and Training activities under FLD:**

Activity	Title of	No.	Clientele	Duration	Venue		No	. of						
	Activity				On/Off	Pa	artic	ipant	ts					
						S	C	S'	T	Oth	ıer	To	tal	
						M	F	M	F	M	F	M	F	T
Field	Brush													
Day	cutter cum weeder	1	PF & EF	1	Off	15	5	-	-	25	5	40	10	50

(9). Crop/ Technology: Maize/ Package of insecticide for Fall Army Worm

Thrust Area: Integrated pest management for sustainable agriculture

Thematic Area: Integrated pest management

Season: Rabi

Farming Situation: Irrigated

		Propose		Parameter	Cost of Cu	ıltivatio	n (Rs.)	No.	of f	arme	ers /	dem	onst	ratio	1	
Sl.	Crop &	d Area	Technology	(Data) in				SC		ST		Oth	ıer	Tot	al	
No .	variety / Enterpris es	(ha)/ Unit (No.)	package for demonstration	relation to technology demonstrat ed	Name of Inputs	Dem o	Loc al	M	F	M	F	M	F	M	F	Т
1	Maize	08	Emamectin benzoate 5SG, Thiomethoxam e and Lamdacyhaloth rin	Yield	Insectici de	-	-	4	1	1	1	1 2	4	1 6	4	2 0

#### **Extension and Training activities under FLD:**

Activity	Title of	No.	Clientele	Duration	Venue		No	. of						
	Activity				On/Off	Pa	artic	ipant	ts					
						S	С	S'	T	Otl	ıer	To	tal	
						M	F	M	F	M	F	M	F	T
	Performance													
Field	of Insecticide													
Day and	for control of	1	PF & EF	1	Off	15	5	-	-	25	5	40	10	50
training	fall army													
	worm													

(10). Crop/ Technology: Pineapple/ Post-emergence herbicide

Thrust Area: Management of pineapple based cropping system

Thematic Area: Weed management

**Season**: Kharif **Farming Situation**: Irrigated

CI	Crop &	Propos ed	Technology	Parameter (Data) in	Cost of (Rs.)	Culti	vation	No	. of	farm	ers	/ de	non	strat	tion	
SI. N	variety / Area packag	package for demonstrat	relation to technology	Name	Dem	Loc	SC		ST		Otl r	he	Tot	tal		
0.	ses	Unit (No.)	ion	demonstra ted	of Inputs	0	al	M	F	M	F	M	F	M	F	Т
1	Pineapple	4.0	Post- emergence herbicide	Yield	chemic als	-	-	2	-	2		4	2	8	2	1 0

# **Extension and Training activities under FLD:**

Activity	Title of	No.	Clientele	Duration	Venue		No. of							
	Activity				On/Off	Pa	rtic	ipant	ts					
						S	С	S	Т	Oth	ier	To	tal	
						M	F	M	F	M	F	M	F	T
Field Day	Performance of post- emergence herbicides in pineapple	1	PF & EF	1	Off	15	5	-	-	25	5	40	10	50

# 13 (A). Cluster Front Line Demonstration(CFLD)

Sl.	Saggan	Cwan	Variety	Technology	Area	No. of	
No	No Season Crop		variety	rechnology	in ha.	Demonstration	
1.	Summer	Green gram	IPM – 205-7	Popularization of pulse	20	50	
1.	1. Summer	Green gram	11 111 200 7	crop in summer season	20		
2	Rabi Oilseed		R-Suflam	Oilseed R-Suflam Popularization of oilseed		30	75
۷٠	2. Rabi	Offseed	K-Sulfaili	crop in rabi season	30	13	

# 13 (B). National Innovations in Climate Resilient Agriculture (NICRA).

Sl.	Season	Crop/	Variety/ Breed	Technology	Area in	No. of
No	No Animals				ha./no.	Demonstration
1.	Summer	Green gram	IPM – 205-7	Popularization of pulse	8	20
1.	Summer	Orech grann	$1 \cdot 1 \cdot 1 - 203 - 7$	crop in summer season	0	20
				Popularization of		
2.		Turmeric	R-Sonia	Turmeric variety in	0.5	6
				upland area		
3.			Swarna Sub – 1	Flood tolerant variety	10	25
4.	Kharif Pac	Paddy	Sabour Sampann	Flood and drought	12	30
5.				tolerant variety	12	30
6.	Rabi	Maize	P-3355	Raised Bed Maize	12	30
7.	Kaui	Makhana	Sabour Makhana – 1	Makaha Production	8	8
8.			Total		50.5	119
9.		Dairy	Cow	Mineral Mixture	24 no.	12
) J.	Others	Animal	Cow	Witheral Witxtuic	24 HO.	12
10.		Fish	Indian Major Carp	Fish Feed	10 pond	10
		34	22			

# 13 (C). Makhana Development Scheme, Govt. of Bihar.

Sl. No	Season	Crop/ Animals	Variety/ Breed	Technology	Area in ha.	No. of Demonstration
1.	Summer	Makhana	Sabour Makhana – 1	Makaha Production	50	50

# 13 (D). Demonstration under Climate Resilient Agriculture Programme, Govt. of Bihar.

Sl.	Coogen	Name of Tashnalogy	Area	No. of
No	Season	Name of Technology	(ha)	demonstrations
1	Summer	Line sowing of green gram	4	10
1	2023	Green manuring with sesbania	100	240
		DSR/line sowing with climate resilient variety	168	420
		Water harvesting and field bunding in paddy	24	60
		Alternate wetting and drying of paddy	16	40
2	Kharif 2023	INM/ green seeker based nutrient management in		40
		paddy	16	40
		Ginger-bitter gourd intercropping	6	15
		Community irrigation	8	20
		Raised Bed Maize	220.8	1104
		Zero tillage wheat	4	10
	Rabi 2023-	INM wheat	4	10
3	23	Raised Bed mustard	10	25
	23	Raised Bed Potato	1.2	10
		Community irrigation	8	20
		Leaser Land Leveling	40	100
		Total	630	2134

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

Name of the Crop /	Variety /	Period From Jan	Area (ha.)		De	etails of Produ	iction	
Enterprise /	Туре	to December 2023	(па.)	Type of Produce	Expected Production (quintals)	Cost of inputs (Rs.)	Expected Gross income (Rs.)	Expected Net Income (Rs.)
Paddy	Sabour Sampann	Kharif	4.6	Seed	160.00	135000.00	532000.00	397000.00
Wheat	HD-2967	Rabi	4.0	Seed	80.00	80000.00	320000.00	240000.00
Mustard	R.Suflam	Rabi	1.0	Seed	08.00	10000.00	88000.00	78000.00
Dragon Fruit	Red cover with red flesh	-	0.035	Cutting	4000 no.	10000.00	240000.00	230000.00
Guava	VNR- VIHI/ Allahabad Safeda	-	0.050	Plant	1000 no.	20000.00	40000.00	20000.00
Cauliflower	Sabour Agrim	Rabi	-	Sapling	5000 no.	2000.00	5000.00	3000.00
		Total			248 q 10000 no.	257000.00	1225000.00	968000.00

# 15. Extension Activities

Sl. No.		No. of	Total			
	Activities/ Sub-activities	activities proposed	Male	Female	Total	
1.	Field Day	05	160	90	250	
2.	Kisan Mela	02	720	180	1000	
3.	Kisan Ghosthi	05	330	170	500	
4.	Exhibition	02	165	35	200	
5.	Workshop	01	0	0	50	
6.	Advisory Services	750	840	220	1060	
7.	Scientific visit to farmers field	75	165	35	200	
8.	Farmers visit to KVK	550	450	100	550	
9.	Diagnostic visits	45	370	80	450	
10.	Exposure visits	02	40	10	50	
11.	Ex-trainees Sammelan	01	30	20	50	
12.	Soil health Camp	02	60	40	100	
13.	Animal Health Camp	02	60	40	100	
14.	Soil test campaigns	02	60	40	100	
15.	Celebration of important days (specify)	06	170	130	300	
16.	Swatchta Hi Sewa	06	170	130	300	
17.	Mahila Kisan Diwas	01			50	
18.	Any Other (Specify)	25	250	100	350	
	Total	1482	4040	1420	5660	

# 16. Revolving Fund (in Rs.)

Opening balance of 2023-2023 (As on 01.04.2023)	Amount proposed to be invested during 2023-23	Expected Return
41,37,986.50	2,10,000.00	968000.00

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

Project	Source	Amount to be received (Rs. in lakh)
Assessment and validation of technology	ATMA,	0.50
	Kishanganj	

#### 19. ON FARM TRIAL

OFT-1 (Entomology)

Season: Fitle of the OFT  Thematic Area: Problem diagnosed	Rabi Eco-friendly management practices to control fruit fly in cucurbits.  Integrated Pest management Most of the fruit of cucurbits damage due to fruit fly, ultimately yield affected and farmers indiscriminate use hard insecticides which is
Thematic Area: Problem diagnosed	Integrated Pest management  Most of the fruit of cucurbits damage due to fruit fly, ultimately yield
Problem diagnosed	Most of the fruit of cucurbits damage due to fruit fly, ultimately yield
4 4 C	harmful for human.
Important Cause	Due to crop damage farmers could not achieve desired production.
Production system:	Vegetables cropping system
Micro farming system:	Medium-Up land
Fechnology for Festing:	Farmers practice- Use of any pesticides as per their knowledge. TO1- Commercial fruit fly pheromone trap @ 10/h. TO2- Self made poison bait fruit fly trap @ 10/h.
Existing Practice:	Farmers indiscriminate use hard insecticides
Hypothesis:	Protect crop by attack of fruit fly keeping in view environmentally safe.
Objective(s):	To enhance the income of farmers through vegetable production.
<b>Freatments</b>	Farmers practice- Use of any pesticides as per their knowledge. TO1- Commercial fruit fly pheromone trap @ 10/h. TO2- Self-made poison bait fruit fly trap @ 10/h.
Critical Inputs:	Pheromone trap/Insecticide for self-made poison bait fruit fly trap
Unit Size:	2000 sqm
No of Replications:	10
Unit Cost:	Rs.500
Fotal Cost:	Rs.5000
Monitoring Indicator:	Technological observations:  Number of fruits/infected fruits at different harvest  Insect infestation (%)  Yield (q/ha)  Economic indicators:
	Cost of cultivation(Rs.)
	Net return (Rs.) B:C Ratio
	DRPCAU, Pusa
	rce of Technology

OFT-2 (Entomology)

	OFT-2 (Entomology)	
i.	Season:	Rabi
ii.	Title of the OFT	Management of <i>Phytophthora</i> heart rot and root rot disease in
		pineapple
iii.	Thematic Area:	Integrated disease management
iv.	Problem diagnosed	Heart rot and root rot one of the major disease caused by <i>Phytophthora</i>
		parasitica and P. cinnamoni is the most serious problem in all the
		pineapple growing area. So development of integrated disease
		management technology is very necessary.
v.	Important Cause	Phytophthora parasitica and P. cinnamon cause mortality in
	•	pineapple.
vi.	Production system:	Pineapple farming situation.
vii.	Micro farming	Medium-Up land
	system:	Trouble of faire
viii.	Technology for	TO1- (i) Soil application of Trichoderma sp. @ 5 Kg/ha with FYM
	Testing:	(ii) Fosetyl AL @ 1000 ppm bi-monthly spray with first spray
		after two month of planting.
		TO2- (i) Soil application of Trichoderma sp. @ 5 Kg with FYM
		(ii) Mancozeb @ 2000 ppm and Difenconazole @ 1000 ppm
		alternate bi-monthly spray with first spray after two month
		of planting.
ix.	Existing Practice:	No use of any fungicide
х.	Hypothesis:	Protect crop by Heart rot and root rot for quality production
xi.	Objective(s):	To enhance the farmers income through quality production
xii.	Treatments	TO1- (i) Soil application of Trichoderma sp. @ 5 Kg/ha with FYM
		(ii) Fosetyl AL @ 1000 ppm bi-monthly spray with first spray
		after two month of planting.
		TO2- (i) Soil application of Trichoderma sp. @ 5 Kg with FYM
		(ii) Mancozeb @ 2000 ppm and Difenconazole @ 1000 ppm
		alternate bi-monthly spray with first spray after two month
		of planting.
xiii.	Critical Inputs:	Trichoderma, , Fosetyl AL, Mancozeb, Difenconazole
xiv.	Unit Size:	1000 sqm
XV.	No of Replications:	10
xvi.	Unit Cost:	Rs.1000
xvii.	Total Cost:	Rs. 10000
viii.	Monitoring	Technological observations:
	Indicator:	Observation on disease severity, Plant mortality after 5 days of each
		spray, (Disease infestation%)
		Yield ( q/ha )
		Economic indicators:
		Cost of cultivation(Rs.)
		Net return (Rs.)
		B:C Ratio
xix.	Source of Technology	D.C Kullo
AIA.	(ICAR/AICRP/SAU/	
	Other, please	
	specify):	
	1 ·- <u>1</u> · - <del></del> J / •	1

# OFT-3 (Horticulture)

I.	Season:	Rabi
1.	Title of the OFT	
II.	Title of the OF I	Performance evaluation of raised bed with paddy straw mulch in potato production.
III.	Thematic Area:	Resource Conservation Technology
	Problem diagnosed	Potato producers are facing increasing costs of cultivation,
IV.	11001em unugnoseu	incidence of potato late blight, and a delay in sowing next crop.
	Important Cause	Low yield accompanied with high cultivation costs, incidence of
V.	-	late blight, and delay in growing the following crop in the field.
VI.	<b>Production system:</b>	Rice-Potato-Maize
VII.	Micro farming system:	Medium and up land situation
VIII.	<b>Technology for Testing:</b>	Raised bed with paddy straw mulch & Zero tillage with paddy straw mulch
IX.	<b>Existing Practice:</b>	Farmers practice Flat method or ridge method
X.	Hypothesis:	<ul> <li>a. Low incidence of insect- pest (99 % reduction of damage by cut worm) and delayed late blight incident.</li> <li>b. Effective way of weed management (80-95 % reduction of weed incidence)</li> <li>c. Early harvesting to facilitate timely sowing of upcoming crops.</li> </ul>
XI.	Objective(s):	Climate resilient technology based potato production
XII.	Treatments	<ul> <li>a. Farmer's Practice: Sowing of potato in plough field and earthing up.</li> <li>b. TO<sub>1</sub> – Zero tillage with rice straw mulch (ZTRM)</li> <li>a. TO<sub>2</sub> – Raised bed with rice straw mulch (RBRM)</li> </ul>
XIII.	Critical Inputs:	Tuber
XIV.	Unit Size:	1000 m <sup>2</sup>
XV.	No of Replications:	08
XVI.	Unit Cost:	1250/-
XVII.	Total Cost:	10000/-
	Monitoring Indicator:	<ul> <li>A. Technological observations:</li> <li>No of tuber/plants</li> <li>Days of maturity</li> <li>Average Yield (q/ha.)</li> </ul>
XVIII.		B. Economics:
		• Cost of cultivation (Rs/ha)
		<ul><li>Net return (Rs/ha)</li><li>B:C ratio</li></ul>
XIX.	Source of Technology (ICAR/AICRP/SAU/ Other, please specify):	CIP, Shillong

# **OFT – 4** (Horticulture)

I.	Season:	Rabi						
	Title of the OFT	Performance assessment of pineapple variety MD 2 in						
II.		Kishanganj district.						
III.	Thematic Area:	Varietal evaluation						
IV.	Problem diagnosed	Pineapple farming is more expensive (about Rs one lakh per acre). In Kishanganj, farmers exclusively produce the kew and queen varieties, which have a poor shelf life.						
V.	Important Cause	Poor shelf life of existing pineapple varieties						
VI.	<b>Production system:</b>	Pineapple based farming						
VII.	Micro farming system:	Up land situation						
VIII.	<b>Technology for Testing:</b>	Performance of Variety MD 2						
IX.	<b>Existing Practice:</b>	Local variety Kew & Queen						
X.	Hypothesis:	<ul><li>a. Adoptability of new variety due to superior quality, yield, and shelf life of the product.</li><li>b. Variety will boost the revenue of district.</li></ul>						
XI.	Objective(s):	Introduction of new variety in kishnagnaj						
	Treatments	a. Farmer's Practice: local variety						
XII.		<ul> <li>b. TO<sub>1</sub> – Queen (Tissue culture or Suckers)</li> <li>c. TO<sub>2</sub> – MD2 (Tissue culture or Suckers)</li> </ul>						
XIII.	Critical Inputs:	Suckers						
XIV.	Unit Size:	$1000 \text{ m}^2$						
XV.	No of Replications:	08						
XVI.	Unit Cost:	1250/-						
XVII.	Total Cost:	10000/-						
XVIII.	Monitoring Indicator:	A. Technological observations:  Days of D-leaf Days of 50 % flowering Days of maturity Fruit yield (q/ha.)  B. Economics: Yield (q/ha) Cost of cultivation (Rs/ha) Net return (Rs/ha) B:C ratio						
XIX.	Source of Technology (ICAR/AICRP/SAU/ Other, please specify):	BAU, Sabour						

# **OFT – 5 (Horticulture)**

I.	Season:	Rabi					
	Title of the OFT	Performance assessment of pineapple variety MD 2 in					
II.		Kishanganj district.					
III.	Thematic Area:	Varietal evaluation					
IV.	Problem diagnosed	Pineapple farming is more expensive (about Rs one lakh per acre). In Kishanganj, farmers exclusively produce the kew and queen varieties, which have a poor shelf life.					
V.	Important Cause	Poor shelf life of existing pineapple varieties					
VI.	<b>Production system:</b>	Pineapple based farming					
VII.	Micro farming system:	Up land situation					
VIII.	<b>Technology for Testing:</b>	Performance of Variety MD 2					
IX.	<b>Existing Practice:</b>	Local variety Kew & Queen					
X.	Hypothesis:	<ul><li>c. Adoptability of new variety due to superior quality, yield, and shelf life of the product.</li><li>d. Variety will boost the revenue of district.</li></ul>					
XI.	Objective(s):	Introduction of new variety in kishnagnaj					
	Treatments	d. Farmer's Practice: local variety					
XII.		e. TO <sub>1</sub> – Queen (Tissue culture or Suckers) f. TO <sub>2</sub> – MD2 (Tissue culture or Suckers)					
XIII.	Critical Inputs:	Suckers					
XIV.	Unit Size:	$1000 \text{ m}^2$					
XV.	No of Replications:	08					
XVI.	Unit Cost:	1250/-					
XVII.	Total Cost:	10000/-					
XVIII.	Monitoring Indicator:	B. Technological observations:  Days of D-leaf Days of 50 % flowering Days of maturity Fruit yield (q/ha.)  B. Economics: Yield (q/ha) Cost of cultivation (Rs/ha) Net return (Rs/ha) B:C ratio					
XIX.	Source of Technology (ICAR/AICRP/SAU/ Other, please specify):	BAU, Sabour					

#### OFT- 6 (Agril. Engg.)

OFI	- 6 (Agrii. Engg.)							
i.	Season:	Kharif – 2023						
ii.	Title of the OFT	Assessment of different weeding tools in paddy.						
iii.	Thematic Area:	Farm mechanization						
iv.	Problem diagnosed	Inter-culturing of paddy is costly and strenuous						
v.	<b>Important Cause</b>	Low level of farm mechanization						
vi.	<b>Production system:</b>	Rice-maize						
vii.	Micro farming system:	Irrigated upland						
viii.	<b>Technology for Testing:</b>	Suitability of inter culturing tools for paddy.						
ix.	<b>Existing Practice:</b>	Manually by local hand tools						
х.	Hypothesis:	Use of power weeder will increase the field capacity and reduce drudgery						
xi.	<b>Objective(s):</b>	To increase the level of farm mechanization.						
xii.	Treatments	a) Farmer Practice (FP): Manually by local hand tools						
		b) TO <sub>1</sub> : Manual inter culturing by grubber.						
		c) TO <sub>2</sub> : Inter culturing with power weeder.						
xiii.	<b>Critical Inputs:</b>	Weeder, Seed						
xiv.	Unit Size:	$600 \text{ m}^2$						
XV.	No of Replications:	06						
xvi.	Unit Cost:	35000						
xvii.	Total Cost:	40000						
xviii.	Monitoring Indicator:	A. Technological observations:						
		<ul> <li>Field capacity (ha/h)</li> </ul>						
		• Field efficiency (%)						
		• Weeding efficiency (%)						
		B. Economical observations:						
		• Cost (Rs/ha)						
		• Yield (q/ha)						
		B:C ratio						
xix.	Source of Technology	DRPCAU, Pusa, Samastipur						
	(ICAR/AICRP/SAU/							
	Other, please specify):							

# OFT – 7 (Agril. Engg.)

I.	Season:	Rabi/Summer – 2023						
II.	Title of the OFT	Assessment of Multi crop planter for sowing of pulses in						
11.		different field conditions.						
III.	Thematic Area:	Farm Mechanization						
IV.	Problem diagnosed							
V.	Important Cause							
VI.	<b>Production system:</b>	Paddy – Maize/ Paddy - wheat cropping system						
VII.	Micro farming system:	Medium land						
VIII.	<b>Technology for Testing:</b>	Sowing of pulses with Multi crop planter.						
IX.	<b>Existing Practice:</b>	Broadcasting in tilled condition.						
X.	Hypothesis:	Line sowing will increase the production.						
XI.	Objective(s):	i. To find out the best sowing method of pulses.						
	Treatments	a. Farmer's Practice: Broadcasting in tilled condition.						
XII.		b. TO <sub>1</sub> : Sowing with Multi crop planter in no tilled condition.						
		c. TO <sub>2</sub> : Sowing with Multi crop planter in tilled condition.						
XIII.	Critical Inputs:	Seed, fuel for planting, herbicide.						
XIV.	Unit Size:	1000 m <sup>2</sup>						
XV.	No of Replications:	08						
XVI.	Unit Cost:	1250/-						
XVII.	Total Cost:	10000/-						
	Monitoring Indicator:	A. Technological observations:						
		• No. of plants/m <sup>2</sup>						
		<ul> <li>Labour saving (man-days/ha)</li> </ul>						
XVIII.		• Yield						
Avin.		B. Economics:						
		• Cost of cultivation (Rs/ha)						
		Net return (Rs/ha)						
		B:C ratio						
	Source of Technology	RPCAU, Pusa						
XIX.	(ICAR/AICRP/SAU/							
	Other, please specify):							

OFT-09 (Agronomy)

	I-09 (Agronomy)	
i.	Season:	
ii.	Title of the OFT	Improvement of Nitrogen use efficiency in rice
iii.	Thematic Area:	INM
iv.	Problem diagnosed	Excessive use of chemical fertilizer and Spiraling price of urea leads to increase in cost of cultivation
v.	Important Cause	
vi.	Production system:	
vii.	Micro farming system:	
viii.	Technology for Testing:	Farmers practice- RDF (100:40:20) Kg/ha TO1- 50% of RDN & 100% PK + nano urea @4ml/lt. water (Single spray at pre flowering stage).  TO2- 50% of RDN & 100% PK + 2 sprays of Nano Urea at (25 to 30 days) and (60-65 days) @ 4 ml/lt water.  (Especially for Medium duration variety of BAU Sabour, BAU
•	E : 4: D 4:	Ranchi and Dr RPCAU, Pusa, ICAR RCER, Patna)
ix.	Existing Practice:	
X.	Hypothesis:	
xi.	Objective(s):	
xii.	Treatments	
xiii.	Critical Inputs:	
xiv.	Unit Size:	
XV.	No of Replications:	
xvi.	Unit Cost:	
xvii.	Total Cost:	
viii.	Monitoring Indicator:	Plot size (10x10 m2)/ in each tech. option, soil data before and after (pH, EC, OC, NPK,), Yield data, No. of effective tillers/m2, 1000 grain weight, Panicle weight, Grain and Straw yield and Economics.
xix.	Source of Technology (ICAR/AICRP/SAU/ Other, please specify):	BAU, Sabour

# OFT-10 (Agronomy)

i.	Season:	
ii.	Title of the OFT	Improvement of Nitrogen use efficiency in wheat.
iii.	Thematic Area:	INM
iv.	Problem diagnosed	Excessive use of chemical fertilizer and Spiraling price of urea leads to increase in cost of cultivation
v.	Important Cause	
vi.	<b>Production system:</b>	
vii.	Micro farming system:	
viii.	Technology for Testing:	Farmers practice- RDF (100:40:20) Kg/ha TO1- 50% of RDN & 100% PK + nano urea @4ml/lt. water (Single spray at 35 DAS).  TO2- 50% of RDN & 100% PK + 2 sprays of Nano Urea at (35 DAS) and (60-65DAS) @ 4 ml/lt water.  (Timely sown variety of BAU Sabour. BAU Ranchi and RPCAU, Pusa, ICAR RCER, Patna)  Under Rice-Wheat cropping system.
ix.	<b>Existing Practice:</b>	
X.	Hypothesis:	
xi.	Objective(s):	
xii.	Treatments	
xiii.	Critical Inputs:	
xiv.	Unit Size:	
XV.	No of Replications:	
xvi.	Unit Cost:	
xvii.	Total Cost:	
viii.	Monitoring Indicator:	Plot size (10x10 m2)/ in each tech. option, soil data before and after (pH, EC, OC, NPK,), Yield data, No. of effective tillers/m2, 1000 grain wt., Panicle wt., Straw yield and Economics.
xix.	Source of Technology (ICAR/AICRP/SAU/ Other, please specify):	BAU, Sabour

# 19. 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	Climate Resilient Agriculture Programme GOB	10000000.00
2	Assessment and refinement of short term technology, ATMA	75000.00
3	Skill Development Training (RPL+Domain) RYVK	1800000.00
4	NICRA Project	820000.00
5	Demonstration and popularization of dragon fruit in Koshi region.	750000.00
6	Makhana Development Scheme	150000.00
	Total	13595000

#### 20. No. of success stories proposed to be developed with their tentative titles - 02

#### 21. No. of Scientific Advisory Committee Meeting – 01

#### 22. Soil and water testing

Details	No. of	No.	No. of Farmers							No. of	No. of SHC	
	Samples	SC	SC ST		Other Total			Villages		distributed		
		M	F	M	F	M	F	M	F	T		
Soil Samples	500	90	10	20	5	350	25	460	40	500	20	500
Water Samples	-	-	-	-	-	-	-	-	-	-	-	-
Other (Please	-	-	-	-	-	-	-	-	-	-	-	-
specify)												
Total	500	90	10	20	5	350	25	460	40	500	20	500

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

Item	Fund required for 2023-24 (Rs.)
Pay & Allowances	9500000.00
Traveling allowances	150000.00
HRD	25000.00
Contingency	
Stationary & POL	400000.00
Training	250000.00
FLD	75000.00
OFT	50000.00
M.O.B	800000.00
Extension Activities	30000.00
Swachhta Expenditure	30000.00
Total	11310000.00

- \* Any additional requirement may be suitably justified.
- 24. 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

Twisting technique of guava has got wide acceptability among the farming community of Kishanganj district. KVK Kishanganj has been popularizing this technology through training and awareness programme since last eight years. The success stories of farmers engaged in guava production through this technique are being published in print as well as electronic media such as uploading video on YouTube by KVK and BAU, Sabour. The area under guava cultivation has increased by 200 acres in the district under this technology. Through this technique farmer are getting a net income of rupees around one lakh fifty thousand per acre per annum.

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