ANNUAL ACTION PLAN

2024

KRISHI VIGYAN KENDRA, BHAGALPUR

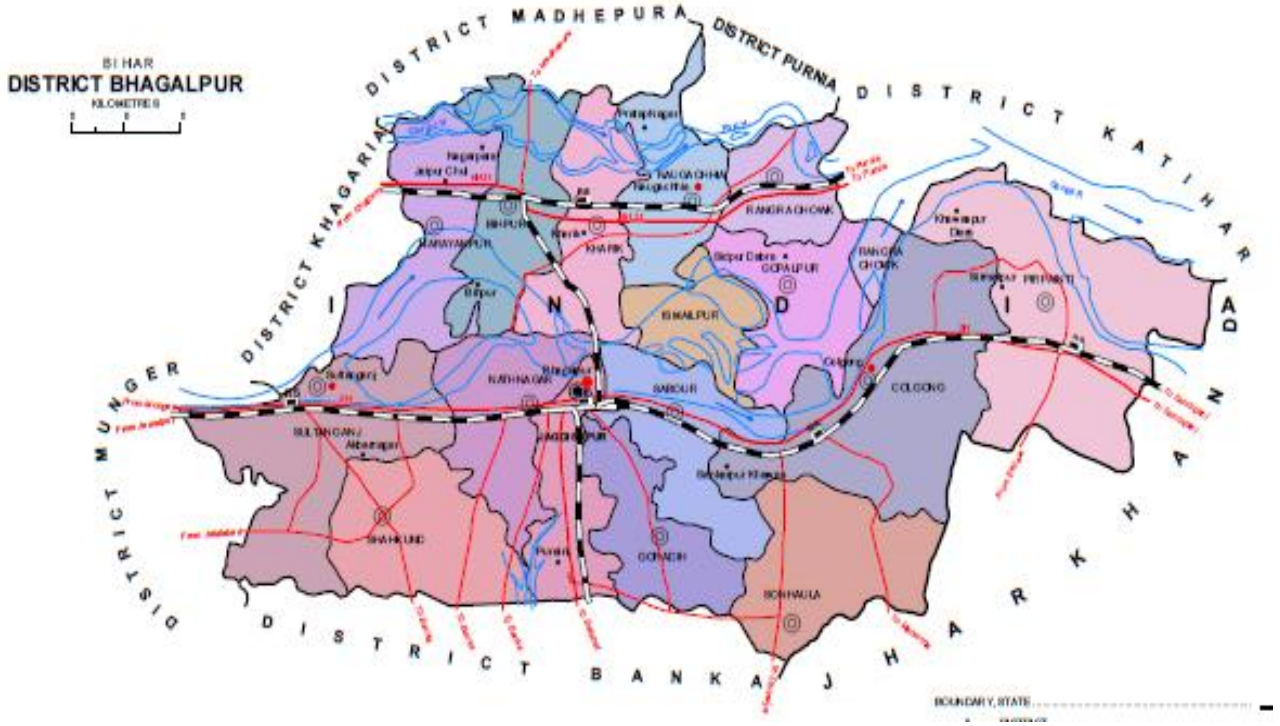
Bihar Agricultural University, Sabour - 813210

Bhagalpur (Bihar)

Brief introduction about KVK, Bhagalpur

Krishi Vigyan Kendra, Bhagalpur is an innovative centre of Indian Council of Agricultural Research (ICAR), Pusa, New Delhi sanctioned vides Letter. No. 18(4)99-NATP dated 01.04.2004 and Krishi Vigyan Kendra, Sabour has established on 1st April 2004 under the administrative control of RAU, Pusa, Samastipur and presently work with Bihar Agricultural University, Sabour, Bhagalpur (Bihar). The economy of the district is characterized by agriculture and the main food crops grown in the area are Paddy, Wheat, Maize, Pulses and Oilseeds, engaging more than 70 per cent of the work force. Horticulture crops commonly grown are Mango, Banana, Litchi and Guava. Among vegetables Tomato, Potato, Brinjal, Cauliflower, onion are the main crop.

Apart from agriculture, other allied activities in the district include Dairy, Goatery, Piggery, Poultry, and Fishery etc. The district can become hub of Agro Processing activity in Mango, Litchi, Banana, Tomato, Maize etc. There is potential for activities like Mushroom cultivation, Medicinal and Aromatic plants, Floriculture, Layer farming and Bee keeping.


BIHAR
DISTRICT BHAGALPUR
KILOMETRES
DISTRICT MADHEPURA
DISTRICT PURNIA
DISTRICT KATIHAR
DISTRICT KHAGARIA
DISTRICT MUNGER
DISTRICT BANKA
JHARKHAND
INDIA
BHAGALPUR
GOPALPUR
BANKA
SULTANGANJ
KAHALGAON
BIHPUR
NATHNAGAR
SHAHKUND
BOUNDARY, STATE

1. Name of the KVK: **Krishi Vigyan Kendra, Sabour, Bhagalpur**

Address	Telephone		E mail
	Office	FAX	
Senior Scientist and Head KVK, Bhagalpur (Bihar) Pin – 813 210	0641 – 2451186	–	bhagalpurkvk@gmail.com http://bhagalpur.kvk4.in

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

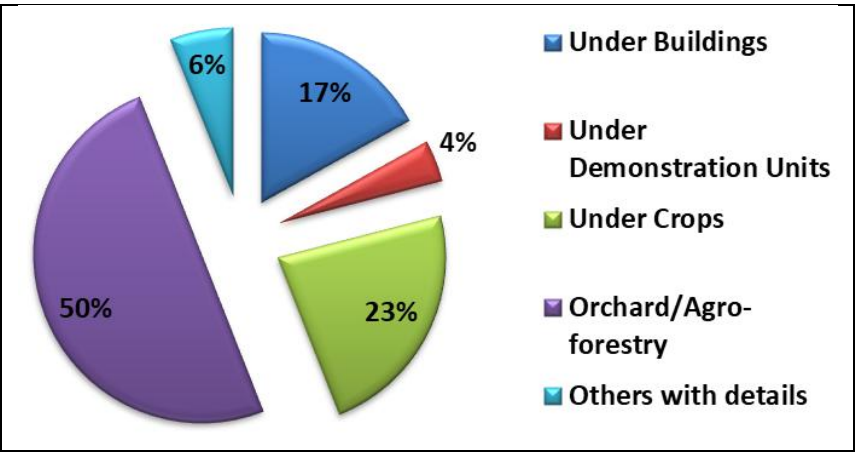
Address	Telephone		E mail
	Office	FAX	
Vice Chancellor BAU, Bhagalpur, Bihar Pin – 813 210	0641 – 2451605	0641 – 2451606	vcbausabour@gmail.com www.bausabour.ac.in

3.Staff Position (As on 01.01.2024)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Permanent/ Temporary	Category
1.	Senior Scientist & Head	Dr. Rajesh Kumar	Senior Scientist & Head	Temporary	-
2.	Subject Matter Specialist	Smt. Anita Kumari	Subject Matter Specialist (Home Science)	Permanent	OBC
3.	Subject Matter Specialist	Er. Pankaj Kumar	Subject Matter Specialist (Agril. Engg.)	Permanent	OBC
4.	Subject Matter Specialist	Dr. Mamta Kumari	Subject Matter Specialist (Horticulture)	Permanent	General
5.	Subject Matter Specialist	Dr. Md. Zeaul Hoda	Subject Matter Specialist (Animal Sci.)	Permanent	OBC
6.	Subject Matter Specialist	Dr. Pawan Kumar	Subject Matter Specialist (Entomology)	Permanent	General
7.	Subject Matter Specialist	Dr. Manish Raj	Subject Matter Specialist (Agronomy)	Permanent	OBC
8.	Farm Manager	Sri Saksham Kumar Sinha	Farm Manager	Permanent	OBC
9.	Programme Assistant	Smt. Rubi Kumari	PA (Lab Technician)	Permanent	SC
10.	Programme Assistant	Anjum Hashim	PA(Computer)	Permanent	OBC
11.	Accountant / Superintendent	Sri Ishwar Chandra	Assistant	Permanent	General
12.	Stenographer	Sri Shashi Kant	Stenographer	Permanent	OBC
13.	Driver (Bolero)	Sri Niranjan Kumar Das	Driver	Permanent	SC
14.	Driver (Tractor)	Sri Rakesh Chandra Jha	-	-	General
15.	Supporting staff	Vacant	Supporting Staff	-	-
16.	Supporting staff	Vacant	Supporting Staff	-	-

4.Total land with KVK (in ha): 10 ha.

Sl. No.	Item	Area (ha)
1.	Under Buildings	1.70
2.	Under Demonstration Units	0.40
3.	Under Crops	2.30
4.	Orchard/Agro-forestry	5.00
5.	Others with details	0.60
	Total	10.00



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

Sl. No.	Farming system/enterprise
1.	Agriculture – Horticulture
2.	Agriculture – Aquaculture – Horticulture
3.	Agriculture – Poultry – Dairy
4.	Agriculture – Poultry – Dairy – Horticulture
5.	Agriculture – Aquaculture
6.	Floriculture – Agriculture – Aquaculture
7.	Agriculture – Horticulture – Beekeeping – Forestry

6.About District

Demographic Features	
Area (in ha.)	256900
No. of Sub-Division	03 (Bhagalpur Sadar, Kahalgaon and Naugachhia)
No. of Block	16
No. of Gram Panchayat	242
No. of Village	1515
No. of Municipalities	3
No. of Municipal Corporations	1
Total Population	3,037,766
Population Density (per sq. km.)	1182/ sq km
Male	1,615,663
Female	1,422,103
SC Population	318,569 10.48(%)
ST Population	67180 2.21(%)

Sex Ratio	940/1000
Literacy rate	31.02 (%)

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

S. No	Agro-climatic Zone	Characteristics
1	Zone-III B	The climate of this zone, lying south of river Ganga is sub-humid, sub-tropical monsoon type of climate with a well marked rainy season of four months.
2	Zone – II (Naugachhia Sub-division)	The climate of this zone, lying north of river Ganga is Sub-humid, subtropical with well marked rainy season. Climate is ranging from sub dry and sub-humid conditions

8.Agro ecological situation

Sl. No.	Agro ecological situation	Characteristics
1.	Diara	Low land *Diara* is flooded every year for about four months (July – October). Medium *Diara* is generally flooded every year, however, upland *Diara* flooded twice in five years for shorter period (mid Aug – Mid Sept.). Uncertain onset & recession of flood causes complete failure of early *Kharif* crops and only one crop (*Rabi*) in a year is certain
2.	Tal	The Tal lands are basin shaped inundated and water retained for a very short period due to fast depletion of soil moisture after recession of flood water, less time is available for land preparation and sowing Rabi crops
3.	Alluvial Plains	The land is almost levelled having slope of 0 – 3 % and the area is suited to rice cultivation

9.Soil types

Sl. No.	Soil types	Characteristics
1.	Diara	Light textured, well drained with free $CaCO_3$ varying between 3-8 %
2.	Tal	Grey to dark grey in colour, poor in drainage medium to heavy in texture. Slightly to moderately alkaline in reaction crack during summer
3.	Alluvial Plains	Grey – Greyish yellow heavy textured soils with cracking

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

Cereals

Crops	Area (ha.)	Production (MT)	Yield (Kg/ha)
Wheat	46378	52831	1139
Paddy	32351	95831	2962
Maize	46062	155808	3383

Pulses

Crops	Area (ha.)	Production (MT)	Yield (Kg/ha)
Chick pea	4614	3248	704
Lentil	2126	595	280
Urad	2177	1990	914
Moong	1182	427	361

Oilseeds

Crops	Area (ha.)	Production (MT)	Yield (Kg/ha)
Rapeseed/ Mustard	2396	2813	1174
Linseed	563	485	861
Sunflower	260	378	1454

Source: District Agriculture Office, Bhagalpur (2017-18)

Fruits

Sl. No.	Crop	Area (ha)	Production (MT)	Productivity (MT/ha)
1.	Mango	7204	692760	10.61
2.	Banana	1032	372550	36.09
3.	Lemon	915	64050	8.12
4.	Guava	638	49210	8.71
5.	Litchi	446	32020	9.37

Source : Asst. Director Horticulture Office, Bhagalpur (2017-18)

Vegetables

Sl. No.	Crop	Area (000, ha)	Production (000, T)
1.	Potato	8.23	150.57
2.	Okra	2.21	29.86
3.	Brinjal	1.71	35.98
4.	Onion	1.64	34.07

Source: Asst. Director Horticulture Office, Bhagalpur (2017-18)

11. Details of operational area / villages

Sl. No.	Name of Taluk	Name of the block	Name of the villages	Major crops & enterprises	Major problems identified (crop-wise)	Identified Thrust Areas
1	Goradih	Goradih	Siyargarh	Nursery of horticultural crops	Connectivity and govt support to rural youth	Marketing
2	Kharik	Kharik	Tulsipur	Litchi and banana	Poor management of orchard and banana crop too	Timely training pruning, management to rejuvenate them, sowing of banana with disease free planting material
3	Kharik	Kharik	Raghopur	Nursery, pointed gourd and other vegetable cultivation	Marketing todistant market	Maintainance of male female raio in pointed gourd, enhance the storability of vegetables, poat harvest management
4	Naugachhia	Naugachhia	Tetri	Nursery, litchi mango and banana crops	Poor management of crops, alternate bearing, sigatoka and panama wilt of banana	Improve the orchard by proper management, control of sigatoka and panama wilt by timely and proper management
5	Gopalpur	Gopalpur	Dharhara	Nursery, mango, litchi and banana	Marketing, poor management of crop, flood	Improvement of orchar by proper management,diversification
6	Sultanganj	Sultanganj	Rashidpur	Nursery and vegetable cultivation	Connectivity and timely seed availability	Seed production of vegetables etc
7	Nathnagar	Nathnagar	Kajraili	Nursery and papaya cultivation	Poor seed availability of papaya market	Seed production of papaya and other vegetable seeds

12. Priority Thrust Areas

Sl. No.	Thrust area
1.	Integrated Crop Management
2.	Rejuvenation and orchard Management
3.	Rainfed Agriculture
4.	Seed production and introduction of high yielding varieties
5.	Small scale fruits and vegetable processing and value addition
6.	Farm mechanization and resource conservation techniques

13. Training programme to be organized (January to December, 2024)

(a) Farmers and farmwomen

Horticulture

Thematic area	Title of Training	No.	Duration	Venue	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Management of orchard	Management of young orchard of mango for better yield	1	2	Off	6-7/01/2024	4	1	1	1	20	3	25	5	30
Management of young orchard	Management of young orchard of litchi	1	2	Off	9-10/02/2024	4	1	1	1	20	3	25	5	30
Management of young orchard	Management of young orchard of mango	1	3	On	14-16/01/2024	4	1	1	1	20	3	25	5	30
Management of young orchard	Management of young orchard of guava	1	2	Off	24-25/02/2024	4	1	1	1	20	3	25	5	30
Management of young orchard	Training& pruning of guava orchard	1	3	On	24-26/03/2024	4	1	1	1	20	3	25	5	30
Grading and standardization	Management of bulbous crop potato for better profitability	1	2	Off	30-31/03/2024	4	1	1	1	20	3	25	5	30
Grading and standardisation	Grading for better marketing and profitability of potato	1	2	Off	12-13/03/2024	4	1	1	1	20	3	25	5	30
Training and pruning in guava	Training and pruning in guava to harvest winter guava	1	5	On	24-28/04/2024	4	1	1	1	20	3	25	5	30
Integrated Crop Management	Scientific cultivation of kharif onion for high remuneration	1	2	Off	18-19/05/2024	4	1	1	1	20	3	25	5	30
Nursery raising of vegetables	Techniques vegetable nursery raising	1	5	On	11-15/05/2024	4	1	1	1	20	3	25	5	30
Integrated Crop Management	Scientific cultivation of kharif vegetables	1	2	Off	4-5/05/2024	4	1	1	1	20	3	25	5	30
Management of orchard	Management of litchi orchard	1	2	Off	1-2/06/2024	4	1	1	1	20	3	25	5	30
Management of orchard	Management of litchi orchard	1	2	Off	8-9/06/2024	4	1	1	1	20	3	25	5	30
Management of mango orchard	Management of mango orchard to control different insect & pest	1	5	On	15-19/06/2024	4	1	1	1	20	3	25	5	30

Thematic area	Title of Training	No.	Duration	Venue	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Propagation of fruit plants	Techniques of fruit plant Propagation	1	2	Off	1-2/07/2024	4	1	1	1	20	3	25	5	30
Propagation of fruit plants	Techniques fruit plant Propagation	1	2	Off	6-7/07/2024	4	1	1	1	20	3	25	5	30
Management of orchard	Management of orchard after harvesting	1	2	Off	3-4/8/2024	4	1	1	1	20	3	25	5	30
Management of orchard	Management of orchard after harvesting of fruits	1	5	On	17-21/08/2024	4	1	1	1	20	3	25	5	30
Orchard management	Mango orchard management against insect-pest	1	2	Off	26-27/08/2024	4	1	1	1	20	3	25	5	30
Nursery raising	Nursery raising of winter flowers	1	2	Off	1-2/09/2024	4	1	1	1	20	3	25	5	30
Training and pruning of guava	Training pruning of guava for better yield	1	2	Off	5 - 6/10/2024	4	1	1	1	20	3	25	5	30
Bulbous crop	Scientific cultivation of gladiolus for better remuneration	1	2	Off	9 - 10/10/2024	4	1	1	1	20	3	25	5	30
Management of potted plants	Management of potted plants for better profit	1	5	On	9 - 13/11/2024	4	1	1	1	20	3	25	5	30
Integrated Crop Management	Scientific cultivation of onion	1	2	Off	24 - 25/11/2024	4	1	1	1	20	3	25	5	30
	Total	**24**	**65**			**96**	**24**	**24**	**24**	**480**	**72**	**600**	**120**	**720**

Animal Science

Thematic area	Title of Training	No.	Duration	Venue	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Disease management	Treatment of mastitis in large animal	2	2	On/ Off	03-04.01.2024 22-23.01.2024	4	1	1	1	20	3	25	5	30
Disease management	Management and control of Parasitic diseases in goats	2	2	On/ Off	01-02.02.2024 21-22.02.2024	4	1	1	1	20	3	25	5	30
Fodder conservation	Application of urea in straw	2	2	On/ Off	04-05.03.2024	4	1	1	1	20	3	25	5	30

Thematic area	Title of Training	No.	Duration	Venue	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
					20-21.03.2024									
Entrepreneur-ship development	composite Fish culture	2	2	On/ Off	01-02.04.2024 24-25.04.2024	4	1	1	1	20	3	25	5	30
Disease Management	Treatment of protozoal diseases in large animal	2	2	On/ Off	02-03.05.2024 28-29.05.2024	4	1	1	1	20	3	25	5	30
Disease Management	Management & treatment of viral diseases in goats	2	2	On/ Off	03-04.06.2024 28-29.06.2024	4	1	1	1	20	3	25	5	30
Disease Management	Importance of immunisation in cow & buffalo	2	2	On/ Off	01-02.07.2024 22-23.07.2024	4	1	1	1	20	3	25	5	30
Disease Management	Management of uterine prolapsed in buffalo	2	2	On/ Off	O6-7.08.2024 27-28.08.2024	4	1	1	1	20	3	25	5	30
Disease Management	Viral diseases of poultry	2	2	On/ Off	02-3.09.2024 26-27.09.2024	4	1	1	1	20	3	25	5	30
Ration formulation	Ration making for cow & buffalo	2	2	On/ Off	03-04.10.2024 28-29.10.2024	4	1	1	1	20	3	25	5	30
Resource Conservation	Integrated farming system, IFS	2	2	On/ Off	04-05.11.2024 26-27.11.2024	4	1	1	1	20	3	25	5	30
Breed Improvement	Artificial Insemination (A.I)	2	2	On/ Off	02-3.12.2024 26-27.12.2022	4	1	1	1	20	3	25	5	30
	Total	**24**	**24**			**96**	**24**	**24**	**24**	**480**	**72**	**600**	**120**	**720**

Agricultural Engineering

Thematic area	Title of Training	No.	Duration	Venue	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Repair & maintenance of farm machinery & implements	Basic tractor servicing & maintenance	01	01	Off	05.01.2024	4	1	1	1	20	3	25	5	30
	Operation & maintenance of various types of Spraying & dusting machine	01	01	Off	06.01.2024	4	1	1	1	20	3	25	5	30
	Basic tractor servicing & maintenance	01	02	On	18.01.2024 to 19.01.2024	4	1	1	1	20	3	25	5	30
	Operation & maintenance of various types of Spraying & dusting machine	01	01	On	20.01.2024	4	1	1	1	20	3	25	5	30
Promotion of farm mechanization for reduce cost of cultivation	Awareness of farm mechanization & custom hiring	01	02	Off	21.01.2024 to 22.01.2024	4	1	1	1	20	3	25	5	30
		01	02	Off	01.02.2024 to 02.02.2024	4	1	1	1	20	3	25	5	30
Promotion of farm mechanization for reduce cost of cultivation	Water management through mechanical method	01	02	Off	24.02.2024	4	1	1	1	20	3	25	5	30
Installation & maintenance of micro irrigation systems	Installation & maintenance of sprinkler & Drip irrigation system	01	02	On	10.03.2024 to 11.03.2024	4	1	1	1	20	3	25	5	30
Repair & maintenance of farm machinery & implements	Knowledge, utility & operation of latest Agril. Equipment	01	02	On	29.04.2024 to 30.04.2024	4	1	1	1	20	3	25	5	30
Promotion of farm mechanization for reduce cost of cultivation	Awareness of farm mechanization & custom hiring	01	02	On	11.05.2024 to 12.05.2024	4	1	1	1	20	3	25	5	30
Promotion of farm mechanization	Operation of Rice Planter & Drum seeder for direct	01	02	Off	24.05.2024 to 25.05.2024	4	1	1	1	20	3	25	5	30

Thematic area	Title of Training	No.	Duration	Venue	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
for reduce cost of cultivation	sowing of rice	01	02	Off	08.06.2024 to 09.06.2024	4	1	1	1	20	3	25	5	30
Repair & maintenance of farm machinery & implements	Repair & maintenance of zero tillage machine	01	02	On	22.06.2024 to 23.06.2024	4	1	1	1	20	3	25	5	30
	Use, maintenance & advantage of power tiller	01	02	Off	06.07.2024 to 07.07.2024	4	1	1	1	20	3	25	5	30
		01	02	On	21.07.2021 to 22.07.2024	4	1	1	1	20	3	25	5	30
	Operation & maintenance of various types of Spraying & dusting machine	01	02	Off	17.08.2024 to 18.08.2024	4	1	1	1	20	3	25	5	30
Installation & maintenance of micro irrigation systems	Installation & maintenance of sprinkler & Drip irrigation system	01	02	On	23.08.2024 to 24.08.2024	4	1	1	1	20	3	25	5	30
Promotion of farm mechanization and RCT	Sowing of Rabi crop through Zero tillage/ Raise bed machine & their calibration	01	02	Off	07.09.2024 to 08.09.2024	4	1	1	1	20	3	25	5	30
		01	02	On	13.09.2024 to 14.09.2024	4	1	1	1	20	3	25	5	30
Use of plastic in farming practices	New advance in low cost poly house/ tunnel	01	02	Off	12.10.2024 to 13.10.2024	4	1	1	1	20	3	25	5	30
Post-harvest technology	Knowledge of post -harvest equipment its utility & operation	01	02	On	18.10.2024 to 19.10 2024	4	1	1	1	20	3	25	5	30
Promotion of farm mechanization and RCT	Sowing of Rabi crop through Zero tillage/ Raise bed machine & their calibration	01	02	Off	08.11.2024 to 09.11.2024	4	1	1	1	20	3	25	5	30
Installation & maintenance of micro irrigation	Installation & maintenance of mini sprinkler	01	02	On	23.11.2024 to 24.11.2024	4	1	1	1	20	3	25	5	30

Thematic area	Title of Training	No.	Duration	Venue	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
systems	system													
Repair and maintenance of farm machinery & implements	Service & maintenance of pump set	01	02	Off	01.12.2024 to 02.12.2024	4	1	1	1	20	3	25	5	30
Promotion of farm mechanization for reduce cost of cultivation	Knowledge, utility & operation of latest Agril. Equipment	01	02	On	15.12.2024 to 16.12.2024	4	1	1	1	20	3	25	5	30
	Total	**25**	**47**			**100**	**25**	**25**	**25**	**500**	**75**	**625**	**125**	**750**

Agronomy

Thematic area	Title of Training	No.	Duration	Venue	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Seed production	Quality seed production techniques of zaid crops	01	02	ON/OFF	06.03.2024 to 07.03.2024	2	1	1	1	22	3	25	5	30
Seed production	Seed production of rabi field Crops	01	02	ON/OFF	12.03.2024 to 13.03.2024	2	1	1	1	22	3	25	5	30
Resource Conservation Techniques	Improved cultivation of zaid pulse crops with RCT	01	02	ON/OFF	02.04.2024 to 03.04.2024	2	1	1	1	22	3	25	5	30
Cropping system	Suitable cropping system for the enhance of profitability	01	02	ON/OFF	18.04.2024 to 19.04.2024	2	1	1	1	22	3	25	5	30
Resource Conservation Techniques	Rice crop establish with direct seeded rice	01	02	ON/OFF	06.05.2024 to 07.05.2024	2	1	1	1	22	3	25	5	30
Integrated Crop Management	Role of Nutrient expert, Crop manager and green seeker for the enhance of profitability	01	02	ON/OFF	14.05.2024 to 15.05.2024	2	1	1	1	22	3	25	5	30
Integrated Nutrient Management	Nutrient Management in field crops for organic farming	01	02	ON/OFF	10.06.2024 to 11.06.2024	2	1	1	1	22	3	25	5	30
Integrated Nutrient	Brown manuring in rice crop	01	02	ON/OFF	18.06.2024 to	2	1	1	1	22	3	25	5	30

Thematic area	Title of Training	No.	Duration	Venue	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Management					19.06.2024									
Resource Conservation Techniques	RCT in Paddy	01	02	ON/OFF	11.06.2024 to 12.06.2024	2	1	1	1	22	3	25	5	30
Seed production	Seed production of Kharif field crops	01	02	ON/OFF	14.06.2024 to 15.06.2024	2	1	1	1	22	3	25	5	30
Weed control	Weed control in transplanted/direct seeded rice	01	02	ON/OFF	18.06.2024 to 19.06.2024	2	1	1	1	22	3	25	5	30
Integrated Nutrient Management	Bio-fertilizer – the tool for present day Agriculture with special emphasis to Blue Green Algae (BGA) for transplanted rice	01	02	ON/OFF	01.07.2024 to 02.07.2024	2	1	1	1	22	3	25	5	30
Weed Control	Weed management in crops and cropping system	01	02	ON/OFF	08.07.2024 to 09.07.2024	2	1	1	1	22	3	25	5	30
Integrated Crop Management	Key elements for enhancing sustainability of Pulse crops	01	02	ON/OFF	19.08.2024 to 20.08.2024	2	1	1	1	22	3	25	5	30
Integrated Crop Management	Precision resource management for enhancing crop productivity and quality	01	02	ON/OFF	02.09.2024 to 03.09.2024	2	1	1	1	22	3	25	5	30
Seed production	Quality seed production techniques of Rabi field crops	01	02	ON/OFF	26.09.2024 to 27.09.2024	2	1	1	1	22	3	25	5	30
Resource Conservation Techniques	RCT in pulses (lentil, chickpea, pea pigeon pea black gram & green gram)	01	02	ON/OFF	30.09.2024 to 01.10.2024	2	1	1	1	22	3	25	5	30
Resource Conservation Techniques	Scientific cultivation of rabi pulses (lentil, chickpea and pea) through ZT	01	02	ON/OFF	14.10.2024 to 15.10.2024	2	1	1	1	22	3	25	5	30
Integrated Crop Management	Agro-technological advancement in Sugarcane production	01	02	ON/OFF	17.10.2024 to 18.10.2024	2	1	1	1	22	3	25	5	30
Resource Conservation	Crop establish of cereals crop with ridge bed	01	02	ON/OFF	24.10.2024 to	2	1	1	1	22	3	25	5	30

Thematic area	Title of Training	No.	Duration	Venue	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Techniques	planting and zero tillage methods				25.10.2024									
Integrated Crop Management	TPS cultivation technique	01	02	ON/OFF	04.11.2024 to 05.11.2024	2	1	1	1	22	3	25	5	30
Weed Control	IWM in Rabi crops	01	02	ON/OFF	11.11.2024 to 12.11.2024	2	1	1	1	22	3	25	5	30
Resource Conservation Techniques	Role of Climate Resilient Agriculture in crop production	01	02	ON/OFF	05.12.2024 to 06.12.2024	2	1	1	1	22	3	25	5	30
INM	Liquid fertilizer uses & application	01	02	ON/OFF	12.12.2024 to 13.12.2024	2	1	1	1	22	3	25	5	30
	Total	**24**	**48**			**48**	**24**	**24**	**24**	**528**	**72**	**600**	**120**	**720**

Plant Protection

Thematic area	Title of Training	No.	Duration	Venue	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Integrated pest management	Integrated Pest and Disease Management in green gram	I	2	Off/ On	06-07 Mar,2024	2	1	1	1	15	5	18	7	25
Integrated Pest management	Pest management in pumpkin		2	Off/ On	15-16 Mar, 2024	2	1	1	1	15	5	18	7	25
Integrated Pest management	Cultural control of insect pest in summer season	II	2	Off/ On	08-09Apr, 2024	2	1	1	1	15	5	18	7	25
Bio-control of pest and diseases	Importance of bio-pesticides in plant protection		2	Off/ On	14-15 May, 2024	2	1	1	1	15	5	18	7	25
Integrated pest and disease management	Management of Nursery pest and diseases in paddy		2	Off/ On	12-13 June, 2024	2	1	1	1	15	5	18	7	25
Integrated pest management	Integrated Pest Management in paddy		2	Off/ On	18,19 June,2024	2	1	1	1	15	5	18	7	25
Integrated Pest management	Pest of stored grain and their management		2	Off/ On	26,27 June,2024	2	1	1	1	15	5	18	7	25
Natural Farming	Preparation and use of Jeewamrit 1,2,3 and	III	2	Off/	10-11 July, 2024	2	1	1	1	15	5	18	7	25

Thematic area	Title of Training	No.	Duration	Venue	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
	Amrit Jal 1,2,3			On										
Integrated Disease management	Integrated Disease management in paddy		2	Off/ On	12-13 Aug, 2024	2	1	1	1	15	5	18	7	25
Integrated disease management	Disease management in bajra		2	Off/ On	21-22 Aug, 2024	2	1	1	1	15	5	18	7	25
Integrated Pest Management	Pest management of banana		2	Off/ On	4-5 Sept, 2024	2	1	1	1	15	5	18	7	25
Integrated disease management	Disease management in Banana		2	Off/ On	19-20 Sept, 2024	2	1	1	1	15	5	18	7	25
Integrated pest management	Integrated pest in cool season vegetables	IV	2	Off/ On	08-09 Oct, 2024	2	1	1	1	15	5	18	7	25
Integrated disease management	Disease management in cole crops		2	Off/ On	17-18 Oct,2024	2	1	1	1	15	5	18	7	25
Integrated Pest Management	Pest management in maize		2	Off/ On	28,29 Oct,2024	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	12-13 Nov, 2024	2	1	1	1	15	5	18	7	25
Integrated Pest management	Pest management in potato		2	Off/ On	15-16 Nov, 2024	2	1	1	1	15	5	18	7	25
Integrated Pest management	Pest management in pulse crop		2	Off/ On	20-21 Nov, 2024	2	1	1	1	15	5	18	7	25
Integrated Disease management	Disease management in Maize		2	Off/ On	04-05 Dec, 2024	2	1	1	1	15	5	18	7	25
Integrated Pest management	Pest management in okra		2	Off/ On	10-11 Dec, 2024	2	1	1	1	15	5	18	7	25
Organic Farming	Use of bio-pesticides in crops		2	Off/ On	16-17 Dec, 2024	2	1	1	1	15	5	18	7	25
	Total		**42**			**42**	**21**	**21**	**21**	**315**	**105**	**378**	**147**	**525**

(b) Rural youths

Horticulture

Thematic area	Title of Training	No.	Duration	Venue	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Nursery raising	Nursery raising of vegetables for income generation	1	5	On	20-25/01/2024	2	1	1	1	22	3	25	5	30
Nursery raising	Nursery raising of ornamentals for income generation	1	5	On	10-15/01/2024	2	1	1	1	22	3	25	5	30
Integrated Crop Management	Scientific cultivation of garma crop	1	5	On	23-27/03/2024	2	1	1	1	22	3	25	5	30
Plant propagation	Technical knowhow of Propagation of fruit crops	1	7	On	1-7/07/2024	2	1	1	1	22	3	25	5	30
Entrepreneurship development	Raising vegetable nursery	1	5	On	17-21/08/2024	2	1	1	1	22	3	25	5	30
Entrepreneurship development	Income generation through potted plants	1	7	On	23-30/12/2024	2	1	1	1	22	3	25	5	30
	Total	**6**	**32**			**12**	**06**	**06**	**06**	**132**	**66**	**150**	**30**	**180**

Animal Science

Thematic area	Title of Training	No.	Duration	Venue	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Entrepreneurship development	Goat farming	1	5	On	05-08.02.2024	4	1	1	1	20	3	25	5	30
Entrepreneurship development	Broiler farming	1	5	On	11-14.03.2024	4	1	1	1	20	3	25	5	30
Entrepreneurship development	Goat farming	1	5	On	13-16.05.2024	4	1	1	1	20	3	25	5	30
Entrepreneurship development	Value addition of milk & its products	1	5	On	15-19.07.2024	4	1	1	1	20	3	25	5	30
Entrepreneurship development	Layer farming	1	5	On	14-17.10. 2024	4	1	1	1	20	3	25	5	30
Entrepreneurship development	Para veterinarian training	1	5	On	18-21.11.2024	4	1	1	1	20	3	25	5	30
	Total	**6**	**30**			**24**	**6**	**6**	**6**	**120**	**18**	**150**	**30**	**180**

Agricultural Engineering

Thematic area	Title of Training	No.	Duration	Venue	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Repair and maintenance of farm machinery & implements	Use, Repair & maintenance of leveler & seeding implements	01	05	On	16.05.2024 to 20.05.2024	4	1	1	1	20	3	25	5	30
Repair and maintenance of farm machinery & implements	Overhauling of diesel/ petrol engine pump set	01	05	On	13.06.2024 to 17.06.2024	4	1	1	1	20	3	25	5	30
Production of small tools & implements	Designing & fabrication of hand operated small tools for income generation	01	05	On	25.07.2024 to 29.07.2024	4	1	1	1	20	3	25	5	30
Production of small tools & implements	Custom hiring of agricultural machinery	01	05	ON	22.08.2024 to 26.08.2024	4	1	1	1	20	3	25	5	30
Repair and maintenance of farm machinery & implements	Use, Repair & maintenance of leveler & seeding implements	01	05	ON	24.10.2024 to 28.10.2024	4	1	1	1	20	3	25	5	30
Production of small tools & implements	Developing skills to manufacturing small hand tools	01	05	ON	14.11.2024 to 18.11.2024	4	1	1	1	20	3	25	5	30
	Total	**06**	**30**			**24**	**6**	**6**	**6**	**120**	**18**	**150**	**30**	**180**

Plant Protection

Thematic area	Title of Training	No.	Duration	Venue	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Bee-keeping	Sustainable Beekeeping and Honey Production technique	I	4	Off/ On	10-13 Jan, 2023	2	1	1	1	15	5	18	7	25
Mushroom production	Mushroom seed production technique	III	4	Off/ On	27-30 Aug, 2024	2	1	1	1	15	5	18	7	25
Mushroom Production	Mushroom cultivation technique	IV	4	Off/ On	23-26 Sep, 2024	2	1	1	1	15	5	18	7	25
Production of	Production of vermi wash		4	Off/	18-21	2	1	1	1	15	5	18	7	25

organic input	and uses in vegetable crops.			On	Dec, 2024									
	Total		**16**			**08**	**04**	**04**	**04**	**60**	**20**	**72**	**28**	**100**

Agronomy

Thematic area	**Title of Training**	**No.**	**Duration**	**Venue**	**Tentative Date**	**No. of Participants**								
						SC		**ST**		**Other**		**Total**		
						M	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**T**
Nutrient management	Role of essential nutrients and their deficiency symptoms in field crops	01	04	ON/ OFF	25.04.2024 to 26.04.2024	2	1	1	1	22	3	25	5	30
Resource conservation techniques	Conservation agriculture concept & adoption strategies	01	04	ON/ OFF	20.06.2024 to 21.06.2024	2	1	1	1	22	3	25	5	30
Weed control	New advances in weed management of field crop	01	04	ON/ OFF	09.09.2024 to 13.09.2024	2	1	1	1	22	3	25	5	30
Integrated crop management	Techniques of organic farming	01	04	ON/ OFF	20.12.2024 to 21.12.2024	2	1	1	1	22	3	25	5	30
	Total	**04**	**16**			**08**	**04**	**04**	**04**	**88**	**12**	**100**	**20**	**120**

(c) Extension functionaries

Horticulture

Thematic area	**Title of Training**	**No.**	**Duration**	**Venue**	**Tentative Date**	**No. of Participants**								
						SC		**ST**		**Other**		**Total**		
						M	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**T**
Management of orchard	Management of orchard through advance techniques for better yield of mango	1	2	on	06-07.07.2024	4	1	1	1	20	3	25	5	30
Management of orchard	Management of litchi orchard for better yield	1	2	on	09-08.08.2024	4	1	1	1	20	3	25	5	30
Training &	Training and pruning	1	2	on	09-10.09.2024	4	1	1	1	20	3	25	5	30

pruning of guava orchard	for better yield													
Integrated Crop Management	Scientific cultivation of banana	1	2	on	11-12.11.2024	4	1	1	1	20	3	25	5	30
		4	**8**			**16**	**4**	**4**	**4**	**80**	**12**	**100**	**20**	**120**

Animal Science

Thematic area	**Title of Training**	**No.**	**Duration**	**Venue**	**Tentative Date**	**No. of Participants**								
						SC		**ST**		**Other**		**Total**		
						M	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**T**
Disaster management	Various Steps taken during flood/climatic disaster	1	2	on	30-31.01.2024	4	1	1	1	20	3	25	5	30
Disease management	Way of transmission of viral diseases, its prevention and control	1	2	on	11-12.03.2024	4	1	1	1	20	3	25	5	30
Climate change	Effect of Global Warming on animal	1	2	on	06-17.05.2024	4	1	1	1	20	3	25	5	30
Diseases management	Different types of infectious diseases in animals	1	2	on	07.08.11.2024	4	1	1	1	20	3	25	5	30
	Total	**4**	**8**			**16**	**4**	**4**	**4**	**80**	**12**	**100**	**20**	**120**

Agricultural Engineering

Thematic area	**Title of Training**	**No.**	**Duration**	**Venue**	**Tentative Date**	**No. of Participants**								
						SC		**ST**		**Other**		**Total**		
						M	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**T**
Use of plastic in farming practices	New advance in low cost poly house/ tunnel	01	02	ON	14.03.2024 to 14.03.2024	4	1	1	1	20	3	25	5	30
Installation & maintenance of drip irrigation systems	New advance in drip Irrigation system	01	02	ON	01.06.2024 to 02.06.2024	4	1	1	1	20	3	25	5	30
Promotion of farm mechanization for reduce cost of cultivation	Awareness of custom hiring & farm mechanization	01	02	ON	01.07.2024 To 02.07.2024	4	1	1	1	20	3	25	5	30
Farm mechanization & RCT	New advance in zero tillage seed cum fertilizer machine	01	02	ON	28.09.2024 To 29.09.2024	4	1	1	1	20	3	25	5	30
	Total	**04**	**08**			**16**	**4**	**4**	**4**	**80**	**12**	**100**	**20**	**120**

Agronomy

Thematic area	Title of Training	No.	Duration	Venue	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Nutrient management	Role of essential nutrients and their deficiency symptoms in field crops	01	02	ON/ OFF	25.04.2024 to 26.04.2024	2	1	1	1	22	3	25	5	30
Resource conservation techniques	Conservation agriculture concept & adoption strategies	01	02	ON/ OFF	20.06.2024 to 21.06.2024	2	1	1	1	22	3	25	5	30
Weed control	New advances in weed management of field crop	01	02	ON/ OFF	09.09.2024 to 13.09.2024	2	1	1	1	22	3	25	5	30
Integrated crop management	Techniques of organic farming	01	02	ON/ OFF	20.12.2024 to 21.12.2024	2	1	1	1	22	3	25	5	30
	Total	**04**	**08**			**08**	**04**	**04**	**04**	**88**	**12**	**100**	**20**	**120**

Plant Protection

Thematic area	Title of Training	No.	Duration	Venue	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Integrated pest management	Integrated pest management in *Kharif* crops.	II	2	Off/ On	20-21 June, 2024	2	1	1	1	15	5	18	7	25
Integrated pest management	Integrated pest management in *Rabi* crops.	IV	2	Off/ On	22-25 Oct, 2024	2	1	1	1	15	5	18	7	25
	Total		**04**			**04**	**02**	**02**	**02**	**30**	**10**	**36**	**14**	**50**

d. Vocational trainings

Thematic Area*	Title	Duration	No. of Course	No. of Participants			
				SC	ST	Others	Total
Repair and maintenance of farm machinery & implements	Overhauling of diesel/ petrol engine & pump	12	01	02	01	21	25
Entrepreneurship development	ICM (multi layer farming)	5	01	5	-	25	30
Entrepreneurship development	Nursery development of vegetables	5	01	5	-	25	30
Entrepreneurship development	Nursery development of seasonal flowers and ornamentals	5	01	5	-	25	30
Goat Farming	Management Goat Farming	5	01	02	01	21	25

Poultry Farming	Management Poultry Farming	5	01	02	01	21	25
	Total	**12**	**01**	**02**	**01**	**21**	**25**

E. Skill development training Programmes

Sl. No.	Name of the Course	No. of Participants	Sponsored By
1.	Micro Irrigation Technician (RPL)	30	BAMETI, Patna
2.	Agriculture extension service provider (RPL)	30	BAMETI, Patna

Action Plan of ARYA Programme

A. <u>Nursery raising</u>

Name of the Course	Duration (Days)	Others		SC		ST		Total
		Male	Female	Male	Female	Male	Female	
Propagation of fruit crops	07	15	10	03	01	01	0	30
Propagation of fruit crops	07	20	05	02	01	02	0	30
Nursery raising of horticultural crops	07	20	05	02	01	02	0	30
Nursery raising of horticultural crops	07	20	05	02	01	02	0	30
Propagation of ornamentals and management of potted plants	07	20	05	02	01	02	0	30
Total		**95**	**30**	**11**	**5**	**9**	**0**	**150**

a. Establishment/develop 15 more units in distant villages

B. <u>Poultry farming</u>

Name of the Course	Duration (Days)	Others		SC		ST		Total
		Male	Female	Male	Female	Male	Female	
Broiler farming	05	15	10	03	01	01	0	30
Layer farming	05	20	05	02	01	02	0	30
Hatchery management	07	20	05	02	01	02	0	30
Total		**55**	**20**	**07**	**03**	**05**	**0**	**90**

C. <u>Fish Farming</u>

Name of the Course	Duration (Days)	Others		SC		ST		Total
		Male	Female	Male	Female	Male	Female	
Composite fish culture	05	15	10	03	01	01	0	30
Nursery management	05	20	05	02	01	02	0	30
Fish seed production technique	07	20	05	02	01	02	0	30
Total		**55**	**20**	**07**	**03**	**05**	**0**	**90**

14. Frontline demonstration to be conducted*

Sl. No.	Crop/ Enterprises	Thrust Area	Thematic Area	Season	Farming situation
1	Wheat	Crop Residue Management through happy seeder	Resource Conservation Technology	Rabi	Irrigated
2	Paddy	Weed management through e-weeder	Weed Management	Kharif	Irrigated
3	Goat	Lower adoption rate of immunization	Disease Management	Kharif/Rabi	-
4	Cattle	Lower adoption rate of immunization	Disease Management	Kharif/Rabi	-
5	Buck	Lack of true breed of goats	Breed Improvement	Kharif/Rabi	-
6	Mango	Insect Incidence, RBC	Integrated Pest Management	Rabi	Irrigated
7	Rajnigandha cultivation	Introduction of cut flowers	Integrated Crop Management	Summer	Irrigated

Animal Science

Sl. No.	Enterprises	Proposed Area (ha)/ Unit (No.)	Technology package for demonstration	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	Goat	2000	Immunization	PPR Vaccine	2000	100	75	50	250	50	450	125	775	225	1000
2	Cattle	500	Immunization	FMD vaccine	500	50	25	25	25	25	150	50	200	100	300
3	Buck	06	Breed improvement	Beetle buck	06	-	01	01	01	01	02	0	04	02	06

Agriculture Engineering

Sl. No.	Crop & variety/ Enterprises	Proposed Area (ha)	Technology package for demonstration	Parameter (Data) in relation to technology demonstrated	Name of Inputs	Cost of Cultivation (Rs.)		No. of farmers / demonstration								
						Demo	Local	SC		ST		Other		Total		
								M	F	M	F	M	F	M	F	T
1	Paddy	2 ha	Weed Management	Field capacity and efficiency of m/c, yield attribute, weed intensity	Seed, Seed treatment	7000/-	8000/-	1	1	1	0	6	1	8	2	10
2	Wheat	2 ha	Resource Conservation Technology	Field capacity and efficiency of m/c, yield attribute, weed intensity	Seed, Seed treatment	12000/-	14000/-	1	1	1	0	6	1	8	2	10

Horticulture

Sl. No.	Crop & variety	Proposed Area (ha)	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	100	Spray of Chloropyriphos + cypermethrine1.5ml /lt of water	Insect Incidence and Economics	Chemicals	20000/-		2	0	2	0	16	0	20	0	20
2	Rajnigandha cultivation	0.40	Pranjal variety of bausabour	Profitability	Tubers	10000/-		**1**	**0**	**1**	**0**	**8**	**0**	**10**	**0**	**10**

Agronomy

Sl. No.	Crop & variety	Proposed Area (ha)	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	2 ha	Conservation Agriculture (Happy Seeder)	Yield and Economics	Seed	10000/-		2	0	0	0	5	3	7	3	10
2	Chickpea	1 ha	ZT/Line sowing Chickpea	Yield and Economics	Seed	10000/-		2	0	0	0	5	3	7	3	10

Plant Protection

Sl. No	Season	Crop	Variety	Technology	Area in ha.	No. of Demonstration
1.	Summer	(Pointed Gourd) Cucurbitaceous crop	Existing Farmer's Variety	Pheromone trap for management of fruit fly @ 30 traps/ha	4.0	20
2.	*Kharif*	Brinjal	Existing Farmer's Variety / Hybrid	Emamectin Benzoate 5 SG for management of Fruit and Shoot borer @ 200 g /ha	4.0	20
2.	*Rabi*	Mustard	Existing Farmer's Variety	Imidacloprid 17.8 SL for the management of aphid @300ml/ha	4.0	10
Total					**12**	**50**

Extension and Training activities under FLD

Activity	Title of Activity	No.	Clientele	Duration	Venue (On/ Off)	No. of Participants								Grand Total
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	
Training	Pre-FLD farmers training	14	PF	2	ON/OFF	10	4	20	6	350	10	400	20	420
Field day	Field day-cum-crop cutting	7	PF	1	OFF	5	2	10	3	175	5	200	10	210
	Total	**21**				**15**	**6**	**30**	**9**	**525**	**15**	**600**	**30**	**630**

* Repeat the above tables and information in Point no. 4 for EACH FLD being proposed.

CFLD (2024 – 25)

Crop	Target	Variety Name	Special Character
Mustard	280 ha	RH – 725	Matures 136 - 143 days Tall, Bold seeded and good germination Oil Content 29-40%, Lower aphid resistant index
Sesame	20 ha	Sabour Tisi – 1	Resistant to bud fly Moderately resistant to rust and alternaria

15. Seed and planting material production by utilization of instructional farm (Crops / Enterprises)

Name of the Crop / Enterprise	Variety / Type	Period From Jan to December 2024	Area (Acre)	Details of Production				
				Type of Produce	Expected Production (quintals)/No.	Cost of inputs (lakh)	Expected Gross income (lakh)	Expected Net Income (lakh)
Mango Plants	Mald Zardalu Bombay	2024	-	Grafted Plant	50000 (No.)	13.00	40.00	27.00
Guava Plants	Allahabad Safeda & L-45	2024	-	Guttae	10000 (No.)	1.50	4.00	2.50
Citrus Plants	Kagji	2024	-	Guttae	5000 (No.)	0.75	2.00	1.25
Fish Seed	Rohu, Katla, Casr etc	2024	-	-	400 (lit.)	2.00	6.00	4.00
Milk, Chicken Duck	- Kadanath	2024	-	-	14000 (lit.) 100 (No.) 50 (No.)	5.00	6.44	1.44
Wheat	HD-2967	2024	2.0 acre	Seed	30 q	0.60	1.20	0.60
Maize	P-3562	2024	1.0 acre	Non-Seed	40 q	0.50	1.0	0.50
Potato	K-Ashoka	2024	1.0 acre	Seed	100 q	1.00	3.00	2.00

16. 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	1000										15	1000
Total	**1000**										**15**	**1000**

17. 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**

2. On Farm Trials to be conducted*

On Farm Trial : 1 (Animal Science)

I.	**Title of the OFT**	**Assessment of performance of sorted and non-sorted semen straw after AI in Heifer under field conditions.**
II.	**Thematic Area**	Milk production.
III.	**Problem diagnosed**	Less used of Male calf and high demand of female calf
IV.	**Production system**	Desired sex (male or female Calf)
V.	**Treatments**	**Farmer practice :** Natural /Artificial Insemination **Tech. option I:** Artificial insemination using frozen female sex sorted semen **Tech. option II:** Artificial insemination using frozen non sex- sorted semen
VI.	**Monitoring Indicator**	Conception rate, Desired sex (male or female Calf), Milk production and B:C ratio
VII.	**Source of Technology (ICAR/AICRP/SAU/ Other, please specify)**	NDRI, Karnal, Haryana and *Bodmer M1 , Janett F, Hässig M, den Daas N, Reichert P, Thun R, Theriogenology. 2005 Oct 15;64(7):1647-55*

ON FARM TRIAL- 2 (Animal Science)

Title	Assessment of different management practices in preventing bovine mastitis
Problem diagnosed/addressed	High incidence of clinical mastitis , decreased milk yield and Low economic return
Major Causes of the problem	Infectious agents and unhygienic management practices
Production system and thematic area	Milk production and Disease Management
Details of technologies selected for assessment	
Farmer practice	Farmer practices : Use of Antibiotics, Anti-inflammatory for treatment against Mastitis
Treatment Options	T.O- I : Vitamin E and selenium supplementation @ 10 ml orally daily for last 30 days before calving
	T.O-II : Blanket dry cow treatment (BDCT) Cefoperazone Sodium suspension IP 10 ml) Intra mammary each quarter immediately after the last milking of lactation +Vitamin E and selenium supplementation @ 10 ml orally daily for last 30 days before calving orally daily for last 30 days before calving
Source of Technology (ICAR/ AICRP/SAU/other, please specify	GBPUAT, Pantnagar

Performance indicator to be recorded	Technical : Udder condition, Milk P.H. Milk colour, C.M.T. test Economics : Total Milk production, B.C. Ratio
No of trial	06
Detail of critical input	Drugs :i) Vitamin E and selenium ii) Cefoperazone Sodium suspension IP 100 ml
Cost of individual critical input	TO-1 : Rs. 240/piece TO-2 Rs. 170/100 ml,
Methodology adopted for problem identification	Farmers System Analysis (Participatory Rural Appraisal (PRA) involving all the stakeholders and farmers)

ON FARM TRIAL- 3 (Horticulture)

i.	**Season**	Kharif
ii.	**Title of the OFT**	Assessment of different bio mulch in mango
iii.	**Thematic Area**	Management of orchard.
iv.	**Problem diagnosed**	Lack of organic carbon in soil .farmers are not adding bio degradable mulch
v.	**Important Cause**	Lots of weed infestation in orchards.
vi.	**Production system**	Management of orchard
vii.	**Micro farming system**	Mulching by different organic mulch
viii.	**Technology for Testing**	Tephrotia and other organic mulch
ix.	**Existing Practice**	No mulching or some farmer practices inter cropping
x.	**Hypothesis**	If suitable bio-mulch are used improved the organic carbon moisture holding capacity of the orchard that will ultimately improved the condition.
xi.	**Objective(s)**	Improvement of orchard conditions that improves the production system of the orchard.
xii.	**Treatments**	➢ **Farmers' Practices : only intercrop turmeric** ➢ **TO_1**: cover the canopy area of ground by tephrotia ➢ **TO_2**: cover with canopy area by straw or other bio mulch
xiii.	**Critical Inputs**	different mulch
xiv.	**Unit Size**	200 m^2
xv.	**No of Replications**	10
xvi.	**Unit Cost**	1500/-
xvii.	**Total Cost:**	15,000/-
xviii.	**Monitoring Indicator**	**organic carbon in soil, moisture and economics**
xix.	**Source of Technology (ICAR/AICRP/SAU/ Other, please specify)**	**RCER, Ranchi, Plandu**

ON FARM TRIAL- 4 (Horticulture)

i.	**Season**	Kharif
ii.	**Title of the OFT**	Assessment of bio-control agent for management of panama wilt in banana.
iii.	**Thematic Area**	Management of orchard.
iv.	**Problem diagnosed**	Farmers do not manage in very early stage of plantation of banana to manage panama wilt.
v.	**Important Cause**	Used of infected planting material.
vi.	**Production system**	Management of orchard.
vii.	**Micro farming system**	
viii.	**Technology for Testing**	ICAR fusicont and Sabour Trichoderma – 1 against the panama wilting in banana
ix.	**Existing Practice**	Indiscriminate use of chemical and not reliable source
x.	**Hypothesis**	If disease management starts in very early stage of plantation spread management is easy.
xi.	**Objective(s)**	Cultivate panama wilt crop so that fetch higher profitability.
xii.	**Treatments**	➢ **Farmers' Practice:** Tissue culture plant. ➢ **Technology option 1:** ICAR fusicont ➢ **Technology option 2:** Sabour Trichoderma - 1.
xiii.	**Critical Inputs**	ICAR Fusicont, Sabour trichoderma -1 etc
xiv.	**Unit Size**	200 m^2
xv.	**No of Replications**	10
xvi.	**Unit Cost**	1500/-
xvii.	**Total Cost:**	15,000/-
xviii.	**Monitoring Indicator**	(i) disease incidence (ii) yield (iii) economics
xix.	**Source of Technology (ICAR/AICRP/SAU/ Other, please specify)**	**CISH, Lucknow**

On Farm Trial – 5 (Agril. Engg.)

i. **Topic:** Assessment of Multi crop planter for sowing of pulses in different field condition.

ii. **Thematic area and production system:** Farm mechanization & RCT and Rice- wheat production system

iii. **Problem identified:** Farmers using broadcasting method for sowing of pulses with reduced production.

iv. **Hypothesis:** The proposed machine will improve the farm income.

v. **Details of technologies selected for assessment/refinement:**

- **Farmers practice:** Broad casting in tilled condition
- **Technology option – I:** Sowing with Zero tillage Multi crop planter (No till condition)
- **Technology option – II:** Sowing with Multi crop planter (Tilled condition)

vi. **Source of technology:** PAU, Ludhiana

vii. **No. of Replication: 10**

viii. **Plot Size: 2000 meter square**

ix. **Critical Input:** Machine operation cost, seed, seed treatment cost, weedicide etc

x. **Cost of Critical input: Rs. 4000/-**

xi. **Total Cost of intervention: Rs. 24000/-**

xii. **Performance indicator: Yield, Yield attributes, economics and machine effective field capacity & efficiency**

xiii. **Involvement of Scientists:** Er. Pankaj Kumar, Dr. A. K. Maurya and Dr. A. K. Sinha

On Farm Trial – 6 (Agril. Engg.)

i. **Topic:** Assessment of Happy Seeder Machine for wheat sowing under crop residue management.

ii. **Thematic area and production system:** Farm mechanization & RCT and Rice- wheat production system

iii. **Problem identified:** Straw burning after combine harvesting due to high labour cost.

iv. **Hypothesis:** The proposed machine will increase the nutrient status of soil & improve the farm income.

v. **Details of technologies selected for assessment/refinement:**

Farmers practice : Broad casting in tilled condition

Technology option – I : Sowing with Happy Seeder incorporating the crop residue

Technology option – II : Removal of crop residue and sowing with Zero Till drill

vi. **Source of technology:** PAU, Ludhiana

vii. **No. of Replication: 06**

viii. **Plot Size: 2000 meter square**

ix. **Critical Input:** Machine operation cost, seed, seed treatment cost, weedicide etc

x. **Cost of Critical input: Rs. 4000/-**

xi. **Total Cost of intervention: Rs. 24000/-**

xii. **Performance indicator: Yield, Yield attributes, economics, machine effective field capacity & efficiency and nutrient status of soil**

xiii. **Involvement of Scientists:** Er. Pankaj Kumar, Dr. A. K. Maurya and Dr. A. K. Sinha

ON FARM TRIAL- 7 (Agronomy)

Topic:	Assessment of different crop establishment methods of Direct Seeded Rice (DSR)
Thematic area:	NRM
Problem identified:	Depletion of ground water table, labour shortage and greenhouse gas emission
Background:	Direct seeded rice (DSR) cultivation is the most feasible alternative approach to puddle transplanted rice (PTR) in India, allowing to saving water (upto 20%), overcome the labour requirement and mitigates the greenhouse emission.
Hypothesis:	All treatment has same yield.
Details of technologies selected for assessment/refinement:	• **Farmers' Practice:**CT PTR • **Tech. Option I:**Dry DSR • **Tech. Option II:** Vattar DSR • **Tech. Option III:** ZT DSR
Source of technology:	CSISA, IRRI
No. of Replication:	5
Plot Size:	200 m^2 each plot
Critical Input:	Seeds, herbicides and display board
Cost of Critical input:	Rs 5500.00
Performance indicator:	**Technical Observation** ✓ No. of effective tillers per m2 ✓ No. of grains per spike ✓ Test weight (g) ✓ Economic yield (q/ha) ✓ Straw yield (q/ha) ✓ Biological yield (q/ha) ✓ Harvest index (%) **Economic indicator** ✓ Cost of cultivation (Rs/ha) ✓ Gross return (Rs./ha) ✓ Net return (Rs./ha) ✓ B:C ratio **Soil parameters** **Initial and after harvest of the crop** • pH • EC • Organic carbon (OC) • Available Nitrogen (N) • Available Phosphorous (P) • Available Potassium (K)

ON FARM TRIAL-8 (Agronomy)

Topic:	Assessment of different herbicide on weed flora and yield in Rabi maize
Thematic area:	Integrated Weed Management
Problem identified:	Low yield of Rabi maize due to weed infestation
Background:	Near about 27-60% yield losses of maize crop due to weeds. Atrazine is commonly used by the farmers for weed control in maize as pre-emergence herbicide; it is not effective against some of the weeds, both grass, and broadleaf weeds as well as the sedge *Cyprus rotundus.*
Hypothesis:	If suitable herbicide use at optimum time, yield losses of maize can be minimize.
Details of technologies selected for assessment/refinement:	• **Farmers' Practice:** Atrazine @ 750 g a.i./ha as Pre/Post emergence • **Tech. Option I:**Tembotrione 120 g a.i./ha at early post-emergence (20 DAS) • **Tech. Option II:** Tembotrione 120 g a.i./ha + Atrazin 625 g a.i./ha at 20 DAS
Source of technology:	IIMR, Ludhiana and ICAR-DWR, 2023
No. of Replication:	7
Plot Size:	200 m^2 each plot
Critical Input:	Herbicides and display board
Cost of Critical input:	Rs 10,000.00
Performance indicator:	• **Technical Observation** ✓ Yield (q/ha) ✓ Weed population/m^2 at 40-50 DAS ✓ Weed dry wt. (g/m^2) at 40-50DAS ✓ Cob length ✓ Number of cobs per plant ✓ Number of grains per cob ✓ Grain weight per cob ✓ 100 grain weight • **Economic indicator** ✓ Gross return (Rs./ha) ✓ Net return (Rs./ha) ✓ B:C ratio

ON FARM TRIAL- 9 (Plant Protection)

i. **Topic:** Management of BPH in Paddy

ii. **Thematic area:** IPM

iii. **Problem identified:** Low yield of paddy

iv. **Background:** Rice BPH has emerged as a serious Pest in rice production worldwide. The Pest is characterized by the drying of paddy crop due to toxin produced by it. It causes considerable losses in terms of grain yield.

v. **Hypothesis:** If suitable chemical insecticides use at optimum time, yield and quality of grain of paddy can be minimize.

vi. **Details of technologies selected for assessment/refinement:**

- Farmers' Practice:(Bleaching powder, Kerosene oil and Kerosene oil with fire in night)
- Tech. Option I: Flonicamid 50% WG (150 g/ha)
- Tech. Option II: Dinotefuran 20% SG (150- 200 g/ha)

vii. **Source of technology:** NCIPM 2023

viii. **No. of Replication:** 8

ix. **Plot Size:** 400 m^2 each plot

x. **Critical Input:** Insecticides

xi. **Cost of Critical input:** Rs 3700/-

xii. **Performance indicator:**

- **Technical Observation**
  - **a.** Pest incidence
  - **b.** No. of hoppers per hill
  - **c.** Yield (q/ha)
- **Economic indicator**
  1. Gross return (Rs./ha)
  2. Net return (Rs./ha)
  3. B:C ratio

ON FARM TRIAL -10 (Plant Protection)

i. **Topic:** Management of whitefly in green gram.

ii. **Thematic area:** IPM

iii. **Problem identified:** Low yield

iv. **Background:** Whitefly is a very serious pest of green gram. Whiteflies weaken plants by sucking vital sap, hindering growth, development, and pod formation. Studies report yield losses ranging from 10% to 30% due to direct feeding alone. Whiteflies serve as vectors for numerous plant viruses, including the devastating Mungbean Yellow Mosaic Virus (MYMV). MYMV infection can cause stunting, yellowing, leaf distortion, and even complete crop failure, leading to potential yield losses of 50% to 80%.

v. **Hypothesis:** If suitable pesticide use at optimum time, yield losses of green gram can be minimize**.**

vi. **Details of technologies selected for assessment/refinement:**

   d. Farmers' Practice: No Pesticide

   e. Tech. Option I: Seed treatment with Thiamethoxam 30% FS@ 10ml/kg seeds

vii. **Tech. Option II:** Thiamethoxam 25% WG @ 100g/ha

viii. **Source of technology:**Tamilnadu Agricultural University, Coimbatore

ix. **No. of Replication:** 8

x. **Plot Size:** 400 m^2 each plot

xi. **Critical Input:** Pesticides

xii. **Cost of Critical input:** Rs 1500/-

xiii. **Performance indicator:**

- **Technical Observation**
  - ✓ Pest incidence
  - ✓ No. of whitefly/ Plant
  - ✓ Yield (q/ha)
- **Economic indicator**
  - ✓ Gross return (Rs./ha)
  - ✓ Net return (Rs./ha)
  - ✓ B:C ratio