KRISHI VIGYAN KENDRA, KISHANGANJ

ISO 9001:2015 Certified KVK

Annual Action Plan 2026

Year of establishment of KVK: 06.04.2006

Name of host organization: Bihar Agricultural University, Sabour, Bhagalpur

ICAR - Agricultural Technology Application Research Institute, Zone - IV, Patna

Brief information about the district

Name of Agro Climatic Zone	Zone-II (North – East Alluvial Plain)
Longitude	87'07’ to 88'19’
Latitude	25'07’ to 26'30’
Temperature Maximum	41°C
Temperature Minimum	3.8°C
Geographical (ha)	188682.34 ha
Total cultivable area (ha)	147469.90 ha
Total Net sown area (ha)	122892.63 ha
Area sown more than once (ha)	44800
Kharif sown area (ha)	90556
Rabi sown area (ha)	89300
Summer sown area (ha)	8876
Gross cropped area (ha)	188,732
Cropping intensity (%)	133.8%
Annual Rainfall (mm)	2269.49
Rainy days	88
Total irrigated area (ha)	106173.4
Total rainfed area (ha)	83003.08
Irrigation per cent	32.60
Soil type	Sandy soil, Loamy soil, Clay soil
Upland (ha) & % of total cultivable area	16%
Midland (ha) & % of total cultivable area	62%
Lowland (ha) & % of total cultivable area	22%
Soil organic carbon status of the district	Low
Nutrient status of soil of the district	N Low
	P Low
	K Medium
Micronutrient status of soil of the district	Low to medium
Fertilizer consumption (Kg/ha)	212 Kg/ha
Total Population	1690948
Total SC population & (%) of total population	113,118 & 6.7%
Total ST population & (%) of total population	64,224 & 3.8%
Male population	868,845
Female population	822,103
Literacy (%)	57.04
No of Tehasil	01
No of blocks	7
No of Panchayat	126
No of villages	773

1.5. Staff Position (as on 1st January, 2026)

Sl. No.	Sanctioned post	Name of the Incumbent	Designation	Discipline	Grade Pay	Present basic (Rs.)	Date of joining	Permanent/ probation	Category	Mobile No.	Email id	photograph
1.	Senior Scientist& Head	Dr. Rajeev Singh	Senior Scientist & Head	Agronomy	Level 13(A)	Basic-1,39,400	05/07/2019	Permanent	Other	9431204379	singhrajeev79@gmail.com	
2.	Subject Matter Specialist	Dr. Manju Kumari	Subject Matter Specialist	Horticulture	Level 10	Basic-64,900/-	10/11/2023	Permanent	SC	8340620029	manjuhortibau2106@gmail.com	
3.	Subject Matter Specialist	Dr. Alimul Islam	Subject Matter Specialist	Extension Education	Level 10	Basic-64,900/-	19.01.2024	Permanent	Other	9695844787	draliagrilext@gmail.com	
4.	Subject Matter Specialist	Dr. Kanhiya Lal	Subject Matter Specialist	Agronomy	Level 10	Basic-64,900/-	04.03.2024	Permanent	BC	7567290559	kanhaiyalal.8986@gmail.com	
5.	Subject Matter Specialist	Smt. Raman Bharti	Subject Matter Specialist	Home Science	Level 10	Basic-64,900/-	13.02.2024	Permanent	EBC	9304373139	ramanbhartihsc17@gmail.com	
6.	Subject Matter Specialist	**Vacant**	Subject Matter Specialist	Plant Protection	-		-	-	-	-		
7.	Subject Matter Specialist	**Vacant**	Subject Matter Specialist	Animal Science	-		-	-	-	-	-	
8.	Programme Assistant	**Vacant**	PA(Lab Technician)	Lab Technician	-		-	-	-	-	-	
9.	Computer Programmer	Sri. Rajesh Lal	PA(Computer)	Computer	Level 06	Basic-44,900/-	24/05/2013	Permanent	Other	9122862093	rajesh.lal09@gmail.com	
10.	Farm Manager	Smt. Sunita Kumari	Farm Manager	Agriculture	Level 06	Basic-44,900/-	01/03/2013	Permanent	OBC	9199188796	sunitak_1@rediffmail.com	
11.	Accountant / Superintendent	Sri Rahul Kumar	Assistant	Account	Level 06	Basic-44,900/-	01/11/2024	Permanent	Other	9199788300	rkumarbau@gmail.com	
12.	Stenographer	Sri Rakesh Mandal	Stenographer	Office	Level 04	Basic-32,300	19/06/2013	Permanent	OBC	9430932305	rakeshbau@gmail.com	

13.	Driver	Sri Niraj Kumar Singh	Driver	Vehicle	Level 03	Basic-26,800/-	20/05/2015	Permanent	Other	9308678806	nirajkvk75@gmail.com	
14.	Driver	**Vacant**	Driver	Vehicle	-		-	-	-	-		
15.	Supporting staff	**Vacant**	Supporting	-	-		-	-	-	-		
16.	Supporting staff	**Vacant**	Supporting	-	-		-	-	-	-		

1.6. Total land with KVK (in ha) :

S. No.	Item	Area (ha)
1	Under Buildings	1.5
2.	Under Demonstration Units	0.5
3.	Under Crops	5.0
4.	Horticulture	1.0
5.	Pond	0.13
6.	Others with details	1.87
	Total	**10**

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding		Stage					
				Complete			Incomplete		
		ICAR	RKVY	Completion Year	Plinth area (Sq.m)	Expenditure (Rs.)	Starting year	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR			550				
2.	Farmers Hostel	ICAR			350				
3.	Staff Quarters (6)	ICAR			302			Supporting Staff 2 unit	Not Started

4.	Demonstration Units (2)	ICAR							
5	Fencing								
6	Rain Water harvesting system								
7	Threshing floor	ICAR			186				
8	Farm godown	ICAR							
	Other								

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.)**
Bahudurganj	27168.54	8030	4519	2134	544	108	32255
Dighalbank	25235.48	10282	3268	2150	14	0	55969
Kishanganj	14981.44	9780	3025	5302	3258	131	27488
Kochadhaman	28357.83	15660	4322	6217	263	0	86104
Pothia	35033.44	15303	3628	3277	2737	122	54203
Terhagachh	19122.94	8946	2419	1035	745	122	23223
Thakurganj	38782.83	12466	4827	4197	3101	87	44572
Total no of farmers	--	80467	26008	24312	10662	570	323814
% of Land holding		**85.02%**	**9.21%**	**4.52%**	**0.91%**	**0.44 %**	

Average land holding of the district 0.74 ha

Source of information: DAO and statistics department, Kishanganj, 2025

Status of major field crops of the district

Season: Kharif			
Name of crop	**Area (ha)**	**Production (MT)**	**Productivity (Q/ha)**
Paddy	88865	328800.50	37
Moong	745	399.32	5.36
Pigeon Pea	34	63.55	18.69
Other Pulses	912	555.41	6.09
Season: Rabi			
Wheat	4054	9068.80	22.37
Maize	69595	661152.50	95
Lentil	840	814.80	9.7
Mustard	1959	1528.02	7.8
Linseed	287	243.95	8.5
Other Pulses	6353	4745.69	7.47
Season: Summer			
Moong	4540	3137.14	6.91
Maize	552	4322.16	78.3
Jute	3784	8377.78	22.14

Source of information: DAO and statistics department, Kishanganj, 2025

Status of major horticulture crops of the district

Season: Kharif			
Name of crop	**Area (ha)**	**Production (MT)**	**Productivity (Q/ha)**
Mango	1195.2	53556.91	448.1
Banana	263.75	1983.40	75.2
Makhana	1143	1999.11	17.49
Dragon Fruit	8.25	1080.00	1309.09
Season: Rabi			
Potato	4400	118206.00	268.65
Cauliflower	830	14829.61	178.67
Brinjal	160	3389.92	211.87
Season: Summer			
Pineapple	2469	79008.00	320
Chilli	202.9	156.84	7.73
Cucumber	119.55	72.33	6.05

Source of information: DAO and statistics department, Kishanganj, 2025

Live stock status of the district

Name of livestock	**Number**
Total no. of Indigenous cattle	35212
Total no. of cross breed	11600
Total no. of Buffalo	67000
Total no. of Goat	104206

Total no. of Sheep	977
Total no. of poultry	217708
Total no. of commercial dairy unit	15
Total no. of commercial goatry unit	35
Total no. of commercial poultry unit	625

Source of information: 20th Livestock Census, GOI, 2019

Details of Agro-Ecological situation

S. No	Name of Agro-Climatic Zone	Name of Agro-Ecological Situation	Agro-Ecological Situation features	Blocks covered
1.	Zone-II (North – East Alluvial Plain) AES-1	Up land sandy soil	Suitable for maize, wheat, vegetables & fruits	Thakurganj, Pothia, Kochadhaman, Dighlabank, Kishanganj, Bahadurganj
		Medium sandy loam soil	Wheat, maize, jute, rice, oilseeds, pulses, vegetables & fruits cultivation	
		Low lying clay soil	Flood & water lodging condition suitable for Paddy, Boro-paddy & paira cropping	
		Diara land of Mahananda flooded during rainy season with sandy and loamy soil	Suitable for rabi Maize, oilseeds and cucurbits	

MAJOR PROBLEMS IDENTIFIED

- ❑ Lack of Access to Quality Inputs.
- ❑ Farmers facing market access problem.
- ❑ Post-harvesting management problem.
- ❑ Excessive use of chemical fertilizers, pesticides, and monocropping (same crop every year) harms the soil.
- ❑ Lack of integrated approach of cultivation
- ❑ Deficiency of micronutrient and potash
- ❑ Problem of soil in the district
- ❑ Inadequate pest and disease control measure
- ❑ Lack of cropping system
- ❑ Inadequate and low use of organic manure

Major Thrust Areas

Sl	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.

Summary of the activities to be conducted during 2026

Activity	Target	
	Number of activity	No. of farmers to be covered
OFTs	08	184
FLDs – Oilseeds (activity in ha)	-	-
FLDs – Pulses (activity in ha)	-	-
FLDs – Other than Oilseed and Pulses crops (activity in ha)	12	75
FLDs – Other than Crops (activity in no. of unit/Enterprises)	100	100
Training – Farmers and farm women	96	2275
Training – Rural Youths	16	370
Training – Extension Functionaries	16	380
Extension activities	694	5050
Seed Production (Quintal)	410	0
No. of seedling/sampling Production	10000	--
Other Bio- products – Vermicompost (q)	10 q	--
Live stock products (Poultry chicks – nos.)	--	--
(Fingerlings – nos.)	--	--
No of Soil and Water Testing in Laboratory	100	100
No of advisory through Kishan Sarathi portal	48	65000
SAC Meeting (Date & no. of core/ official members)	01	30
Literature to be developed/ Published	02	50
Convergence Programme / Sponsored Programme	03	150
KVK Progressive Farmers interaction	03	75
Outreach of KVK in the District (No. of blocks, no. of villages)	08	--

Proposed OFT

OFT No: 01 (Agronomy)

Crop area of district: 74500 ha, District yield: 26.00 Q/ha, State yield: 30.34 Q/ha

Crop	**Rice**
Season	Kharif
Main problem	Heavy weed infestation in transplanted rice leading to yield loss
Main cause	High rainfall and humid climate favouring weeds (*Echinochloa* spp., *Cyperus* spp., *Ludwigia* spp.)
Title of OFT	**Assessment of different herbicide for increasing kharif rice productivity**
Farming situation	Sandy loam, Irrigated, low to medium land condition; previous crop: maize
Thematic area	Weed Management
Farmer practice	T1 (Farmer's practice) : Pyrazosulfuron ethyl 70% WDG @21g a.i./ha
Technology option selected for assessment	TO2: Pyrazosulfuron ethyl 70% WDG @21g a.i./ha fb Penoxsulam+ cyhalofop butyl @150 g a.i./ ha at 25-30 DAS TO3: Pyrazosulfuron ethyl 70% WDG @21g a.i./ha fb Triafamone 20% + Ethoxysulfuron 10% WG @67.5 g a.i./ha at 25-30 DAS.
Source of technology	IIRR, Hydrabad-2022
No of trial	10
Detail of critical input	Pyrazosulfuron ethyl, Penoxsulam + Cyhalofop-butyl, Triafamone + Ethoxysulfuron
Cost of individual critical input	Pyrazosulfuron ethyl: ₹750, Penoxsulam + Cyhalofop-butyl: ₹1800, Triafamone + Ethoxysulfuron: ₹1900
Total cost of critical input	Rs. 4450
Performance indicator to be recorded	(i) Technical : No of weed/sq m, dry weight(g) of weed, at 30DAT and at Harvest,100 grain wt., no. of tiller/m2, No. of grains/tillers, straw yield, grain yield (ii) Economic : Cost of cultivation, Gross return, Net return, B:C ratio (iii) Farmer perception

OFT No: 02 (Agronomy) (2nd Year)

Crop area of district:1000 ha, District yield : 243 Q/ha, State yield: 275 Q/ha

Crop	**Potato**
Season	Rabi
Main problem	Low yield due to Zn and B deficiency
Main cause	Soil deficient in B and Zn
Title of OFT	**Assessment of Zn and B fertilizers to improve Potato Productivity**
Farming situation	Sandy loam, Irrigated, low to medium land condition; previous crop: Paddy
Thematic area	INM
Farmer practice	TO1 (Control): No application of Zn and B; only recommended dose of NPK (150:60:40 kg/ha).
Technology option selected for assessment	TO2: 2.0 kg B/ha and 4.5 kg Zn/ha soil application TO3: 0.1% boric acid foliar application (3 times; 40 DAS, 50DAS and 60 DAS) TO4: Combined application 0.1% zinc sulphate foliar + 0.1% boric acid (3 times; 40 DAS, 50DAS and 60 DAS)
Source of technology	BCKV, 2018
No of trial	10
Detail of critical input	Fertilizer
Cost of individual critical input	Rs. 6000
Total cost of critical input	Rs. 6000
Performance indicator to be recorded	(i) Technical indicator (No. tuber m^{-2}, tuber yield (q/ ha) (ii) Economic indicator (Cost of cultivation, Gross return, Net return, B:C ratio) (iii) Farmer perception

OFT No: 03 (Agronomy) (2nd Year)

Crop area of district:1000 ha, District yield : 243 Q/ha, State yield: 275 Q/ha

Crop	**Potato**
Season	Rabi
Main problem	Yield loss due to high weed infestation
Main cause	Higher weed-crop competition
Title of OFT	**Assessment of different herbicides for improving potato productivity**
Farming situation	Sandy loam, Irrigated, medium to upland condition; previous crop: rice
Thematic area	Weed management
Farmer practice	TO1 (Control): Manual weeding
Technology option selected for assessment	TO2: Metribuzin 70% wp 0.525 kg/ha a.i. (3 days after planting)

	TO3: Paraquat dichloride 24% SL. @0.50 kg/ha a.i. (5% of crop emergence)
Source of technology	ICAR - Directorate of Weed Research (2018-19)
No of trial	10
Detail of critical input	Herbicides
Cost of individual critical input	Rs 5000
Total cost of critical input	Rs 5000
Performance indicator to be recorded	(i) Technical indicator (weed m^{-2}, No. tuber m^{-2}, tuber yield (q/ ha) (ii) Economic indicator (Cost of cultivation, Gross return, Net return, B:C ratio) (iii) Farmer perception

OFT No: 04 (Horticulture)

Crop area of district:1000 ha, District yield: 243 Q/ha, State yield: 275 Q/ha

Crop	**Potato**
Season	Rabi-2026
Main problem	Severe incidence of late blight of potato
Main cause	Low yield of potato due to late blight.
Title of OFT	**Assessment of fungicides against Late Blight of Potato.**
Farming situation	Soil Type: Sandy loam, Land Type : Medium land, Irrigation Type : Irrigated , Previous crop: Paddy
Thematic area	Integrated Disease Management
Farmer practice	T1 (FP): Spray of Mancozeb @ 2.5 gm/lit of water.
Technology option selected for assessment	T2: Copper Oxychloride @3gm/lit. at 30 DAP +Mancozeb @2.5 gm/lit. at 10 days interval of 1st spray. T3: Soil application of Trichoderma spp. @ 5 kg. /ha. + Seed treatment with Tricoderma spp. @ 5 gm/kg of seed and spray of copper oxychloride @ 2.54 gm/lit of water on 10 days Interval (04 times).
Source of technology	BCKV, West Bengal-2018
No of trial	10
Detail of critical input	Copper Oxychloride , Mancozeb ,Tricoderma
Cost of individual critical input	Rs.1500/Unit
Total cost of critical input	Rs. 15,000/-
Performance indicator to be recorded	Technological observations: No. of effected plant m^{-2}, Avg. Tuber weight (gm), Tuber yield (q/ha) Economical observations: Cost of cultivation (Rs), Gross Return (Rs), Net return(Rs.), BC ratio Farmer perception: Feedback/reaction after technology assessment.

OFT No: 05 (Horticulture) (2nd Year)

Cauliflower, Crop area of district: 289.5 ha, District yield: 185 Q/ha, State yield: 167.60 Q/ha

Crop	Cauliflower
Season	Rabi-2026
Main problem	Browning, stem cracking, smaller leaves, poor quality of curds and farmers facing low yield
Main cause	Nutrient deficiencies, sensitivity to temperature fluctuations, lack of knowledge about doses of plant protection chemicals
Title of OFT	**Assessment of efficacy of Boron on yield and quality of Cauliflower**
Farming situation	Soil type- sandy loam, land type- medium and low land, irrigated, previous crop -Paddy
Thematic area	Nutrient management
Farmer practice	FP: N:P2O5:K2O :: 100:60:40 kg/ha
Technology option selected for assessment	TO1: RDF (N:P2O5:K2O :: 100:80:80 kg/ha) + Borax@15kg/ha as basal dose TO2: RDF (N:P2O5:K2O :: 100:80:80 kg/ha) + Boric acid (20%B) @ 0.3% as foliar spray after one month of transplanting
Source of technology	B.A.U. Sabour, Bhagalpur (2016)
No of trial	10
Detail of critical input	Borax, Boric acid
Cost of individual critical input	Borax-1500/-, Boric acid- 1000/-
Total cost of critical input	3000/-
Performance indicator to be recorded	Technological observations: Curd diameter(cm), wt of curd (g) per plant, curd yield (q/ha) Economical observations : Cultivation Cost(Rs), Gross Return(Rs), Net return(Rs.), BC ratio Farmer perception: Feedback/reaction after technology assessment.

OFT No: 06 (Home Science)

Crop area of district in ha- 850, District yield- 160 (Q/ha) State yield- 140 (Q/ha)

CROP	Vegetable crop
Season	Rabi/ kharif
Main problem	Farmers face a high risk of cuts and skin problems like rashes while harvesting vegetable crops.
Main cause	This problem arises due to manual harvesting practices, where continuous direct contact with plant surfaces, sap, and rough handling leads to skin irritation, allergic reactions, and dark patches on the hands.

Title of OFT	**Assessment of Improved Harvesting Tool for Vegetable Crops**
Farming situation	Irrigated
Thematic area	Drudgery Reduction
Farmer practice	Manual Harvesting of Vegetables
Technology option selected for assessment	T1 - Silicon based harvesting cutter T2 - Silicon harvesting cutter with gloves T3 - Bhindi Cutter
Source of technology	PAU Punjab (2020)
No. of trail	10
Detail of critical input	Silicon based harvesting cutter, Bhindi cutter and gloves
Cost of individual critical input	Rs. 350/-
Total cost of critical input	Rs. 3500/-
Performance indicator to be recorded	(i) Technical indicator: Work efficiency (%), comfort level and musculoskeletal problems (ii) Economic indicator: Labour cost saving (Rs/ha), B:C ratio (iii) Farmer perception

OFT No: 07 (Home Science)

Crop area of district in ha- 1092, District yield- 200 to 450 (Q/ha) State yield- 200 to 450 (Q/ha)

CROP	Green leafy Vegetable
Season	Rabi/ kharif
Main problem	Farm women suffer from low hemoglobin levels (anemia), leading to fatigue, weakness, and reduced work efficiency.
Main cause	Inadequate intake of iron-rich foods, poor dietary diversity, and low consumption of green leafy vegetables in daily meals.
Title of OFT	**Nutritional Assessment of Green Leafy Vegetable-Enriched Multigrain Chapati for Improving Hemoglobin Status of Farmwomen**
Farming situation	Irrigated
Thematic area	Nutritional Security
Farmer practice	Wheat flour chapatti
Technology option selected for assessment	T1 - Wheat+ soy flour + makki atta (1:1:1) + seasonal green leafy vegetable T2 - Wheat + makki atta+ gram flour (1:1:1) + seasonal green leafy vegetable
Source of technology	PAU, Ludhiana (2016)
No. of trail	10
Detail of critical input	Wheat, soy flour, makki atta, gram flour, seasonal green leafy vegetable

Cost of individual critical input	Rs. 700/-
Total cost of critical input	Rs. 7000/-
Performance indicator to be recorded	I. Technical indicator: Nutrient Intake (energy, protein, iron, calcium) and Anthropometric measurements (BMI) II. Economic indicator: cost saving (Rs/kg), B:C ratio III. Feedback of Farm women

OFT No: 08 (**Agriculture Extension**)

Title: Impact of KVK Training Interventions on Knowledge, Skills, and Adoption of Climate-Resilient Practices in Kishanganj

1- To determine the socio-economic profile of the farmers.
2- To ascertain the knowledge gain among farmers regarding climate-resilient technologies.
3- To evaluate the level of skill acquisition of climate-resilient practices.
4- To know the extent of adoption of climate-resilient practices.
5- To identify the constraints faced by farmers in adoption.

Research Methodology

1- Locale of the Study

The study is conducted within the operational area of Krishi Vigyan Kendra (KVK) Kishanganj, which functions under the jurisdiction of Bihar Agriculture University (BAU), Sabour. This locale is specifically chosen due to its unique humid, high-rainfall climate and its focus on climate-resilient

2- Selection of the District

Kishanganj district has been purposively selected for this research. The district is a key hub for diverse agricultural activities, including high-yield maize production and specialized horticultural crops like Dragon Fruit, pineapple, tea, and Banana etc., making it an ideal site to study the adoption of modern and resilient technologies.

3- Selection of the Block

The blocks where KVK Kishanganj has concentrated its climate resilient interventions are selected. These block represent the areas most actively engaged in farmer-scientist interactions and capacity-building programs.

1. Selection of the Villages

The study focuses on "Adopted Villages" of KVK Kishanganj. These villages are selected because they serve as the primary sites for training and others activities of KVK.

5. Selection of the Respondents

- **Target Group:** Farmers who have participated in KVK training programs, including **Rural Youth (RY)** and **Farmer Master Trainers**.

- **Sampling:** A total of 60 respondents will be selected using a Random Sampling technique from the list of trained farmers maintained by the KVK and 60 farmers Random Sampling technique who have not attend the training from KVK.

6. Tools and Techniques for Data Collection

- **Structured Interview Schedule:** A pre-tested schedule will be used to collect data on socio-economic profiles and knowledge gain.
- **Direct Observation:** This technique will be used specifically to evaluate **Skills** by observing farmers perform tasks such as mulching or microbial formulation preparation.
- **Focus Group Discussions (FGD):** Participatory sessions with farmers to understand the constraints faced in the adoption of new technologies.

7. Statistical Analysis

The collected data will be processed and analyzed using the following statistical tools:

- **Descriptive Statistics:** Frequency, percentage, mean, and standard deviation to describe the socio-economic profile and adoption levels.
- **Knowledge & Skill Index:** To quantify the gain in theoretical understanding and practical expertise.

Comparative Analysis: Use of **t-tests** to determine the significant difference between pre-training and post-training knowledge and skill levels.

Number of farmers: 120

Proposed FLD

FLD No: 01 (Agronomy)

Crop area of district: 8486.60 ha, District yield: 21 Q/ha, State yield: 24 Q/ha

Title of FLD	**Demonstration of Improved Jute variety for better fiber yield and quality.**
Season & Year	Summer- 2027
Main Problem	Low yield and low-quality jute fibre
Main cause of problem	Old variety JRO 524 (1977)
Full detail of farmer's Practice	Old variety JRO 524 (1977)
Name of the Technology	Improved variety
Full detail of technology to be demonstrated	Improved variety (JRO 204)
Thematic area	ICM
Source of Technology with year	CRIJAF (2007)
Name of villages	Kashipur, Khanabadi
Farming situation	Soil type: Sandy loam, land type: Medium land, irrigation type: Irrigated, season: Summer, previous crop: Potato
Area (ha)	02
No of farmers	10
Performance indicator	Technical indicator- Production (q/ha) Economic indicator- Cost of cultivation, Gross return, Net return, B:C ratio Farmer Feedback- reaction

FLD No: 02 (Agronomy)

Crop area of district: 74500 ha, District yield: 26.00 Q/ha, State yield: 30.34 Q/ha

Title of FLD	**Demonstration of high yielding Variety (Sabour Heera) of Paddy**
Season & Year	Kharif -2026
Main Problem	cultivation of old/local rice varieties susceptible to pests and diseases
Main cause of problem	Farmers are still cultivating old varieties such as BB-11 which have low yield potential and are susceptible to pests and diseases
Full detail of farmer's Practice	One ploughing with harrow and two ploughings with cultivator, maintaining standing water in field and transplanting/sowing old variety BB-11 with imbalanced fertilizer application
Name of the Technology	High yielding variety-Sabour Heera

Full detail of technology to be demonstrated	Cultivation of improved high yielding rice variety Sabour Heera developed by BAU, Sabour with recommended package of practices: line transplanting, seed rate 20–25 kg/ha, recommended fertilizer dose (120:60:40 N:P_2O_5:K_2O kg/ha), timely weed and pest management
Thematic area	ICM
Source of Technology with year	BAU, Sabour (2022)
Name of villages	Belwa, Kochadhaman, Deramari, Chhatar Gachh, Pothia
Farming situation	Soil type: Sandy loam, land type: Low Land, irrigation type: Irrigated, season: Kharif, previous crop: Maize
Area (ha)	02
No of farmers	10
Performance indicator	(I) Technical indicator- Production (II) Economic indicator- Cost of cultivation, Gross return, Net return, B:C ratio (III) Farmer Feedback- reaction

FLD No: 03 (Agronomy)

Name of crop: Buckwheat, Crop area of district: 103 ha, District yield: 13.71 Q/ha, State yield:12.34 Q/ha

Title of FLD	**Promotion of pseudo millets (Buck Wheat) for crop diversification**
Season & Year	Rabi- 2026
Main Problem	Low yield of Buck Wheat
Main cause of problem	Low yield of buck wheat due to use of local variety
Full detail of farmer's Practice	Broadcasting method of sowing with high seed rate
Name of the Technology	Improved variety- Himpriya
Full detail of technology to be demonstrated	HYVs of buckwheat Himpriya + seed rate of 30 kg/ha ; NPK: 40:20:20; One light irrigation : before flowering; weed-free during early crop growth 20-30 DAS. Mature in 90 to 100 days.
Thematic area	RCT
Source of Technology with year	ICAR-NBPGR Regional Station, Shimla(1991)
Name of villages	Belpokhar, Kochadhaman
Farming situation	Soil type: Sandy loam, land type: Upland, irrigation type: Irrigated, season: Rabi, previous crop: Paddy
Area (ha)	02
No of farmers	10
Performance indicator	(I) Technical indicator- Production (q/ha) (II) Economic indicator- Cost of cultivation, Gross return, Net return, B:C ratio (III) Farmer Feedback- reaction

FLD No: 04 (Agronomy)

Crop: Wheat, Crop area of district: 12017 ha, District yield: 22.37 Q/ha, State yield: 32.11Q/ha

Title of FLD	**Demonstration of improved verity of(Bio-fortified variety) wheat**
Season & Year	Rabi-2026
Main Problem	Low cultivation of Bio-fortified variety
Main cause of problem	Lack of awareness regarding Bio-fortified variety
Full detail of farmer's Practice	No Cultivation of Bio-fortified variety-HD-2967
Name of the Technology	Bio-fortified wheat
Full detail of technology to be demonstrated	Varietal improvement (Bio-fortified variety) DBW-187
Thematic area	ICM
Source of Technology with year	IIWBR, Karnal, 2019
Name of villages	Belwa Kashipur, Kashipur, Dohabadi
Farming situation	Soil type: Sandy loam, land type: Medium Land, irrigation type: Irrigated, season: Rabi, previous crop: Paddy
Area (ha)	02
No of farmers	10
Performance indicator	1. Technical indicator- Production 2. Economic indicator- Cost of cultivation, Gross return, Net return, B:C ratio 3. Farmer Feedback- reaction

FLD No: 05 (Horticulture)

Crop: Pineapple, Crop area of district: 2469 ha, District yield: 378 Q/ha, State yield: 360 Q/ha

Title of FLD	**Synchronizing flowering in pineapple for higher yield and economics**
Season & Year	Rabi-2026
Main Problem	Irregular and uneven flowering in pineapple.
Main cause of problem	uneven flowering in pineapple due to imbalanced and non-scientific use of plant growth regulators.
Full detail of farmer's Practice	Use of Naphthalene Acetic Acid (NAA) 25 ppm
Full detail of technology to be demonstrated	Use of Ethephon 25 ppm+ 2% urea + 0.04% $CaCO_3$
Source of Technology with year	Pineapple Research Station, Vazhakkulam, Kerala Agricultural University, Vellanikkara. Thrissur, Kerala (2010)
Name of the Technology	PGR: Use of Ethephon 25 ppm+ 2% urea + 0.04% $CaCO_3$
Thematic area	Nutrient Management
Name of villages	Rupnigachch, Pothia

Farming situation	Soil type: Sandy loam, land type: Medium and low land, irrigation type: Irrigated, previous crop: pineapple
Area (ha)	01 ha
No of farmers	10
Performance indicator	Technical indicator- Production, 50% Flowering, Day of ripening Economic indicator- Cost of cultivation, Gross return, Net return, B:C ratio Farmer Feedback- reaction

FLD No: 06 (Horticulture)

Crop: Okra, Area of district: 223.10 ha, District yield: 12.30 Q/ha

Title of FLD	**Demonstration of high yielding Variety (Kashi Sahishanu) (VRO-111)of Okra**
Season & Year	Summer- 2027 (Feb.)
Main Problem	Cultivation of old/local okra varieties susceptible to pests and diseases
Main cause of problem	Farmers are still cultivating old varieties which have low yield potential and small fruit size and are susceptible to pests and diseases,
Full detail of farmer's Practice	Parbhani Kranti
Full detail of technology to be demonstrated	YVMV Variety (Kashi Sahishanu)
Source of Technology with year	IIVR, Varanasi (2024)
Name of the Technology	High yielding and YVMV, leaf curl virus resistant variety-Kashi Sahishanu
Thematic area	Production and management technology
Name of villages	Kolha, Kasipur, Mahingaon
Farming situation	Soil type: Sandy loam, land type: Medium land, irrigation type: Irrigated, previous crop: Potato
Area (ha)	01 ha
No of farmers	15
Performance indicator	1) Technical indicator- Yield (Q/ha) 2) Economic indicator- Cost of cultivation, Gross return, Net return, B:C ratio 3) Farmer Feedback- reaction

FLD No: 07 (Home Science)

Title of FLD	**Demonstration on Nutri Garden for Nutritional Food Security**
Season & Year	Rabi , Kharif & Summer 2026-27
Main Problem	Lack of diverse vegetables for meeting household nutritional needs

Main cause of problem	Limited awareness and lack of diverse vegetable seeds for household production
Full detail of farmer's Practice	Cultivation of only a few seasonal vegetables; dependence on market supply
Full detail of technology to be demonstrated	Establishment of a nutritional garden using vegetable seed kits for year-round availability of diverse vegetables
Source of Technology with year	ICAR 2018
Name of the Technology	Nutritional Garden
Thematic area	Household food security through Nutritional Garden
Name of villages	Mahingaon
Farming situation	Soil type: Sandy loam, land type: Medium land, irrigation type: Irrigated
Unit (No.)	50N
No of farmers	50
Performance indicator	(I) Technical indicator- Production (II) Economic indicator- Cost of cultivation, Gross return, Net return, B:C ratio (III) Farmer Feedback- reaction

FLD No: 08 (Home Science)

Title of FLD	**Demonstration of Mushroom Cultivation for income generation**
Season & Year	Rabi, 2026-27
Main Problem	Low income and limited access to nutritious food
Main cause of problem	Lack of awareness and very few farmers practicing mushroom cultivation.
Full detail of farmer's Practice	Only a few farmers practice mushroom cultivation; most farmers are not aware of the improved production technology.
Full detail of technology to be demonstrated	Cultivation of button/oyster mushroom using improved production techniques.
Source of Technology with year	ICAR 2008
Name of the Technology	Oyster Mushroom Cultivation
Thematic area	Income generation
Name of villages	Mahingaon
Farming situation	Irrigated
Unit (No.)	50 N
No of farmers	50
Performance indicator	(I) Technical: Mushroom production (kg/unit). (II) Economic: Cost of cultivation, gross return, net return, B:C ratio. (III) Farmer Feedback: Farmers' reaction and satisfaction.

FLD No: 09 (Agronomy)

Crop: Maize, Crop area of district: 69310 ha, District yield: 92.22 Q/ha, State yield: 61.38 Q/ha

Title of FLD	**Demonstration of herbicide for weed management in winter maize.**
Season & Year	Rabi -2026
Main Problem	Excessive weed growth at early stage leads to decrease in the yield of maize
Main cause of problem	High weed infestation
Full detail of farmer's Practice	Atrazine a.i. 750 g/ha as pre-emergence
Name of the Technology	Topramezone a.i. 25.2 g/ha + Atrazine a.i. 500 g/ha (tank mix) at 25 DAS
Full detail of technology to be demonstrated	Topramezone a.i. 25.2 g/ha + Atrazine a.i. 500 g/ha (tank mix) at 25 DAS
Thematic area	Weed management
Source of Technology with year	IIMR, ICAR DWR, Jabalpur, 2023
Name of villages	Belwa, Kochadhaman, Deramari, Chhatar Gachh, Pothia
Farming situation	Soil type: Sandy loam, land type: Low Land, irrigation type: Irrigated, season: Kharif, previous crop: Paddy
Area (ha)	02
No of farmers	10
Performance indicator	(I) Technical indicator- weed count, weed dry wt. , cob size, grain yield, stover yield (II) Economic indicator- Cost of cultivation, Gross return, Net return, B:C ratio (III) Farmer Feedback- reaction

Proposed trainings

Summary of training programme

Training Programme	No. of course	Participant (No.)
Farmers and Farm Women training		
Agronomy	24	600
Horticulture	23	575
Home Science	25	500
Extension Education	24	600
Total	**96**	**2275**
Rural Youth training		
Agronomy	03	75
Horticulture	04	100
Home Science	06	120
Extension Education	03	75
Total	**16**	**370**
Extension functionaries training		
Agronomy	04	100
Horticulture	04	100
Home Science	04	80
Extension Education	04	100
Total	**16**	**380**
Grand Total	**128**	**3025**

Farmers and Farm Women training

Title of training programme	Venue	Thematic Area	Duration (Days)	Participants	Month
Agronomy					
Fall armyworm management in Maize crop	OFF	Integrated Pest Management	1	25	January
Insect and pest management in Maize crop	ON	Integrated Pest Management	1	25	January
Fall armyworm management in Maize crop	OFF	Integrated Pest Management	1	25	February
Integrated pest management in mustard	ON	Integrated Crop Management	1	25	February
Scientific cultivation of jute and improve fiber quality	OFF	Integrated Nutrient Management	1	25	March

Management of acidic soil for higher crop productivity	ON	Soil fertility management	1	25	March
Production technology of summer moong	OFF	Integrated Crop Management	1	25	April
Importance of green manuring in exhaustive cropping system	ON	Soil fertility management	1	25	April
Production technology of rice under flooded condition	OFF	Integrated Crop Management	1	25	May
Nursery raising of paddy crop	ON	Nursery management	1	25	May
Scientific Cultivation of Paddy	OFF	Integrated Crop Management	1	25	June
Integrated weed management in paddy	ON	Weed Management	1	25	June
Application of nitrogen management by LCC in Paddy to enhance productivity	ON	Integrated Nutrient Management	1	25	July
Water management in paddy	OFF	Water management	1	25	July
Agronimic activities during cloudy days just before maturity stage	ON	Integrated Crop management	1	25	August
Improve package and practices of Fodder crops cultivation	OFF	Fodder production	1	25	August
Agronomic activities during milking stage of Paddy crop for improving yield	OFF	Integrated Crop Management	1	25	Septembe r
Scientific cultivation of wheat	ON	Integrated Crop Management	1	25	Septembe r
Scientific cultivation of buckwheat	OFF	Integrated Crop Management	1	25	October
Scientific cultivation of Mustard	ON	Weed Management	1	25	October
Scientific cultivation of Maize	ON	Integrated Crop Management	1	25	November
Importance of irrigation management at Critical growth stage in Maize	OFF	Water management	1	25	November
Weed management in maize	ON	Weed Management	1	25	December
Integrated Nutrient management in Maize crop	OFF	Integrated Nutrient management	1	25	December

Title of training programme	Venue	Thematic Area	Duration (Days)	Participants	Month
Horticulture					
Scientific cultivation of root crops.	ON	Vegetable cultivation	1	25	January
Prpduction technology of summer vegetables.	OFF	Yield increment	1	25	February
Scientific cultivation of pineapple	ON	Cultivation of fruit	1	25	February
Production management of tea garden	OFF	Cultivation of fruit	1	25	March
Scientific cultivation of okra French bean	OFF	Yield increment	1	25	March
Production and management of makhana and its processing	ON	Export potential fruits	2	25	April
Production techniques in dragon fruit	ON	Cultivation of fruit	2	25	April
Scientific cultivation of banana	OFF	Cultivation of fruit	1	25	May
Scientific cultivation of ginger & turmeric	OFF	Cultivation of spices	1	25	May
Role & importance of micro irrigation system in tea garden	ON	Production and Management technology	1	25	June
Scientific cultivation of banana	OFF	Fruit cultivation	1	25	June
Production techniques in cucurbit crops	ON	Yield increment	1	25	July
Nursery management in cole crops	OFF	Nursery raising	1	25	July
Orchard management in guava	ON	Layout and management of orchard	1	25	August
Nursery management of brinjal, tomato and chilli	ON	Nursery raising	2	25	August
Scientific cultivation of pineaaple	OFF	Fruit cultivation	1	25	September
Disease & pest management in tea cultivation	OFF	IPM	1	25	September
Scientific cultivation of potato	ON	Production and management	1	25	October

		technology of tuber crop			
Production & management of mango orchard	OFF	Orchard management	1	25	October
Scientific cultivation of leafy vegetables	ON	Vegetable cultivation	1	25	November
Production techniques of tomato and brinjal	ON	Production and management technology	1	25	November
Poly tunnel technology in vegetable crops	ON	Protected cultivation techniques	1	25	December
Scientific cultivation of capsicum	OFF	Cultivation of vegetable	1	25	December

Title of training programme	**Venue**	**Thematic Area**	**Duration (Days)**	**Participants**	**Month**
Extension Education					
Building Leadership Skills for Progressive Farmers	ON	Leadership development	1	25	January
Using Social Capital to Enhance Farm Productivity	OFF	Mobilization of social capital	1	25	January
Entrepreneurial Opportunities in Agriculture	ON	Entrepreneurial development	1	25	February
Training programm on Forming Effective Self-Help Groups	OFF	Formation and Management of SHGs	1	25	February
Understanding Group Dynamics in Farming Communities	ON	Group Dynamics	1	25	March
Leadership Development of Progressive Farmers for Technology Dissemination	OFF	Leadership development	1	25	March
Opportunities in Poultry Entrepreneurship	ON	Entrepreneurial development	1	25	April
Introduction to WTO and Its Impact on Agriculture	OFF	WTO and IPR issues	1	25	April
Role of Farmer Groups in Collective Marketing of Agricultural Produce	ON	Mobilization of social capital	1	25	May
Strengthening Farmer Leadership for Climate Smart Agriculture	OFF	Leadership development	1	25	May

Opportunities in Dairy Entrepreneurship	ON	Entrepreneurial development	1	25	June
Leadership for Agri-Startups and Innovation	OFF	Leadership development	1	25	June
Role of Group Dynamics in Technology Adoption among Farmers	ON	Group Dynamics	1	25	July
Strengthening Farmer Groups for Improved Paddy Production	OFF	Mobilization of social capital	1	25	July
Entrepreneurship Opportunities in Seed Production	ON	Entrepreneurial development	1	25	August
Leadership Development for Promoting Integrated Farming Systems	OFF	Leadership development	1	25	August
Mobilization of Social Capital for Improved Vegetable Production	ON	Mobilization of social capital	1	25	Septembe r
Importance of IPR in Agricultural Innovation	OFF	WTO and IPR issues	1	25	Septembe r
Group Decision Making in Agricultural Activities	ON	Group Dynamics	1	25	October
Entrepreneurship in Mushroom Cultivation	OFF	Entrepreneurial development	1	25	October
Linking SHGs to Markets and Opportunities	ON	Formation and Management of SHGs	1	25	November
Collective Action of Farmers for Improved Wheat Production	OFF	Mobilization of social capital	1	25	November
Leadership Development for Farmer Producer Organizations (FPOs)	ON	Leadership Development	1	25	December
Role of Group Dynamics in Technology Adoption among Farmers	OFF	Group Dynamics	1	25	December

Title of training programme	**Venue**	**Thematic Area**	**Duration (Days)**	**Participants**	**Month**
Home Science					
Mushroom Production Technique	ON	Income generation	1	20	January

Nutrition During the Winter Season	OFF	Women and child Care	1	20	January
Value addition of Pineapple	ON	Value addition	1	20	February
Value added product of mushroom	OFF	Value addition	1	20	February
Herbal Gulal Making for income generation	ON	Income generation	2	20	February
Nutritional security through Nutri-Garden	OFF	Household food security by Kitchen Gardening	1	20	March
Drudgery reduction techniques in Agriculture	ON	Drudgery Reduction technologies	1	20	March
millet-based snacks making technique	ON	Capacity building	1	20	April
Preservation of seasonal fruits and vegetables	OFF	Value Addition	1	20	April
Gender Mainstreaming through SHGs	ON	Gender mainstreaming	1	20	May
Pine apple Jam and squash making process	OFF	Enterprise Development	1	20	May
Minimization of nutrient loss while preparing food	ON	Minimization of Nutritional loss	1	20	June
Cost efficient Diet for Adolescent girl	OFF	Designing and development of low/minimum cost diet	1	20	June
Hygiene and Sanitation Practices	ON	Women and child care	1	20	July
Recycling of waste material	OFF	Rural craft	1	20	July
Pine apple Jam and squash making process	ON	Enterprise Development	1	20	August
Gender Mainstreaming through SHGs	OFF	Gender mainstreaming	1	20	August
Development/maintenance of nutria-garden	ON	Nutritional Security	1	20	September
Value added product of makhana	ON	Enterprise development	1	20	September
Mushroom Cultivation Techniques	OFF	Income Generation	1	20	October
Digital Literacy and Online Marketing	ON	Capacity building	1	20	October
Value added product of seasonal fruits and vegetables	OFF	Value addition	1	20	November

Income Generation through millets based food production	ON	Income Generation	1	20	Novembe r
Farm equipment for drudgery reduction	OFF	Drudgery Reduction techniques	1	20	December
Nutritional security through Nutri-Garden	ON	Nutritional Security	1	20	December
			26	520	

Rural Youth training

Title of training programme	Venue	Thematic Area	Duration (Days)	Participants	Month
Agronomy					
Seed Production of Paddy crop	ON	Seed production	5	25	May
Seed Production of Wheat crop	ON	Seed production	5	25	August
Vermicomposting and Organic Waste Management for Income Generation	ON	Income Generation	5	25	October
Horticulture					
Scientific cultivation of dragon fruit	ON	Cultivation of fruits	5	25	January
Mali training for skill development in horticulture	ON	Plant propagation technique	5	25	May
Training, pruning & grafting in mango, guava & citrus crops	ON	Orchard management	5	25	July
Nursery management of vegetable crops and poly tunnel technology	ON	Protected cultivation techniques	5	25	October
Extension Education					
Entrepreneurship Development through Goat Farming	ON	Enterprise Development	5	25	February
Entrepreneurship Development through Natural farming	ON	Enterprise Development	5	25	June
Small Scale Processing of Maize for Rural Entrepreneurship	ON	Small scale processing	5	25	August

Home Science					
Value added product of mushroom	ON	Income Generation	5	20	January
Sewing and apparel designing	ON	Tailoring and Stitching	5	20	April
Soft Toy making	ON	Income Generation	5	20	May
Tie and die techniques	ON	Income Generation	5	20	July
Pineapple preservation through jam and squash preparation	ON	Value Addition	5	20	August
Madhubani painting techniques	ON	Rural craft	5	20	December

Extension functionaries training

Title of training programme	**Venue**	**Thematic Area**	**Duration (Days)**	**Participants**	**Month**
Agronomy					
Modern technology in Agriculture for Crop production	ON	Productivity enhancement in field crops	1	25	January
Nutrient management in paddy crop	ON	Integrated Nutrient management	1	25	June
Importance of Weather forecast and Agro-advisory	ON	Weather forecast	1	25	July
Integrated Nutrient management in maize crop	ON	Integrated Nutrient management	1	25	September
Horticulture					
Hi-tech horticulture production system	ON	Protected cultivation	1	25	January
Production technology of Summer Vegetables	ON	Yield increment	1	25	March
Scientific cultivation of dragon fruit	ON	Layout and management of orchard	1	25	May
Nursery management of horticultural crops	ON	Nursery raising	1	25	October
Extension Education					
Enhancing Group Dynamics for Better Outcomes	ON	Group Dynamics and farmers organization	1	25	March

ICT practices for information and networking among farmers	ON	Capacity Building for ICT applications	1	25	May
Strengthening Agriculture Through Farmers Networks	ON	Information networking among farmers	1	25	July
Role of Extension Personnel in Promoting SHGs in Agriculture	ON	Formation and Management of SHGs	1	25	September
Home Science					
Women empowerment through Income generation activity	ON	Women Empowerment	2	20	April
Health and Nutrition	ON	Women and child care	2	20	June
Jute craft designing and development	ON	Rural craft	2	20	July
Minimization of Nutritional loss and anti-nutritional factor in food	ON	Minimization of Nutritional loss	2	20	September

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	5	270	01	01	02	01
Kisan Mela	2	200	01	01	0	0
Kishan Ghosthi	14	700	0	07	0	07
Exhibition	2	200	01	01	0	0
Ex-trainees sammelan	1	50	0	0	01	0
Special day celebration	10	500	4	4	4	4
Animal health camp	0	0				
Soil health camp	2	130	0	01	0	01
SHG conveners meeting	05	150	01	02	01	01
Farmer Scientist interaction	2	50	01	0	0	01
Scientist visit to farmers field	75	250	15	20	20	20

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	Rabi	Wheat	HD2967	3.7	F/S
2	Rabi	Mustard	TS-38	0.8	TFL

3	Rabi	Potato	Yushi Map	0.2	TFL
4	Rabi	Buck Wheat	Himpriya	0.1	TFL
5	Kharif	Paddy	Sabour Sammpann and Sabour Heera	4.0	F/S
6	Rabi	Makhana	Sabour Makhana-1	0.5	T/L

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	-	Dragon Fruit	Rosa (Red skin with red flesh)	3000 no.
2	Rabi	Tomato	Arka Rakshak	2000 no.
		Chilli	Arka Meghna	2000 no.
		Brinjal	Arka Keshav	2000 no.
		Pineapple (Suckers/Slips)	Kew	50 no.

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)**
1.	Soil testing	100	100	10000

Detail of other special activity/programme

- NICRA
- SCSP
- Natural Farming
- CFLD-Oilseed
- Mal-nutrition