KRISHI VIGYAN KENDRA

KISHANGANJ

ACTION PLAN

(January to December 2022)

Submitted to

ICAR-ATARI, Patna, (Zone-IV)

BIHAR AGRICULTURAL UNIVERSITY

KRISHI VIGYAN KENDRA
KISHANGANJ (BIHAR)

ACTION PLAN, 2022

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 Kishanganj 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, PIN- 855107	7903864332	*kishanganjkvk@gmail.com*

1. Name of host organization :

Address	Telephone		E mail
	Office	**FAX**	
Bihar Agricultural University Sabour, Bhagalpur	0641-2452611	0641-2452611	*deebausabour@gmail.com*

2. Staff Position (As on 01.01.2022)

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

6. Description of Agro-climatic Zone & major agro ecological situations (based on soil and 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^{o}C and 3.52^{o}C respectively. The average annual rainfall of the district is about **2269.49 mm**. 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	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	Unavailability of quality seeds, injudicious use of fertilizers, incidence of weeds, diseases and pests, lack of scientific knowledge of crop cultivation, Problematic soil	ICM,WM,INM, Improved seed and seed treatment, Vermiculture, Mushroom Production, Capacity Building, Value Addition, Disease management in animals
2.		Pothia	Panasi	Rice, Wheat, Maize, Jute, Potato, pineapple &Vegetables, Mustard, green gram, Banana, Mushroom, Livestock, goatry, and Backyard	Unavailability of quality seeds injudicious use of fertilizers, incidence of weeds, diseases and pests, lack of scientific knowledge of crop cultivation.	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	Unavailability of quality seeds incidence of weeds, diseases and pests, lack of scientific knowledge of crop cultivation.	ICM, Weed Management, Integrated Nutrient Management
4.		Thakurganj	Chapati, Patharia, Khanabari, Govindpur	Rice, Maize, Wheat, Makhana, Banana, Vegetables, Fish Culture and Backyard Poultry	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	Unavailability of quality seeds incidence of weeds, diseases and pests, lack of scientific knowledge of crop cultivation.	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 (January to December 2022)

1. Agricultural Engineering

Thematic area	Title of Training	Qtr No.	Duration (Days)	Venue On/Off	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Practicing Farmers														
Irrigation management	Irrigation Scheduling in wheat	I	1	Off/On	09 Feb 2022	2	1	1	1	15	15	18	7	25
Installation and maintenance of micro irrigation system	Installation and operation of micro-irrigation system		3	Off/On	08-10 Mar, 2022	2	1	1	1	15	5	18	7	25
Use of farm machinery and implements	Sowing of green gram by zero tillage machine	II	2	Off/On	06-07, April 2022	2	1	1	1	15	5	18	7	25
Micro irrigation water management	Importance of Micro irrigation system & its maintenance		2	Off/On	10-11 May, 2022	2	1	1	1	15	5	18	7	25

Thematic area	Title of Training	Qtr No.	Duration (Days)	Venue On/Off	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Use of farm machinery and implements	Direct Seeded Rice technology		2	Off/On	24-25 May, 2022	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	III	2	Off/On	22-23 July, 2022	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		2	Off/On	16-17 Aug, 2022	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	22-23 Sept, 2022	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	20-21 Oct, 2022	2	1	1	1	15	5	18	7	25
Use of farm machinery and implements	Use of zero till drill machine for wheat cultivation.		2	Off/On	17-18 Nov, 2022	2	1	1	1	15	5	18	7	25
Rural Youth														
Care and maintenance of farm machinery	Care and maintenance of plant protection equipments	III	4	Off/On	14-17 Sept, 2022	2	1	1	1	15	5	18	7	25

Thematic area	Title of Training	Qtr No.	Duration (Days)	Venue On/Off	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Installation and maintenance of micro irrigation system	Installation and maintenance of micro irrigation system	IV	4	Off/On	07-10 Dec, 2022	2	1	1	1	15	5	18	7	25
Extension Functionaries														
Water Management	Use of micro – irrigation for horticultural crops.	I	2	Off/On	28-29 Jan, 2022	2	1	1	1	15	5	18	7	25
Resource Conservation Technology	Calibration of zero till drill machine	III	2	Off/On	25-26 Aug, 2022	2	1	1	1	15	5	18	7	25
Total			**32**			**28**	**14**	**14**	**14**	**210**	**80**	**252**	**98**	**350**

2. Plant Protection

Thematic area	Title of Training	No.	Duration (Days)	Venue On/Off	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Practicing Farmers														
Integrated Pest management	Insects pest management in mango	I	2	Off/On	03-04 Jan, 2022	2	1	1	1	15	5	18	7	25
Integrated disease management	Disease management in mango		2	Off/On	18-19 Jan, 2022	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, 2022	2	1	1	1	15	5	18	7	25
Integrated pest management	Storage pest of grains and their control measures		2	Off/On	22-23 Feb, 2022	2	1	1	1	15	5	18	7	25
Bio-control of pest and diseases	Bio pesticide and their use in plant production		2	Off/On	15-16 Mar, 2022	2	1	1	1	15	5	18	7	25

Thematic area	Title of Training	No.	Duration (Days)	Venue On/Off	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Integrated Pest management	Management of insect pest by cultural practices in summer season	II	2	Off/On	19-20 April, 2022	2	1	1	1	15	5	18	7	25
Integrated Pest management	Management of insect pest of green gram		2	Off/On	27-28 April, 2022	2	1	1	1	15	5	18	7	25
Integrated pest management	Integrated pest management in jute		2	Off/On	18-19 May, 2022	2	1	1	1	15	5	18	7	25
Integrated disease management	Seed treatment of tuber crops		2	Off/On	16-17 June, 2022	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	III	2	Off/On	06-07 July, 2022	2	1	1	1	15	5	18	7	25
Integrated disease management	Management of sheath blight in kharif paddy		2	Off/On	10-11 Aug, 2022	2	1	1	1	15	5	18	7	25
Integrated disease management	Management of false smut in kharif paddy		2	Off/On	23-24 Aug, 2022	2	1	1	1	15	5	18	7	25
Integrated disease management	Disease management of banana		2	Off/On	07-08 Sept, 2022	2	1	1	1	15	5	18	7	25
Integrated pest management	Integrated pest management in maize	IV	2	Off/On	11-12 Oct, 2022	2	1	1	1	15	5	18	7	25
Integrated disease management	Early and late blight disease of potato and their management		2	Off/On	15-16 Nov, 2022	2	1	1	1	15	5	18	7	25
Organic Farming	Use of bio-pesticides,		2	Off/On	13-14 Dec,	2	1	1	1	15	5	18	7	25

Thematic area	Title of Training	No.	Duration (Days)	Venue On/Off	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
	PSB, Azotobacter and Vermi composting				2022									
Rural Youth														
Bee-keeping	Sustainable Beekeeping and Honey Production technique	I	4	Off/On	12-15 Jan, 2022	2	1	1	1	15	5	18	7	25
Vermiculture	Technique of vermicompost production and its importance and application.	II	4	Off/On	05-08 Apr, 2022	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/On	02-05 Aug, 2022	2	1	1	1	15	5	18	7	25
Mushroom production	Mushroom cultivation technique.	IV	4	Off/On	08-11 Nov, 2022	2	1	1	1	15	5	18	7	25
Extension Functionaries														
Integrated pest management	Integrated pest management in Kharif crops.	II	2	Off/On	29-30 June, 2022	2	1	1	1	15	5	18	7	25
Integrated pest management	Integrated pest management in Rabi crops.	IV	2	Off/On	26-27 Oct, 2022	2	1	1	1	15	5	18	7	25
Total			**52**			**44**	**22**	**22**	**22**	**330**	**110**	**396**	**154**	**550**

3. Horticulture

Thematic area	Title of Training	No.	Duration (Days)	Venue On/Off	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Practicing Farmers														
Cultivation of fruits	Scientific cultivation of Pine apple	I	2	Off/On	12-13 Jan, 2022	2	1	1	1	15	5	18	7	25
Cultivation of fruits	Production management of Guava orchard		2	Off/On	11-12 Feb, 2022	2	1	1	1	15	5	18	7	25
Production and management technology of tuber crops	Scientific cultivation of summer vegetables		3	Off/On	04-06 Mar, 2022	2	1	1	1	15	5	18	7	25
Cultivation of fruits	Production management of guava orchards		2	Off/On	12-13 Mar, 2022	2	1	1	1	15	5	18	7	25
Nursery raising	Nursery management of vegetable crops	II	2	Off/On	28-29 April, 2022	2	1	1	1	15	5	18	7	25
Yield increment	Scientific cultivation of elephant foot yam		2	Off/On	11-12 May, 2022	2	1	1	1	15	5	18	7	25
Cultivation of fruits	Scientific cultivation of Banana		2	Off/On	16-17 June, 2022	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, 2022	2	1	1	1	15	5	18	7	25
Rejuvenation of old orchard	Training and pruning of old orchards		2	Off/On	17-18 Aug, 2022	2	1	1	1	15	5	18	7	25
Production & management technology of	Scientific cultivation of solanaceous vegetables		2	Off/On	14-15 Sept, 2022	2	1	1	1	15	5	18	7	25

Thematic area	Title of Training	No.	Duration (Days)	Venue On/Off	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Vegetable														
Production and management technology of tuber crop	Scientific cultivation of potato	IV	2	Off/On	20-21 Oct, 2022	2	1	1	1	15	5	18	7	25
Yield increments	Scientific cultivation of leafy vegetables		2	Off/On	28-29 Nov, 2022	2	1	1	1	15	5	18	7	25
Yield increments	Production management of mango orchards		2	Off/On	08-09 Dec, 2022	2	1	1	1	15	5	18	7	25
Rural Youth														
Layout and management methods	Establishment and methodology of new orchards	I	4	Off/On	01-04 Feb, 2022	2	1	1	1	15	5	18	7	25
Cultivation of fruit	Scientific cultivation of Dragon Fruit	III	2	Off/On	19-20 July, 2022	2	1	1	1	15	5	18	7	25
Cultivation of fruit	Organic cultivation of Dragon Fruit		6	Off/On	20-25 Aug, 2022	2	1	1	1	15	5	18	7	25
Layout and management methods	High density planting system for fruit crops		3	Off/On	07-09 Sept, 2022	2	1	1	1	15	5	18	7	25
Export potential fruits	Production and management of Makhana and its processing	IV	4	Off/On	27-30 Oct, 2022	2	1	1	1	15	5	18	7	25
Planting propagation techniques	Technique of propagation of rootage and graftage in fruit crops		4	Off/On	15-18 Nov, 2022	2	1	1	1	15	5	18	7	25
Protected cultivation	Nursery management		4	Off/On	01-04 Dec,	2	1	1	1	15	5	18	7	25

Thematic area	Title of Training	No.	Duration (Days)	Venue On/Off	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
techniques	of vegetable crops and poly tunnel technology				2022									
Extension Functionaries														
Water Management	Increasing water use efficiency and high productivity of horticultural crops.	II	2	Off/On	22-23 June, 2022	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, 2022	2	1	1	1	15	5	18	7	25
Total			**58**			**44**	**22**	**22**	**22**	**330**	**110**	**396**	**154**	**550**

12. (A) Skill Development training to be organized (January to December 2022)

Sl. No.	Job Role	Duration (hrs)	No. of participants	Remarks
1	Nursery Worker	200	30	ICAR
2	Quality Seed Grower	240	30	BSDM (Domain)
3	Gardner	80	30	BSDM (RPL)
4	Agriculture Extension Service provider	80	30	BSDM (RPL)
5	Beekeeper	80	30	BSDM (RPL)

13. Frontline demonstration to be conducted 2022

Sl. No	Season	Crop	Variety	Technology	Area in ha.	No. of Demonstration
1.	Summer	Jute	JRO – 204/ 524	Post emergence herbicides (Propoquizafop 10% EC) for weed control in Jute	4.00	10
2.	Summer	(Pointed Gourd) Cucurbitaceous crop	Existing Farmer's Variety	Pheromone trap for management of fruit fly	4.00	20
3.	Kharif	Brinjal	Existing Farmer's Variety / Hybrid	Emamectin Benzoate 5 SG for management of Fruit and Shoot borer	4.00	20
4.	Kharif	Tea	Existing Farmer's Variety (T-24/25)	Yellow Sticky Trap	8.00	20
5.	Kharif	Paddy	Existing Farmer's Variety	Self propelled walk behind reaper for harvesting	4.00	10
6.	Rabi	Wheat	BHU – 31 and PBW – 1 – Zn	Bio-fortified varieties of wheat	4.00	10
7.	Rabi	Mango	Existing Farmer's Variety	Use of paclobutrazole for regular bearing	1.0	5
8.	Rabi	Maize	Existing Farmer's Variety / Hybrid	Emamectin benzoate 5SG, Thiomethoxame and Lamdacyhalothrin for management of fall army worm	4.0	20
9.	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: Integrated crop management
Season: Summer
Farming Situation: Irrigated

Sl. No.	Crop & variety / Enterprises	Proposed Area (ha)/ Unit (No.)	Technology package for demonstration	Parameter (Data) in relation to technology demonstrated	Cost of Cultivation (Rs.)			No. of farmers / demonstration								
					Name of Inputs	Demo	Local	SC		ST		Other		Total		
								M	F	M	F	M	F	M	F	T
1	Jute	4	Post emergence herbicides (Propoquizafop 10% EC)	Yield	Seed, herbicides	-	-	0	0	1	0	9	0	10	0	10

Extension and Training activities under FLD:

Activity	Title of Activity	No.	Clientele	Duration	Venue On/Off	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Training	Scientific cultivation of jute	1	PF	2	Off	5	10	-	-	5	10	10	20	30
Field Day	Scientific cultivation of jute	1	PF	1	Off	5	10	-	-	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

Sl. No.	Crop & variety / Enterprises	Proposed Area (ha) / Unit (No.)	Technology package for demonstration	Parameter (Data) in relation to technology demonstrated	Cost of Cultivation (Rs.)			No. of farmers / demonstration								
								SC		ST		Other		Total		
					Name of Inputs	Demo	Local	M	F	M	F	M	F	M	F	T
1	Cucurbitaceous crop/ Pheromone trap	4	Pheromone trap for management of fruit fly	Yield	Pheromone trap	-	-	1	1	-	-	8	5	9	6	15

Extension and Training activities under FLD:

Activity	Title of Activity	No.	Clientele	Duration	Venue On/Off	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Training/ Field Day	IPM in cucurbitaceous crop	3	PF	4	ON/Off	10	20	-	-	10	20	20	40	60

(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

Sl. No.	Crop & variety / Enterprises	Proposed Area (ha)/ Unit (No.)	Technology package for demonstration	Parameter (Data) in relation to technology demonstrated	Cost of Cultivation (Rs.)			No. of farmers / demonstration								
					Name of Inputs	Demo	Local	SC		ST		Other		Total		
								M	F	M	F	M	F	M	F	T
1	Brinjal	4	Emamectin Benzoate 5 SG for management of Fruit and Shoot borer	Yield	Emamectin Benzoate 5 SG	-	-	2	2	2	2	8	4	12	8	20

Extension and Training activities under FLD:

Activity	Title of Activity	No.	Clientele	Duration	Venue On/Off	No. of Participants								
						SC		ST		Other		Total		
						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

Sl. No.	Crop & variety / Enterprises	Proposed Area (ha)/ Unit (No.)	Technology package for demonstration	Parameter (Data) in relation to technology demonstrated	Cost of Cultivation (Rs.)			No. of farmers / demonstration								
					Name of Inputs	Demo	Local	SC		ST		Other		Total		
								M	F	M	F	M	F	M	F	T
1	Tea	8	Yellow Sticky Trap	Leaf Yield	Tin and Sticky Trap	-	-	4	-	-	-	12	4	16	4	20

Extension and Training activities under FLD:

Activity	Title of Activity	No.	Clientele	Duration	Venue On/Off	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Field Day	Field day and Training	2	PF & EF	1	Off	15	5	-	-	25	5	40	10	50

(5). Crop/ Technology: Paddy/ Self Propelled Reaper for paddy harvesting
Thrust Area: Farm mechanization for sustainable agriculture.
Thematic Area: Farm mechanization
Season: Kharif
Farming Situation: Irrigated

Sl. No.	Crop & variety / Enterprises	Proposed Area (ha) / Unit (No.)	Technology package for demonstration	Parameter (Data) in relation to technology demonstrated	Cost of Cultivation (Rs.)			No. of farmers / demonstration								
					Name of Inputs	Demo	Local	SC		ST		Other		Total		
								M	F	M	F	M	F	M	F	T
1	Self Propelled Reaper	4	Use of Self Propelled Reaper for paddy harvesting	Field Capacity	Fuel and operator charge for machine	-	-	2	-	-	-	6	2	8	2	10

Extension and Training activities under FLD:

Activity	Title of Activity	No.	Clientele	Duration	Venue On/Off	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Field Day	Field day of paddy	1	PF & EF	1	Off	15	5	-	-	25	5	40	10	50

(6). Crop/ Technology: Wheat/ bio-fortified variety
Thrust Area: Popularization of bio-fortified seed
Thematic Area: Nutritional security
Season: Rabi
Farming Situation: Irrigated

Sl. No.	Crop & variety / Enterprises	Proposed Area (ha)/ Unit (No.)	Technology package for demonstration	Parameter (Data) in relation to technology demonstrated	Cost of Cultivation (Rs.)			No. of farmers / demonstration								
					Name of Inputs	Demo	Local	SC		ST		Other		Total		
								M	F	M	F	M	F	M	F	T
1	Wheat	4	Bio-Fortified Varieties	Yield	Seed	-	-	1	1	-	-	6	2	7	3	10

Extension and Training activities under FLD:

Activity	Title of Activity	No.	Clientele	Duration	Venue On/Off	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Training	Scientific cultivation of wheat	2	PF	2	ON/Off	5	10	-	-	5	10	10	20	30

(7). Crop/ Technology: Mango / Use Paclobutrazol for regular bearing
Thrust Area: Management of fruit orchard
Thematic Area: Plant Growth Regulator
Season: Kharif
Farming Situation: Irrigated

Sl. No.	Crop & variety / Enterprises	Proposed Area (ha)/ Unit (No.)	Technology package for demonstration	Parameter (Data) in relation to technology demonstrated	Cost of Cultivation (Rs.)			No. of farmers / demonstration								
					Name of Inputs	Demo	Local	SC		ST		Other		Total		
								M	F	M	F	M	F	M	F	T
1	Mango	1.0	Use Paclobutrazol for regular bearing	Fruit Yield	chemicals	-	-	1	-	-		4	0	5	0	5

Extension and Training activities under FLD:

Activity	Title of Activity	No.	Clientele	Duration	Venue On/Off	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Field Day	Performance of Paclobutrazol for regular bearing of mango	1	PF & EF	1	Off	15	5	-	-	25	5	40	10	50

(8). 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

Sl. No.	Crop & variety / Enterprises	Proposed Area (ha)/ Unit (No.)	Technology package for demonstration	Parameter (Data) in relation to technology demonstrated	Cost of Cultivation (Rs.)			No. of farmers / demonstration								
					Name of Inputs	Demo	Local	SC		ST		Other		Total		
								M	F	M	F	M	F	M	F	T
1	Maize	08	Emamectin benzoate 5SG, Thiomethoxame and Lamdacyhalothrin	Yield	Insecticide	-	-	4	-	-	-	12	4	16	4	20

Extension and Training activities under FLD:

Activity	Title of Activity	No.	Clientele	Duration	Venue On/Off	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Field Day and training	Performance of Insecticide for control of fall army worm	1	PF & EF	1	Off	15	5	-	-	25	5	40	10	50

(9). Crop/ Technology: Pineapple/ Post-emergence herbicide
Thrust Area: Management of pineapple based cropping system
Thematic Area: Weed management
Season: Kharif
Farming Situation: Irrigated

Sl. No.	Crop & variety / Enterprises	Proposed Area (ha)/ Unit (No.)	Technology package for demonstration	Parameter (Data) in relation to technology demonstrated	Cost of Cultivation (Rs.)			No. of farmers / demonstration								
					Name of Inputs	Demo	Local	SC		ST		Other		Total		
								M	F	M	F	M	F	M	F	T
1	Pineapple	4.0	Post-emergence herbicide	Yield	chemicals	-	-	2	-	2		4	2	8	2	10

Extension and Training activities under FLD:

Activity	Title of Activity	No.	Clientele	Duration	Venue On/Off	No. of Participants								
						SC		ST		Other		Total		
						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. No	Season	Crop	Variety	Technology	Area in ha.	No. of Demonstration
1.	Summer	Green gram	IPM – 205-7	Popularization of pulse crop in summer season	20	50
2.	Rabi	Oilseed	R-Suflam	Popularization of oilseed crop in rabi season	30	75

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

Sl. No	Season	Crop/ Animals	Variety/ Breed	Technology	Area in ha./no.	No. of Demonstration
1.	Summer	Green gram	IPM – 205-7	Popularization of pulse crop in summer season	8	20
2.		Turmeric	R-Sonia	Popularization of Turmeric variety in upland area	0.5	6
3.	Kharif	Paddy	Swarna Sub – 1	Flood tolerant variety	10	25
4.			Sabour Sampann	Flood and drought tolerant variety	12	30
5.			Farmer's Existing Variety	Nutrient management through LCC	100	250
6.	Rabi	Maize	P-3355	Raised Bed Maize	12	30
7.		Makhana	Sabour Makhana – 1	Makaha Production	8	8
8.	**Total**				**150.5**	**369**
9.	Others	Dairy Animal	Cow	Mineral Mixture	24 no.	12
10.		Fish	Indian Major Carp	Fish Feed	10 pond	10
Total					**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. No	Season	Name of Technology	Area (ha)	No. of demonstrations
1	Summer 2022	Line sowing of green gram	24	60
		Green manuring with sesbania	80	200
2	Kharif 2022	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
		INM/ green seeker based nutrient management in paddy	16	40
		Ginger-bitter gourd intercropping	6	15
		Community irrigation	8	20
3	Rabi 2022-23	Raised Bed Maize	220.8	1104
		Zero tillage wheat	4	10
		INM wheat	4	10
		Raised Bed mustard	10	25
		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 / Enterprise	Variety / Type	Period From Jan to December 2022	Area (ha.)	Details of Production				
				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.	Activities/ Sub-activities	No. of activities proposed	Total		
			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 2022-2023 (As on 01.04.2022)	Amount proposed to be invested during 2022-23	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, Kishanganj	0.50

18. ON FARM TRIAL

OFT-1

I.	**Season:**	Rabi
II.	**Title of the OFT**	**Performance evaluation of raised bed with paddy straw mulch in potato production.**
III.	**Thematic Area:**	Resource Conservation Technology
IV.	**Problem diagnosed**	Potato producers are facing increasing costs of cultivation, incidence of potato late blight, and a delay in sowing next crop.
V.	**Important Cause**	Low yield accompanied with high cultivation costs, incidence of late blight, and delay in growing the following crop in the field.
VI.	**Production system:**	Rice-Potato-Maize
VII.	**Micro farming system:**	Medium and up land situation
VIII.	**Technology for Testing:**	Raised bed with paddy straw mulch & Zero tillage with paddy straw mulch
IX.	**Existing Practice:**	Farmers practice Flat method or ridge method
X.	**Hypothesis:**	a. Low incidence of insect- pest (99 % reduction of damage by cut worm) and delayed late blight incident. b. Effective way of weed management (80-95 % reduction of weed incidence) c. Early harvesting to facilitate timely sowing of upcoming crops.
XI.	**Objective(s):**	Climate resilient technology based potato production
XII.	**Treatments**	a. *Farmer's Practice: Sowing of potato in plough field and earthing up.* b. TO_1 – Zero tillage with rice straw mulch (ZTRM) **a.** TO_2 – Raised bed with rice straw mulch (RBRM)
XIII.	**Critical Inputs:**	Tuber
XIV.	**Unit Size:**	1000 m^2
XV.	**No of Replications:**	08
XVI.	**Unit Cost:**	1250/-
XVII.	**Total Cost:**	10000/-
XVIII.	**Monitoring Indicator:**	**A. Technological observations:** • No of tuber/plants • Days of maturity • Average Yield (q/ha.) **B. Economics:** • Cost of cultivation (Rs/ha) • Net return (Rs/ha) • B:C ratio
XIX.	**Source of Technology (ICAR/AICRP/SAU/ Other, please specify):**	CIP, Shillong

OFT – 2

I.	**Season:**	Rabi
II.	**Title of the OFT**	**Performance assessment of pineapple variety *MD 2* in 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.	**Production system:**	Pineapple based farming
VII.	**Micro farming system:**	Up land situation
VIII.	**Technology for Testing:**	Performance of Variety *MD 2*
IX.	**Existing Practice:**	Local variety Kew & Queen
X.	**Hypothesis:**	a. Adoptability of new variety due to superior quality, yield, and shelf life of the product. b. Variety will boost the revenue of district.
XI.	**Objective(s):**	Introduction of new variety in kishnagnaj
XII.	**Treatments**	a. *Farmer's Practice: local variety* b. TO_1 – *Queen (Tissue culture or Suckers)* c. TO_2 – *MD2 (Tissue culture or Suckers)*
XIII.	**Critical Inputs:**	Suckers
XIV.	**Unit Size:**	1000 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 – 3

I.	**Season:**	Rabi – 2022
II.	**Title of the OFT**	**Assessment of different planting methods of rabi maize.**
III.	**Thematic Area:**	Farm Mechanization
IV.	**Problem diagnosed**	High cost of cultivation in dibbling of maize by Khurpi.
V.	**Important Cause**	Unavailability of full proof planting technology of maize.
VI.	**Production system:**	Paddy – Maize cropping system
VII.	**Micro farming system:**	Medium land
VIII.	**Technology for Testing:**	Planting methods of maize.
IX.	**Existing Practice:**	Conventional tillage flat dibbling by Khurpi.
X.	**Hypothesis:**	Planting with raised bed planter will reduce the cost of cultivation and drudgery to farm labour.
XI.	**Objective(s):**	i. To find out the best planting method of maize. ii. To relieve the labour engaged in planting from drudgery.
XII.	**Treatments**	a. Farmer's Practice: Conventional till flat planting manually by khurpi. b. TO_1: Raised bed planting with raised bed planter. c. TO_2: Zero till planting. d. TO_3: Conventional till flat planting with planter.
XIII.	**Critical Inputs:**	Seed, fuel for planting, herbicide.
XIV.	**Unit Size:**	1000 m^2
XV.	**No of Replications:**	08
XVI.	**Unit Cost:**	1250/-
XVII.	**Total Cost:**	10000/-
XVIII.	**Monitoring Indicator:**	**A. Technological observations:** • No. of plants/m^2 • Labour saving (man-days/ha) • No. of cobs • Water saving (%) • Yield **B. Economics:** • Cost of cultivation (Rs/ha) • Net return (Rs/ha) • B:C ratio
XIX.	**Source of Technology (ICAR/AICRP/SAU/ Other, please specify):**	DMR, ICAR, New Delhi

OFT – 4

i.	**Season:**	Rabi
ii.	**Title of the OFT**	**Evaluation of fungicide for management of potato black Scurf disease.**
iii.	**Thematic Area:**	Integrated Disease management
iv.	**Problem diagnosed**	Potato farmers face problems of black scurf disease infected tubers reducing the quality production to get good income.
v.	**Important Cause**	Potato black scurf disease affects the quality of produce.
vi.	**Production system:**	Rice-Potato-Maize cropping system
vii.	**Micro farming system:**	Medium – Up land
viii.	**Technology for Testing:**	1. Seed treatment with Mancozeb 75 wp @ 2g/l solution for 10 minutes. 2. Spray of Penflufen 240 FS (22.43%) @ 10 ml/l as seed treatment for 2 times at 6 hour interval.
ix.	**Existing Practice:**	No use of any fungicide for seed treatment by the farmers.
x.	**Hypothesis:**	Protection against Potato black scurf disease. Potato seed germinate and emerge from the soil quickly. Good crop establishment leading to better yield.
xi.	**Objective(s):**	To study about protection of Black scurf disease. Production of good quality potato to get more income to the farmer.
xii.	**Treatments**	Farmers practice- No use of any fungicide for seed treatment TO_1- Seed treatment with Mancozeb 75 wp @ 2g/l solution for 10 minutes. TO_2-Spray of Penflufen 240 FS (22.43%) @ 10 ml/l as seed treatment for 2 times at 6 hour interval..
xiii.	**Critical Inputs:**	Tubers/Fungicide/Others
xiv.	**Unit Size:**	1000 sqm
xv.	**No of Replications:**	10
xvi.	**Unit Cost:**	1000
xvii.	**Total Cost:**	10000
xviii.	**Monitoring Indicator:**	Technological observations: • No. of tubers • No. of infected tubers • Disease Incidence (%) • Yield (q/ha) Economics: ▪ Cost of cultivation(Rs. /ha) ▪ Net return (Rs./ha) ▪ B:C Ratio
xix.	**Source of Technology (ICAR/ AICRP/ SAU/ Other, please specify):**	**CPRI, Shimla**

OFT 5

I.	**Season:**	Summer
II.	**Title of the OFT**	**Efficacy of different combination of fungicide for controlling root and stem rot of cucurbits (Bottle gourd).**
III.	**Thematic Area:**	Integrated Disease management
IV.	**Problem diagnosed**	The farmer face 40 to 45 % yield losses and low profitability in Cucurbits cultivation due to root and stem rot.
V.	**Important Cause**	Infestation of disease
VI.	**Production system:**	Vegetable based farming system
VII.	**Micro farming system:**	Medium land
VIII.	**Technology for Testing:**	1. Copper oxy chloride @ 3 gm/L + Velidamycine @ 2ml/L with soil drenching 2. Kashugamycine @ 2 ml/ L +mixture of (mancozeb 63% +carbendazim 12%) @ 2 gm/L (Poison painting and spray also at 20 days interval)
IX.	**Existing Practice:**	Spray of Mancozeb (Indofil M45) @ 3 gm/L
X.	**Hypothesis:**	Use of suitable fungicide will increase profitability to farmers
XI.	**Objective(s):**	To identify the suitable management practice of root and stem rot
XII.	**Treatments**	**Farmer Practice (FP):**Spray of Mancozeb (Indofil M45) @ 3 gm/L **TO_1:** Copper oxy chloride @ 3 gm/L + Velidamycine @ 2ml/L with soil drenching **TO_2:** Kashgamycine @ 2 ml/ L + (mancozeb 63% +carbendazim 12%) @ 2 gm/L (Poison painting and spray also at 20 days interval
XIII.	**Critical Inputs:**	fungicides
XIV.	**Unit Size:**	1000 sqm
XV.	**No of Replications:**	10
XVI.	**Unit Cost:**	1000
XVII.	**Total Cost:**	10000
XVIII.	**Monitoring Indicator:**	**A. Technological observations:** • Disease appearance (days) • Infected leaf/plant • Per cent infestation • Yield (q/ha) **B. Economics:** • Cost of cultivation (Rs/ha) • Net return (Rs/ha) • B:C ratio
XIX.	**Source of Technology (ICAR/AICRP/SAU/ Other, please specify):**	IIVR, Varansi

OFT – 6 (ATMA)

I.	**Season:**	Summer – 2022
II.	**Title of the OFT**	**Inter cropping of Okra + Cowpea for high income per unit area.**
III.	**Thematic Area:**	Inter cropping.
IV.	**Problem diagnosed**	Farmer practice of sole cropping of okra.
V.	**Important Cause**	Farmers not aware about the intercropping of okra.
VI.	**Production system:**	Paddy based production system
VII.	**Micro farming system:**	Medium-Upland
VIII.	**Technology for Testing:**	Intercropping of okra
IX.	**Existing Practice:**	Farmers grow okra as sole crop.
X.	**Hypothesis:**	Intercropping of plants with different rooting patterns permits greater exploitation of a larger volume of soil and improves access to relatively immobile nutrients.
XI.	**Objective(s):**	i. To enhance the income of farmers. ii. To improve the soil fertility.
XII.	**Treatments**	a. **TO_1:** Farmer's practice (mono cropping as okra) b. **TO_2:** Okra + Cowpea (45 x 45) 1:1 c. **TO_3:** Okra + Cowpea (60 x 45) 1:2
XIII.	**Critical Inputs:**	Seeds
XIV.	**Unit Size:**	1000 m^2
XV.	**No of Replications:**	10
XVI.	**Unit Cost:**	910/-
XVII.	**Total Cost:**	**Rs. 9100/-**
XVIII.	**Monitoring Indicator:**	a. Technological observations: • Yield and yield attributing traits. b. Economics : • Cost of cultivation (Rs/ha) • Net return (Rs/ha) • BC Ratio
XIX.	**Source of Technology (ICAR/AICRP/SAU/ Other, please specify):**	IIVR, Varanasi

OFT – 7 (ATMA)

i.	**Season:**	Summer
ii.	**Title of the OFT**	**Management of Fruit borer of Okra.**
iii.	**Thematic Area:**	Integrated Pest management
iv.	**Problem diagnosed**	Loss of Okra production due to attack of fruit borer.
v.	**Important Cause**	Fruit borer cause damage of fruit, poor plant growth, heavy yield loss.
vi.	**Production system:**	Vegetable based farming system
vii.	**Micro farming system:**	Medium Land Situation
viii.	**Technology for Testing:**	TO_1- Emamectin Benzoate 5% SG @0.4gm/l, 4 spraying at 15 days interval TO_2- Indoxacarb14.5% SC@1ml/l, 4 spraying at 15 days interval
ix.	**Existing Practice:**	Spray of Cypermethrin 25% SC @ 2ml/l
x.	**Hypothesis:**	Use of suitable insecticide will increase profitability to farmers
xi.	**Objective(s):**	To identify the suitable management practice for fruit borer of Okra
xii.	**Treatments**	**Farmer Practice (FP):** Spray of Cypermethrin 25% SC @ 2ml/l **TO_1:** Emamectin Benzoate 5% SG @0.4gm/l, **TO_2:** Indoxacarb14.5% SC@1ml/l, 4 spraying at 15 days interval
xiii.	**Critical Inputs:**	Insecticides, Soil test
xiv.	**Unit Size:**	1000 sqm
xv.	**No of Replications:**	10
xvi.	**Unit Cost:**	1000
xvii.	**Total Cost:**	10000
xviii.	**Monitoring Indicator:**	**A. Technological observations:** • Infestation % • Yield (q/ha) **B. Economics:** • Cost of cultivation(Rs/ha) • Net return (Rs/ha) • B:C ratio
xix.	**Source of Technology (ICAR/AICRP/SAU/ Other, please specify):**	TNAU, Coimbatore

OFT – 8 (ATMA)

I.	**Season:**	Summer – 2022
II.	**Title of the OFT**	**Yield Maximization in ginger through management of Ginger Rhizome Rot.**
III.	**Thematic Area:**	IDM
IV.	**Problem diagnosed**	Cultivation of ginger involves high risk mainly due to high incidence of rhizome rot causing losses up to 80 percent. The technologies available to manage the rhizome rot were not up to the expectations.
V.	**Important Cause**	High rainfall causes rhizome rot of ginger.
VI.	**Production system:**	Rice-Wheat-Ginger production system.
VII.	**Micro farming system:**	Upland
VIII.	**Technology for Testing:**	Integrated Disease Management of ginger rhizome rot.
IX.	**Existing Practice:**	No use of fungicides.
X.	**Hypothesis:**	Use of fungicides will control the rhizome rot of ginger.
XI.	**Objective(s):**	✓ To reduce the loss to farmers. ✓ To study about protection of Rhizome rot of ginger. ✓ To study about production and profitability of farmer.
XII.	**Treatments**	a. **TO_1: Farmers practice:** (No use of fungicides) b. **TO_2:** Seed Treatment + Soil drenching with Metalaxil MZ 1gm/L. c. **TO_2:** Application of *Trichoderma harzianum* (2.5 kg mixed with 50 kg FYM) + Metalaxil MZ 1gm/L of water in 3 drenching at 20 days
XIII.	**Critical Inputs:**	Rhizome Seed, fungicides & biological agent.
XIV.	**Unit Size:**	1000 m^2
XV.	**No of Replications:**	10
XVI.	**Unit Cost:**	4880/-
XVII.	**Total Cost:**	**Rs. 48800/-**
XVIII.	**Monitoring Indicator:**	a. Technological observations: • Rhizome germination % • Infected plant % at DAP (@ 40, 60 & 80 • Rhizome damage % • Disease severity % • Rhizome yield/plant • Rhizome Yield (q/ha.) b. Economics: • Cost of cultivation (Rs/ha.) • Net return (Rs/ha.) • BC Ratio
XIX.	**Source of Technology (ICAR/AICRP/SAU/ Other, please specify):**	UAS Dharwad

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 - 05

21. No. of Scientific Advisory Committee Meeting – 01

22. Soil and water testing

Details	No. of Samples	No. of Farmers									No. of Villages	No. of SHC distributed
		SC		ST		Other		Total				
		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 2022-23 (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 farmers are getting a net income of rupees around one lakh fifty thousand per acre per annum.