



KRISHI VIGYAN KENDRA, BANKA



BIHAR AGRICULTURAL UNIVERSITY, SABOUR BHAGALPUR

ACTION PLAN

2025

**ICAR-Agricultural Technology Application Research
Institute Patna (Zone- IV)**

KRISHI VIGYAN KENDRA, BANKA

Year of establishment of KVK: 1983

Name of host organization: Bihar Agricultural University Sabour, Bhagalpur

Brief information about the district

Name of Agro Climatic Zone	III B-South Bihar Alluvial Plan
Longitude	86°30'00" to 87°12'00'
Latitude	24°30'00" to 25° 07'00"
Temperature Maximum	9° C
Temperature Minimum	45° C
Geographical (ha)	305621
Total cultivable area (ha)	152371.91
Total Net sown area (ha)	146628
Area sown more than once (ha)	64413
Kharif sown area (ha)	113816
Rabi sown area (ha)	34307
Summer sown area (ha)	2918
Gross cropped area (ha)	211041
Cropping intensity (%)	144
Annual Rainfall (mm)	664.50
Rainy days	39.27
Total irrigated area (ha)	115698
Total rainfed area (ha)	126534
Irrigation per cent	37.81
Soil type	Sandy Clay loam
Upland (ha) & % of total cultivable area	47
Midland (ha) & % of total cultivable area	28
Lowland (ha) & % of total cultivable area	25

Soil organic carbon status of the district	Low (0.35-0.41%)
Nutrient status of soil of the district	N (Low)
	P (Low)
	K (Medium)
Micronutrient status of soil of the district	(Low)
Fertilizer consumption (Kg/ha)	133.8
Total Population	2034763
Total SC population & (%) of total population	12.18
Total ST population & (%) of total population	4.40
Male population	1067019
Female population	967744
Literacy (%)	58.17
No of Tehasil	1
No of blocks	11
No of Panchayat	199
No of villages	2131

Staff position

S. No.	Name of staff	Designation and discipline	Date of joining in present KVK
1.	Dr. Brajendu Kumar	Senior Scientist & Head, Fisheries Science	15.05.2023
2.	Er. Ravi Ranjan Kumar	Subject Matter Specialist, Agril. Engg.	20.06.2023
3.	Sri Sanjay Mandal	Subject Matter Specialist, Soil Science	03.05.2013
4.	Dr. Neha Singh	Subject Matter Specialist, Agril. Extension	22.01.2024
5.	Smt. Anamika Kumari	Subject Matter Specialist, Entomology	19.02.2024
6.	Dr. Sanjit Kumar	Subject Matter Specialist, Vet. Science	21.02.2024
7.	Sri Rajiv Ranjan	Programme Assistant (Computer)	15.05.2013
8..	Sri Pawan Kumar	Farm manager, Agriculture	02.05.2023
9.	Sri Sajjan Kumar Jha	Assistant, Account	30.08.2019
10.	Sri Devendra Kumar Singh	Stenographer	22.06.2013
11.	Sri Kishori Mandal	Driver	11.05.2015
12.	Sri Shekhar Pathak	Driver	18.05.2015
13.	Sri Kedar Prasad Yadav	Supporting staff	20.08.1987
14.	Sri Lal Mohan Yadav	Supporting staff	28.08.1989

Farmers category of the district

Name of Block	Geographical Area (ha)	Marginal Farmer (Nos.) Up to 1.0 ha	Small Farmers (Nos.) 1.0 – 2.0 ha	Semi-medium Farmers (Nos.) 2.0 – 4.0 ha	Medium Farmers (Nos.) 4.0 – 10.0 ha	Large Farmers (Nos.) 10.0 ha & Above	Total Farmers (Nos.)
Amarpur	19789						
Banka	28079						
Barahat	14724						
Belhar	24089						
Bausi	31527						
Chandan	45747						
Dhuraiya	23410						
Phulidumar	20850						
Katoria	56061						
Rajaun	19754						
Shambhuganj	17970						
Total no of farmers		300170	16831	9514	1409	46	327970
% of Land holding		91.52	5.13	2.9	0.42	0.1	

Average land holding of the district (ha): 0.464

Source of information: Agriculture Census Online Portal Database

Source of year: 2015-16

Status of major field crops of the district

Season: Kharif			
Name of crop	Area (ha)	Production (MT)	Productivity (Q/ha)
Paddy	99803	357793.75	35.85
Maize	8387	31031.9	37.00
Pigeon pea	1370	822	6.00
Horse Gram	413.7	206.85	5.00
Season: Rabi			
Wheat	37697	94242.5	25.00
Chick Pea	11029	18749.3	17.00
Lentil	7644.70	9938.11	13.00
mustard	5098	6117.6	12.00
Maize	4482	31374	70.00
Season: Summer			
Maize	1254	6178.45	49.27
Green Gram	310	263.5	8.50

Source of information: District Agriculture Office, Banka

Source of Year: 2023

Status of major horticulture crops of the district

Season: Kharif			
Name of crop	Area (ha)	Production (MT)	Productivity (Q/ha)
Bottle gourd	28	980	350
Sponge gourd	27	378	140
Ladys finger	8.75	56.87	65
Season: Rabi			
Brinjal	137.17	2606.23	190
onion	77.54	2326.2	300
Tomato	50.81	406.48	80
Season: Summer			
Bottle gourd	28	980	350
Sponge gourd	27	324	120
Cucumber	21.33	127.98	60
Ladys finger	12.96	90.72	70

Source of information: District Agriculture Office, Banka

Source of Year: 2023

Live stock status of the district

Name of livestock	Number
Total no. of Indigenous cattle	726669
Total no. of cross breed	
Total no. of Buffalo	109430
Total no. of Goat	438999
Total no. of Sheep	8891
Total no. of poultry	198551
Total no. of commercial dairy unit	203
Total no. of commercial goatry unit	55
Total no. of commercial poultry unit	51

Source of information: 20th Livestock Census, Ministry of Fisheries, Animal Husbandry & Dairying
Source of Year: 2019

Details of Agro-Ecological situation

S. No	Name of Agro-Climatic Zone	Name of Agro-Ecological Situation	Agro-Ecological Situation features	Blocks covered
	III A- South Bihar Alluvial Plan	Plain	Soil Type- Clay loam soil, geographical area- 95644 ha, Net sown area- 16454 ha, Irrigated area- 30.8%	Dhouriya, Rajoun, Amarpur, Barahat, Sambhuganj,
		Plain and hilly	Soil Type- sandy clay loam, geographical area- 206356 ha, Net sown area- 17853, Irrigated area- 19.5%	Chandan, Katoriya, Belhar, Bounsi, Banka, fullidumar

Sl. No.	MAJOR PROBLEMS IDENTIFIED
1.	Weed infestation in paddy
2.	Sowing of late duration variety of paddy
3.	60 percent area is undulated
4.	Wilt problem in vegetables and pulses crop
5.	Post harvest management problem
6.	No use of bio fertilizer
7.	Inadequate nutrition in animals
8.	Poor management practices of animals
9.	Disease outbreak
10.	Infertility and repeat breeding in cattle

Sl. No.	Major Thrust area
1.	Weed Management
2.	Production and Management technology
3.	Crop Diversification
4.	Integrated Pest management
5.	Post harvest management
6.	Soil fertility management
7.	Feed Management
8.	Dairy Management
9.	Disease Management

Summary of the activities to be conducted during 2025

Activity	Target	
	Number of activity	No. of farmers to be covered
OFTs	9	156
FLDs – Oilseeds (activity in ha)	2	600
FLDs – Pulses (activity in ha)	3	45
FLDs – Other than Oilseed and Pulses crops (activity in ha)	4	155
FLDs – Other than Crops (activity in no. of unit/Enterprises)	1	30
Training – Farmers and farm women	60	1500
Training – Rural Youths	19	570
Training – Extension Functionaries	8	240
Extension activities	79	3145
Seed Production (Quintal)	-	340
No. of seedling/sampling Production		100000
Other Bio- products – Vermicompost (q)		30
Live stock products (Poultry chicks – nos.)		700
(Fingerlings – nos.)		

Activity	Target	
	Number of activity	No. of farmers to be covered
No of Soil and Water Testing in Laboratory	5	1360
No of advisory through Kishan Sarathi portal	100	200000
SAC Meeting (Date & no. of core/ official members)	24.05.2025	
Literature to be developed/ Published	5	25000
Convergence Programme / Sponsored Programme	5	250
KVK Progressive Farmers interaction	2	50
Outreach of KVK in the District (No. of blocks, no. of villages)		11 block, 100 village

Proposed OFT

OFT-01 **Crop area 37697ha, District yield (25Q/ha) State yield (27.8Q/ha)**

Crop	Wheat
Season	Rabi
Problem	Low yield of Wheat
Main cause	Low yield due to loss of Nutrient through fixation.
Title of OFT	Assessment of Fertilizers and Foliar application of Nutrient on wheat yield.
Farming situation	Soil type-Sandy clay loam, land type-Medium, irrigation type - Canal, season- Rabi, previous crop-Paddy
Thematic area	Nutrient Management
Farmer practice	Farmer practice only Urea and DAP used for wheat crop, about 100kg N,40kg P ₂ O ₅ ha ⁻¹ only (184 kg urea and 87 kg DAP used to Wheat crop.)
Technology option selected for assessment	TI - 100 kg N + 40 Kg P ₂ O ₅ ha ⁻¹ . TII - 120 kgN+60 Kg P ₂ O ₅ +40 kg K ₂ O ha ⁻¹ TIII-120 kgN+60 Kg P ₂ O ₅ +40 kg K ₂ O ha ⁻¹ + 18:18:18 NPK 1% Spray at flowering stage.
Source of technology	MPUAT, Udaipur, Rajsthan. (2013-14)
No of trial	10
Detail of critical input	18:18:18 NPK.
Cost of individual critical input	Rs.200/-
Total cost of critical input	Rs.2000 /ha

Performance indicator to be recorded	(i) Technical indicator (Plant height(cm),No of tiller, Effective tiller, grain per panicle, Yield (Q/ha) (ii) Economic indicator (Cost of cultivation, Gross return, Net return, B:C ratio) (iii) Farmer perception
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OFT-02

Crop area 5098 7ha, District yield (12 Q/ha) State yield (16.8 Q/ha)

Crop	Mustard
Season	Rabi
Problem	Low yield of Mustard
Main cause	Low yield due to deficient in major nutrient and imbalanced nutrient management.
Title of OFT	Assessment of Sulphur levels on mustard yield in Banka district.
Farming situation	Soil type-Sandy clay loam, land type-Medium, irrigation type -Canal, season- Rabi, previous crop-Paddy
Thematic area	Nutrient Management
Farmer practice	Well define farmer practice No application of Sulphur and 60 kg N and 20 Kg/ha P_2O_5 ha ⁻¹ (only 113 kg urea and 45 kg DAP ha ⁻¹)
Technology option selected for assessment	TI – 60 kg N +20 kg P_2O_5 ha⁻¹. TII - 80 kg N + 40 Kg P_2O_5+40Kg K_2O + 20 kg Bentonite Sulphur ha⁻¹. TII- 80 kg N + 40 Kg P_2O_5+40Kg K_2O + 30 kg Bentonite Sulphur ha⁻¹.
Source of technology	DRPCA, Pusa, Samastipur. (2011-12)
No of trial	10
Detail of critical input	Seed and Bentonite Sulphur.

Cost of individual critical input	Rs.300/-
Total cost of critical input	Rs.3000 /ha
Performance indicator to be recorded	(i) Technical indicator (Plant height(cm),No of Branches Plant⁻¹,No of siliqua Plant⁻¹,Test Weight (g),Seed yield (kg/ha), Stover yield (Kg/ha).) (ii) Economic indicator (Cost of cultivation, Gross return, Net return, B:C ratio) (iii) Farmer perception

OFT- 03

Crop area 99803 ha, District yield (35.85 Q/ha) State yield (24 Q/ha)

1.	Crop	Paddy
2.	season	Kharif
3.	Problem	Highly weed infestation in paddy
4.	Main cause	Farmers generally use cone nozzle for spraying weedicide which is not efficient in eradication of weeds as proper amount of weedicide does not reach the target site due to low water discharge efficiency per unit time.
5.	Title of OFT	Influence of nozzle type and spray volume on herbicide efficacy in paddy cultivation
6.	Farming Situation	Sandy clay loam, flood irrigation, Rice-Wheat
7.	Thematic Area	Weed management
8.	Farmer practice	Spray of weedicide using cone type nozzle with spray volume 500 l/ha
9.	Technology option selected for assessment	TI – Spray of weedicide using flat fan nozzle with spray volume 500 l/ha

		TII – Spray of weedicide using flood jet nozzle with spray volume 500 l/ha
10	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	TNAU, Coimbatore, 2023
11.	No of trial	10
12.	Detail of critical input	Bispyribac sodium, Pyrazosulfuron, Spray Nozzle
13.	Cost of individual critical input	Rs. 530.00
14	Total cost of critical input	Rs. /ha 1325.00
15.	Performance of the Technology with performance indicators	Weed/sq.m, Yield attributes, Yield, Economics

OFT- 04

Crop area 7644 ha, District Yield (10.5 q/ha) State yield (11.5 q/ha)

Crop	Lentil
Season	Rabi
Problem	Post Harvest losses in storage
Main cause	Grain pest after some time of Storage
Title of OFT	Assessment of different bag storage method to minimize losses in storage
Farming situation	High moisture during rainy season
Thematic area	Post Harvest Management
Farmer practice	Storage in plastic bag
Technology option selected for assessment	TI – Storage in thin PVC bag and putting in plastic bag

	TII - Storage in Hermetic bag and putting in plastic bag
Source of technology	CCS Haryana Agricultural University, 2016
No of trial	10
Detail of critical input	PVC & Hermetic bag
Cost of individual critical input	Rs. 600.00
Total cost of critical input	Rs. 6000.00
Performance indicator to be recorded	Moisture content %, Germination Rate %, Storage loss %, BC ratio

OFT- 05

Problem	Mastitis is the major problem in milch animal. Its treatment is costly and loss the milk production.
Major Causes	Bacterial infection
Title of OFT	Assessment of feeding and local application of herbal medicine on subclinical mastitis.
Production system and thematic area	Semi- intensive Disease management
Details of technologies selected for assessment	Selected animals will be divided into three groups and each groups contain 6 animals. All animals were dewormed before starting trial.
Farmers practices	Hot fomentation + Aconite 30 @10 pills at 30 minutes interval 4 times
Treatment Options	T1: Eucalyptus leaves+ Curcuma longa+ Aloe vera paste (1:1:1) TII: Green coriander leaves 250gm orally for 5 days

Source of Technology (ICAR/ AICRP/SAU/other, please specify	NDDB
Total cost of OFT	Rs. 12000/-
No of trial	3*6 =18
Detail of critical input & Cost of individual critical input	Dewormer, Herbal pest Rs. 1000/-
Performance indicator to be recorded	Udder Condition, Milk Color, Milk Consistency Total Milk Yield and Fat% (From unaffected quarter) : Milk pH, CMT Test , No. of Days required for recovery

OFT- 06

Problem	Low milk production
Major Causes	Paddy straw is main roughage of dairy animals. Paddy straw having Oxalate which chelate Calcium and increase the requirement of Calcium and in absence of calcium it also inhibit carbohydrate metabolism
Title of OFT	Assessment of supplementation of Lime stone powder and Di Calcium Phosphate on milk production of Straw based fed dairy animal.
Production system and thematic area	Semi-intensive, Feed management
Details of technologies selected for assessment	Selected animals will be divided into three groups and each groups contain 6 animals. All animals were dewormed before starting trial.
Farmer practice	Grains+ Straw
Treatment Options	T I : Farmers practice + 30 g Lime stone powder/day for 3 month T II : Farmers practice + 30 g DCP/day for 3 month

Source of Technology (ICAR/ AICRP/SAU/ other, please specify)	NDRI, Karnal
No of trial	3*6 =18
Detail of critical input & Cost of individual critical input	Dewormer, Lime stone powder, DiCalcium Phosphate Rs. 500/-
Total cost of OFT	Rs. 6000/-
Performance indicator to be recorded	Milk Yield & Fat%, SNF, Days of Postpartum heat , Cost of milk production, Net return (Rs/kg milk production), BC Ratio, Farmers Reaction

OFT- 07

Crop area 137.17 ha, District Yield (190 q/ha) State yield (220 q/ha)

Crop	Brinjal
Season	kharif
Main problem	Low yield
Main cause	Qualitative and quantitative losses in brinjal due to fruit and shoot borer
Title of OFT	Assessment of different techniques for management of fruit and shoot borer in brinjal crop
Farming situation	Soil type-Sandy clay loam, land type-Medium, irrigation type - Tubwell
Thematic area	Integrated pest management
Farmer practice	Pesticides available in local market
Technology option selected for assessment	TI: pheromone trap@1 for 400sq.m TII: two sprays of BT formulations @ 1ml/lt@50% flowering

Source of technology	IIVR, Varanasi
No of trial	10
Detail of critical input	pheromone trap, BT formulations
Cost of individual critical input	800
Total cost of critical input	8000
Performance indicator to be recorded	Fruit damage%, Plant damage, No. of adult trapped, No. of larva per plant and fruit, Yield (q/ha)

OFT- 08

Crop area 7644 ha, District Yield (10.5 q/ha) State yield (11.5 q/ha)

Crop	lentil
Season	Rabi
Main problem	Low yield
Main cause	Loss in lentil production due to heavy wilt
Title of OFT	Assessment of various fungicides for seed treatment in the management of wilt of lentil
Farming situation	Soil type-Sandy clay loam, land type-Medium, irrigation type - Tubwell
Thematic area	Rice-Lentil and Integrated Pest management
Farmer practice	Showing of seed without seed treatment
Technology option selected for assessment	TI: Seed treatment of Azoxystrobin 23%@1ml/kg TII: Seed treatment with Carbendazim@2.0gm/kg TIII: Seed treatment with Captan@2.5gm/kg

Source of technology	BAU, Sabour
No of trial	10
Detail of critical input	fungicide
Cost of individual critical input	750
Total cost of critical input	7500
Performance indicator to be recorded	Fungicide, Yield, B:C ratio, Net return

OFT- 09

Main problem	Poor documentation of impact of technological interventions by KVK
Main cause	Lack of knowledge regarding modern technology
Title of OFT	Impact study of KVK intervention in Adopted village
Farming situation	
Thematic area	Capacity Building & Group Dynamics
Farmer practice	-
Technology option selected for assessment	TI: Control village with participatory farmers and no. of interventions TII: Experimenting farmers having direct collaboration with KVK interventions (OFT, FLD, Trainings)
Source of technology	BAU, Sabour
No of trial	50

Detail of critical input	-
Cost of individual critical input	-
Total cost of critical input	-
Performance indicator to be recorded	Knowledge gain, Adoption %, Income (Rs.), Yield Increase, Area expansion in respect to technology

OFT- 10

Impact of technological interventions for pulse & Oilseed crops under CFLD programme

Concepts-

Throughout the years, the Krishi Vigyan Kendra (KVK) system has expanded the range of its operations in the agricultural and related sectors by executing multiple activities like capacity building programs and cluster frontline demonstrations, technology assessment and refinement to bring new concepts of entrepreneurship opportunities, convergence of extension activities, value addition, biodiversity conservation, organic farming etc. The KVK System has a good effect on the rural agricultural community in terms of income, production, productivity, sale price, and most importantly, the ability to use resources as efficiently as possible. Accordingly, an evaluation of the effects of KVK's technology interventions will be conducted in KVK Banka under CFLD programme in oilseeds & pulses among operational villages between 2020 and 2025.

The present study will be conducted with the following objectives:-

1. To examine the socio-economic profile of KVK beneficiaries
2. To explore the Economic impact of KVK interventions
3. To analyze the Horizontal spread of varieties/technologies in the district

Performance indicator

Knowledge gain, Adoption %, yield increase in percentage, Income (Rs.) in rupees, socio-economic change, assessment of various information sources, Area expansion with respect to technology, Horizontal spread of technology in nearby villages

Methodology

Research Design- An ex-post facto research design will be used to accomplish the objectives of the study

- ☐ Locale of study -The present investigation will be undertaken in operational villages of the Banka district of Bihar state.
- ☐ The district consists of 11 blocks, out of which Banka, Barahat, and Rajoun will be selected based on different extension activities carried out by Krishi Vigyan Kendra, Banka. Villages will be selected purposively from each selected block.
- ☐ Thus, for a selection of respondents, 10 respondents will be selected randomly from each adopted village (5% of the universe population).
- ☐ For the collection of data, a structured interview schedule will be developed, and data will be collected by personal interview.
- ☐ A well-structured schedule will be used for data collection
- ☐ Appropriate statistical tools will be used for the analysis of data.

Proposed FLD

FLD- 01

Crop area 99803 ha, District yield (35.85 Q/ha) State yield (24 Q/ha)

Title of FLD	Demonstration of short duration of Bio-fortified paddy (DRR Dhan-67)		
Season & Year	Kharif, 2025		
Main Problem	Malnutrition is a main problem in children		
Main cause of problem	Farmers are not using Bio-fortified crop variety		
Full detail of farmer's Practice	Farmers are growing local and long duration varieties of paddy		
Full detail of technology to be demonstrated	Bio-fortified (DRR Dhan-67)Seed, seed treatment, weedicide.		
Source of Technology with year	CAR-Indian Institute of Rice Research (IIRR). 2016		
Name of the Technology	Cultivation of Bio-fortified paddy (DRR Dhan-67)		
Thematic area	Crop production		
Name of villages	Chutiya, jhirba, ambedkarnagar		
Farming situation	Soil type-Sandy clay loam, land type-Medium, irrigation type - rainfed, season- kharif, previous crop-wheat		
Area (ha)/Unit (No.)	10 ha	No of farmers	30

Performance indicator	(I) Technical indicator- 1000 grain weight, yield (q/ha), (II) Economic indicator – cost of cultivation, gross return, net return, B:C ratio (III) Farmer Feedback-
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FLD- 02

Crop area 37697ha, District yield (25Q/ha) State yield (27.8Q/ha)

Title of FLD	Demonstration of of Bio-fortified wheat (BHU-31)
Season & Year	Rabi , 2025
Main Problem	Malnutrition is a main problem in children
Main cause of problem	Farmers are not using Bio-fortified crop variety
Full detail of farmer's Practice	Farmers are growing local and long duration varieties of wheat
Full detail of technology to be demonstrated	Bio-fortified (BHU-31)Seed, seed treatment, weedicide.
Source of Technology with year	BHU, 2021
Name of the Technology	Cultivation of Bio-fortified wheat (BHU-31)
Thematic area	Crop production
Name of villages	Aikakura, lalpur,sato
Farming situation	Soil type-Sandy clay loam, land type-Medium, irrigation type - tubwell, season- rabi, previous crop-paddy

Area (ha)/Unit (No.)	10 ha	No of farmers	30
Performance indicator	(I) Technical indicator- 1000 grain weight, yield (q/ha), (II) Economic indicator – cost of cultivation, gross return, net return, B:C ratio (III) Farmer Feedback-		

FLD 03

Crop area 99803 ha, District yield (35.85 Q/ha) State yield (24 Q/ha)

Title of FLD	Demonstration of Azolla in paddy crop
Season & Year	kharif , 2025
Main Problem	More cost of cultivation due to chemical fertilizer
Main cause of problem	Deficiency of major nutrients in soil as well as more weed
Full detail of farmer's Practice	Use of urea
Full detail of technology to be demonstrated	Azolla @15kg/ha
Source of Technology with year	BAU, Sabour
Name of the Technology	Use of Azolla in paddy crop
Thematic area	Nutrient Management
Name of villages	Sato, kairadih, bhindi
Farming situation	Soil type-Sandy clay loam, land type-Medium, irrigation type - irrigated, season- kharif , previous crop-wheat

Area (ha)/Unit (No.)	5 ha	No of farmers	15
Performance indicator	(I) Technical indicator- Saving of nitrogen (kg) 1000 grain weight, yield (q/ha), (II) Economic indicator – cost of cultivation, gross return, net return, B:C ratio (III) Farmer Feedback-		

FLD- 04

Title of FLD	Demonstration of rhizobium and PSB
Season & Year	Rabi , 2025
Main Problem	Degradation of soil health
Main cause of problem	More use of synthetic fertilizer
Full detail of farmer's Practice	No use of biofertilizer
Full detail of technology to be demonstrated	Rhizobium@ 1L / ha and PSB @ 1 L / ha
Source of Technology with year	BAU, Sabour
Name of the Technology	Use of rhizobium and PSB in chick pea crop
Thematic area	Nutrient Management
Name of villages	Bhanubasar, Gauripur, naraindih
Farming situation	Soil type-Sandy clay loam, land type-Medium, irrigation type - rainfed season- rabi , previous crop-paddy

Area (ha)/Unit (No.)	5 ha	No of farmers	15
Performance indicator	(I) Technical indicator- Saving of fertilizer (kg) 100 grain weight, yield (q/ha), (II) Economic indicator – cost of cultivation, gross return, net return, B:C ratio (III) Farmer Feedback-		

FLD- 05

Crop area 7644 ha, District Yield (10.5 q/ha) State yield (11.5 q/ha)

Title of FLD	Demonstration of rhizobium and PSB
Season & Year	Rabi , 2025
Main Problem	Degradation of soil health
Main cause of problem	More use of synthetic fertilizer
Full detail of farmer's Practice	No use of biofertilizer
Full detail of technology to be demonstrated	Rhizobium@ 1L / ha and PSB @ 1 L / ha
Source of Technology with year	BAU, Sabour
Name of the Technology	Use of rhizobium and PSB in lentil crop
Thematic area	Nutrient Management
Name of villages	Aikakura, lalpur,sato
Farming situation	Soil type-Sandy clay loam, land type-Medium, irrigation type - rainfed season- rabi , previous crop-paddy

Area (ha)/Unit (No.)	5 ha	No of farmers	15
Performance indicator	(I) Technical indicator- Saving of fertilizer (kg) 1000 grain weight, yield (q/ha), (II) Economic indicator – cost of cultivation, gross return, net return, B:C ratio (III) Farmer Feedback-		

FLD- 06

Crop area 37697ha, District yield (25Q/ha) State yield (27.8Q/ha)

Title of FLD	Demonstration of zero tillage machine in wheat crop
Season & Year	Rabi , 2025
Main Problem	High cost of cultivation
Main cause of problem	More ploughing
Full detail of farmer's Practice	Broadcasting sowing of wheat
Full detail of technology to be demonstrated	Sowing of wheat through zero tillage machine
Source of Technology with year	DRPCAUI, Pusa
Name of the Technology	Sowing of wheat by zero tillage machine
Thematic area	RCT
Name of villages	Chutiya, naraindih, lalpur

Farming situation	Soil type-Sandy clay loam, land type-Medium, irrigation type - rainfed season- rabi , previous crop-paddy		
Area (ha)/Unit (No.)	5 ha	No of farmers	15
Performance indicator	(I) Technical indicator- no. of labour saving, saving of cost (Rs./ha), yield (q/ha) (II) Economic indicator – cost of cultivation, gross return, net return, B:C ratio (III) Farmer Feedback-		

FLD- 07

Crop area 7644 ha, District Yield (10.5 q/ha) State yield (11.5 q/ha)

Title of FLD	Demonstration of multi crop planter in lentil
Season & Year	Rabi , 2025
Main Problem	High cost of cultivation
Main cause of problem	More ploughing
Full detail of farmer's Practice	Broadcasting sowing of lentil
Full detail of technology to be demonstrated	Sowing of lentil through multi crop planter
Source of Technology with year	DRPCAUI, Pusa
Name of the Technology	Sowing of lentil through multi crop planter
Thematic area	RCT

Name of villages	Karchater, chandipeera, belatkar		
Farming situation	Soil type-Sandy clay loam, land type-Medium, irrigation type - rainfed season- rabi , previous crop-paddy		
Area (ha)/Unit (No.)	5 ha	No of farmers	15
Performance indicator	(I) Technical indicator- no. of labour saving, saving of cost (Rs./ha), yield (q/ha) (II) Economic indicator – cost of cultivation, gross return, net return, B:C ratio (III) Farmer Feedback-		

FLD- 08

Crop area 137.17 ha, District Yield (190 q/ha) State yield (220 q/ha)

Title of FLD	Demonstration of Pheromone trap in brinjal
Season & Year	kharif , 2025
Main Problem	Low yield
Main cause of problem	Qualitative and quantitative losses in brinjal due to fruit and shoot borer
Full detail of farmer's Practice	Pesticides available in local market
Full detail of technology to be demonstrated	pheromone trap@1 for 400sq.m
Source of Technology with year	IIVR, Varanasi
Name of the Technology	management of fruit and shoot borer in brinjal crop by Pheromone trap

Thematic area	Integrated pest management		
Name of villages	Bangalgarh, lakrikola,		
Farming situation	Soil type-Sandy clay loam, land type-Medium, irrigation type - rainfed season- rabi , previous crop-paddy		
Area (ha)/Unit (No.)	1ha	No of farmers	40
Performance indicator	(I) Technical indicator- yield (q/ha), (II) Economic indicator – cost of cultivation, gross return, net return, B:C ratio (III) Farmer Feedback-		

FLD- 09

Title of FLD	Demonstration of improve variety of backyard poultry
Season & Year	2025
Main Problem	Low yield of egg productions
Main cause of problem	Rearing of desi variety of poultry
Full detail of farmer's Practice	Use of local variety of chicks
Full detail of technology to be demonstrated	Vaccinated One week old Sonali chicks
Source of Technology with year	ICAR, Hyderabad
Name of the Technology	Scientific rearing of improve variety of chicks
Thematic area	Poultry Production

Name of villages	Sato, Bangalgarh, Burbabathan		
Farming situation	Rearing of poultry without vaccination and balance feeding		
Area (ha)/Unit (No.)	750 chicks	No of farmers	30
Performance indicator	(I) Technical indicator- egg production/year (II) Economic indicator – cost of cultivation, gross return, net return, B:C ratio (III) Farmer Feedback-		

FLD- 10

Title of FLD	Demonstration of improve variety of fodder
Season & Year	Kharif, 2025
Main Problem	Low fodder production
Main cause of problem	Unawareness of improve variety fodder
Full detail of farmer's Practice	Use available grass in fallow land
Full detail of technology to be demonstrated	Fodder seed (shorgum, anant variety)
Source of Technology with year	RFS, Kalyani
Name of the Technology	Scientific cultivation of Shorgum fodder
Thematic area	Fodder Production
Name of villages	Bhanubasar, Gauripur, damodra

Farming situation	Soil type-Sandy clay loam, land type-Medium, irrigation type - rainfed, season- kharif		
Area (ha)/Unit (No.)	2.5 ha	No of farmers	40
Performance indicator	(I) Technical indicator- fodder yeild (q/ha) (II) Economic indicator – cost of cultivation, gross return, net return, B:C ratio (III) Farmer Feedback-		

Proposed trainings

Detail of training programme

Title of training programme	Venue	Thematic Area	Duration (Days)	Participant (No.)	Month
Farmers and Farm Women training					
Care and management of new born calf	On	Dairy Management	1	25	January
Formation and Management of SHGs/JIGS	Off	Group Dynamics	1	25	
Sowing of wheat through Zero tillage machine	Off	RCT	1	25	
Major pest and disease management in cucurbitaceous vegetables	Off	Integrated Pest Management	1	25	
Vermicompost Production Techniques	On	Vermicompost	1	25	
Important viral diseases of poultry and its prevention	On	Disease Management	1	25	February
Developing leadership skill in innovative farmers	Off	Leadership development	1	25	
Care and maintenance of multi crop thresher	Off	Repair and maintenance of farm machinery	1	25	

Scientific and safe storage of cereals and pulses	Off	Integrated Pest Management	1	25	
Integrated nutrient management in vegetables crops	Off	Integrated Crop Management	1	25	
Urea treatment of straw for better feed management	On	Feed management	1	25	March
Operation and maintenance of 5 Hp diesel pump set	Off	Repair and maintenance of farm machinery	1	25	
Pest and disease management in mango orchard	Off	Integrated Pest Management	1	25	
Production technique of Azolla and blue green Algae in paddy crop and their benefit	On	Production and use of organic inputs	1	25	
Integrated farming system for farmers development	on	Production technology	1	25	
Title of training programme	Venue	Thematic Area	Duration (Days)	Participant (No.)	Month
Farmers and Farm Women training					
Care and management of dairy animals in summer season	On	Dairy Management	1	25	April
Utility and need of farmers group	Off	Group Dynamics	1	25	

Modern implements for summer ploughing and their benefits	Off	Farm mechanization	1	25	
Management of major insect pest in brinjal	Off	Integrated Pest Management	1	25	
Technique of soil sample collection and its processing	On	Soil and Water Testing	1	25	
Important viral diseases of cow and its prevention	On	Disease Management	1	25	May
Use of ICT tools and their application for marketing accessibility	Off	Production technologies	1	25	
Benefit and Operation of Drum seeder for direct sowing of rice	Off	Farm mechanization	1	25	
Integrated nutrient management in vegetables crops	Off	Integrated Crop Management	1	25	
Use of pheromone trap in different crops	Off	Integrated Pest Management	1	25	
Infertility in dairy animals and its management	Off	Disease Management	1	25	June
Rearing of improved breeds for backyard poultry farming	On	Poultry Management	1	25	
Techniques for direct sowing of rice through DSR machine	Off	Farm mechanization	1	25	

Use of bioagents in paddy crop for pest management	Off	Integrated Pest Management	1	25	
Nutrient management in timely sown Paddy crop	Off	Nutrient Use Efficiency	1	25	

Title of training programme	Venue	Thematic Area	Duration (Days)	Participant (No.)	Month
Farmers and Farm Women training					
Care and management of animals in rainy season	On	Dairy Management	1	25	July
Production technology for summer vegetable crops	Off	Production technology	1	25	
Conservation of rainfall water	Off	RCT	1	25	
Production technique of Azolla and blue green Algae in paddy crop and their benefit	Off	Production and use of organic inputs	1	25	
Major pest and disease management in paddy crop	Off	Integrated Pest Management	1	25	
balanced use of nitrogenous fertilizers	On	Nitrogen use efficiency	1	25	August
Productivity enhancement of Millets	Off	Production technologies	1	25	
Repair and maintenance of centrifugal water pump	Off	Repair and maintenance	1	25	

		of farm machinery			
Management of borer in okra	On	Integrated Pest Management	1	25	
Piglet anemia and its prevention and control	On	Disease Management	1	25	
Feeding management of pigs	Off	Feed management	1	25	Sept.
Promotion of Farmer Field School (FFS) a non-formal educational activity	Off	Group Dynamics	1	25	
Fuel saving in agriculture	Off	RCT	1	25	
Natural farming of Rabi crops	On	Soil Health Management	1	25	
Natural control of insect pests through biopesticides	on	Integrated Pest Management	1	25	

Title of training programme	Venue	Thematic Area	Duration (Days)	Participant (No.)	Month
Farmers and Farm Women training					
Care and management of animals in winter season	On	Dairy Management	1	25	Oct.
Precision farming in India	Off	ICT	1	25	
Operation of modern harvesting implements and its uses	Off	Farm mechanization	1	25	

Pest management in cole crops (cabbage, cauliflower, broccoli)	Off	Integrated Pest Management	1	25	
Impact of zero tillage in soil	On	Resource Conservation Technologies	1	25	
Care and management of pregnant animal	On	Dairy Management	1	25	Nov.
Establishing and strengthening farmer organizations	On	Group Dynamics	1	25	
Mechanization of harvesting and threshing of paddy	Off	Farm mechanization	1	25	
Pest and disease management in chickpea and lentils	Off	Integrated Pest Management	1	25	
Production techniques of different natural farming components	On	Soil Health Management	1	25	
Vaccination schedule of poultry	On	Poultry Production	1	25	Dec.
Income generation activities through mushroom cultivation	On	Entrepreneurial development of farmers/youths	1	25	
Care and maintenance of different types of sprayer machine and their uses	Off	Repair and maintenance of farm machinery	1	25	
Fertilizer application as per soil test value	Off	Soil fertility management	1	25	

Disease management in potato	Off	Integrated Disease Management	1	25	
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Title of training programme	Venue	Thematic Area	Duration (Days)	Participant (No.)	Month
Rural Youth training					
Entrepreneurship Development through organic farming	On	Entrepreneurial development of farmers/youths	5	30	Jan.
Pig rearing technique as an important commercial enterprise	On	Piggery	5	30	
Bee Keeping technique as an important enterprise for rural youth	On	Bee Keeping	5	30	Feb.
Repair and maintenance of 5 HP Diesel engine	On	Repair and maintenance of farm machinery	5	30	
Soil sampling techniques, collection and processing of soil	On	Soil Testing	5	30	March
Seed production and its marketing for income generation	On	Entrepreneurial development of farmers/youths	5	30	April
Scientific dairy farming as an important commercial enterprise	On	Dairy Management	5	30	

Bee Keeping technique as an important enterprise for rural youth	On	Bee Keeping	5	30	May
Care and maintenance of tractor	On	Repair and maintenance of farm machinery	5	30	
Vermicompost production for income generation	On	Vermicompost Production	5	30	June

Title of training programme	Venue	Thematic Area	Duration (Days)	Participant (No.)	Month
Rural Youth training					
Entrepreneurship Development through Mushroom production	On	Entrepreneurial development of farmers/youths	5	30	July
Scientific goat farming as an important commercial enterprise	On	Goat Management	5	30	Aug.
Scientific cultivation of Mushroom for income generation	On	Mushroom Production	5	30	
Repair and maintenance of zero tillage machine and its calibration	On	Repair and maintenance of farm machinery	5	30	Sept.

Lac Processing and production of value added items from lac	On	Lac Production	5	30	Oct.
Entrepreneurship Development through Poultry farming	On	Entrepreneurial development of farmers/youths	5	30	
Commercial poultry farming as an important commercial enterprise	On	Poultry Farming	5	30	Nov.
Scientific cultivation of Mushroom for income generation	On	Mushroom Production	5	30	
Lac Processing and production of value added items from lac	On	Lac Production	5	30	Dec.

Title of training programme	Venue	Thematic Area	Duration (Days)	Participant (No.)	Month
Vocational training					
Entrepreneurship Development through Mushroom production	On	Entrepreneurial development of farmers/youths	10	30	Aug.
Bee Keeping technique as an important enterprise for rural youth	On	Bee Keeping	10	30	Oct.
Agriculture Extension Service Provider	On	Capacity development	10	30	Dec.

Title of training programme	Venue	Thematic Area	Duration (Days)	Participant (No.)	Month
Extension functionaries training					
Utility of various farm implements and machinery	on	Farm Machinery	2	30	March
Care of animals pre and post vaccination	on	Disease management	2	30	April
Integrated Pest Management in vegetables	on	IPM	2	30	may
Extension reforms, concept and role of input dealers in organization structure	on	Leadership development	2	30	June
Profit of integrated farming system	on	Enterprise development	2	30	Aug.
Management of Nutri Garden	on	Household food security by kitchen gardening and nutrition gardening	2	30	Oct.
How, why, when : Soil Sampling	on	Soil Testing	2	30	Nov.
Importance of liquid bio fertilizers in Pulses crop	on	INM	2	30	Dec.

Proposed extension activities

Details of extension activities

Name of activity	No.	No. of farmers	Quarter wise details of activities to be conducted			
			Q1	Q2	Q3	Q4
Field day	4	500	2	0	1	1
Kisan Mela	1	300	0	0	0	1
Kishan Ghosthi	3	150	0	1	1	1
Exhibition	5	1000	3	0	1	1
Ex-trainees sammelan	1	30	0	0	1	0
Special day celebration	8	400	2	2	2	2
Animal health camp	4	150	1	1	1	1
Soil test camp	2	50			1	1
Soil health camp	1	150				1
SHG conveners meeting	2	40			1	1
Farmer Scientist interaction	3	125	0	1	1	1
Scientist visit to farmers field	45	250	3	12	15	15

Detail of quality seed production programme

S. No.	Season	Name of crops	Name of varieties	Area (ha) to be covered	Category of seed to be produced
1	summer	Green Gram	Shikha	2	T/L
2	Kharif	Paddy	Rajendra Sweta	4	F/S
			Rajendra Mahsuri-1	2	F/S
3	Rabi	Wheat	DBW-187	4	F/S

Detail of quality seedling/ sampling production programme

S. No.	Season	Name of vegetable/fruit	Name of varieties	No of seedling/ sampling to be prepared
1	summer	Bitter guard	hybrid	5000
		Cucumber		6000
		Sponge gourd		6000
		Bottle gourd		6000
2	Kharif	Guava	Allahabadi Safeda	500
		Papaya	Red Lady	1500
		Bitter guard		5000
		Cucumber		5000
		Sponge gourd		5000
		Bottle gourd		5000

3	Rabi	Cauliflower	hybrid	10000
		Cabbage		10000
		Tomato		10000
		Chilli		10000
		Brinjal		10000
		French Beans		5000

Detail of soil & water testing

S. No.	Name of activity	No of sample to be tested	No of farmer to be covered	Revenue to be generated (Rs)
	OFT	60	60	12000
	FLD	50	50	10000
	CFLD	500	500	100000
	TSP	200	200	40000
	SCSP	100	100	20000