DIRECTORATE OF EXTENSION EDUCATION
Report of 26th Extension Education Council Meeting
(From October 2023 to May 2024)

Programmes conducted by DoEE, BAU, Sabour

Workshop for KVKs Scientist

S. NO.	Name of the training	Number of days	Number of persons trained	Date/ Duration	Venue
1.	Eradication of Malnutrition and value added products of millets	02	60	08-09 April, 2024	DoEE, BAU, Sabour
2.	Climate Agriculture Programme and Natural Farming	02	86	12-13 April, 2024	DoEE, BAU, Sabour
3.	OFT Finalization workshop (Agronomy & Soil Science)-cum-training programme	02	82	28-29 May, 2024	DoEE, BAU, Sabour
		Total	**144**		

Workshop for RAWE Students

S. NO.	Name of the training	Number of days	Number of persons trained	Date/ Duration	Venue
1.	Alternate use of Fertilizers	02	63	02-03, Aug, 2023	DoEE, BAU, Sabour
		Total	**63**		

Details of workshop/seminar for progressive farmers/extension functionaries sponsored by BAMETI during 2023-24 in BAU H/Q

Sl. No.	Name of the training	Number of days	Number of persons attend	Date/ Duration
1.	Bihar farmers, Agripreneur, Start-up Industries and Investors meet: 2024 on nutri cereals	02	149	29.11.2023 to 30.11.2023
2.	Digital Agricultural	02	117	18.12.2023 to 19.12.2023
3.	A sustainable approach to millets nutritional security	02	70	26.02.2024 to 27.02.2024
		Total	**336**	

Details of Workshop/Seminar organized under CRA Programme

Sl. No.	Name of the training	Number of days	Number of persons attend	Date/ Duration	Venue
1.	Brain storming workshop on Exploring the potential of carbon credit of Climate Resilient Practices under CRA Programme	01	65	27.11.2023	BAU, Sabour
2.	Workshop on Climate Resilient Agriculture Programme in Bihar; Interventions and Impact	01	122	23.02.2024	KVK, Gaya
		Total	**187**		

Domain specific training programmes offered under BSDM during the year 2023-24

S. N.	Name of the Institute	Topic/ Job Role	Starting Date	Ending Date	No. of Hours	No. of Participants
1.	DoEE, BAU, Sabour	Gardener (Ver-3.0)	03.10.2023	30.12.2023	420	30
					Total	**30**

Capacity building of KVK Functionaries during 2023-24

S. NO.	Name of the training	Number of days	Number of persons trained	Date/ Duration	Venue
1.	Market Led Extension	03	30	17.02.2024 to 19.02.2024	DoEE
2.	Orientation programme of newly recruit SMS	05	41	18.03.2023 to 22.03.2023	DoEE
		Total	**71**		

Details of training programme for progressive farmers/extension functionaries sponsored by BAMETI during 2023-24 in BAU H/Q

Sl. NO.	Name of the training	Number of days	Number of persons trained	Date/ Duration
1.	Adoption and Implantation of Recent Existing Technologies in Agriculture and allied sector	03	25	09.10.2023 to 11.10.2023
2.	Livestock Development: Goatry& Backyard Poultry	03	22	11.10.2023 to 13.10.2023
3.	Start-up in Agriculture and allied sectors	03	20	02.01.2024 to 04.01.2024
4.	Integrated pest and Disease management with special reference to major millets	03	20	08.01.2024 to 10.01.2024
5.	Production technology of millets and its value addition	03	24	12.01.2024 to 14.01.2024
6.	ICTs Agricultural Extension New Concepts: IOT in Agricultural, GIS, AI and Block-chain technologies	03	22	05.02.2024 to 07.02.2024
7.	Current Advances in ICT-enabled Rural Advisory Services	03	30	10.06.2024 to 12.06.2024
		Total	**163**	

Details of training programme for progressive farmers/extension functionaries sponsored by ATMA during 2023-24 in BAU H/Q

Sl. No.	Name of the training	Num ber of days	Number of persons attend	Date/ Duration	Sponsored by
1.	Food Preservation (Tomato)	03	26	26.10.2023 to 28.10.2023	ATMA, Lakhisarai
2.	Sweet Corn & Baby Corn	03	23	01.11.2023 to 03.11.2023	ATMA, Gaya
3.	Advance Cultivation of Vegetable	05	21	06.11.2023 to 10.11.2023	ATMA, Chatra

4.	Cultivation of Coarse cereals and its marketing	05	18	12.12.2023 to 16.12.2023	ATMA, Darbhanga
5.	Vegetable cultivation under CRA	05	20	12.12.2023 to 16.12.2023	ATMA, Darbhanga
6.	Integrated farming system	05	26	26.12.2023 to 30.12.2023	ATMA, Katihar
7.	Production of Coarse Cereals	05	16	28.02.2024 to 03.03.2024	ATMA, Saharsa
8.	Maize crop- production, marketing and processing	04	35	11.03.2024 to 13.03.2024	ATMA, Khagaria
		Total	**185**		

Details of training programme for progressive farmers sponsored by different NGOs during 2023-24

Sl. No.	Name of the training	Number of days	Number of persons trained	Date/ Duration	Sponsored
1.	Mushroom & Vegetable Cultivation	03	22	02.11.2023 to 04.11.2023	LSS, NALANDA
2.	Animal husbandry, fisheries, fruit & vegetable production	03	25	27.12.2023 to 29.12.2023	SISU, Ranchi
3.	Vegetable and Mushroom production	03	25	08.02.2024 to 10.02.2024	LSS, NALANDA
4.	Organic vegetable production and improved goat farming	02	26	18.03.2024 to 19.03.2024	SSEVS, Sitamarhi
5.	Medicinal Plants and High Value Crops	02	43	31.05.2024 to 01.06.2024	PRAGYA, New Delhi
		Total	**98**		

Details of training programme collaboration with MANAGE Hyderabad

S. NO.	Name of the training	Number of days	Number of persons trained	Date/ Duration	Venue
1.	Natural farming	05	17	11.03.2024 to 15.03.2024	MANAGE Hyderabad
		Total	**17**		

Residential training programme organized under State Scheme

Sl. NO.	Name of the training	Number of days	Number of persons trained	Date/ Duration
1.	"Repair of Farm Machineries for Self Employment Generation"	26	25	03.01.2024 to 01.02.24
2.	"Repair of Farm Machineries for Self Employment Generation"	26	25	04.02.2024 to 21.02.2024
3.	"Repair of Farm Machineries for Self Employment Generation"	26	22	02.02.2024 to 02.03.2024

4.	"Repair of Farm Machineries for Self Employment Generation"	26	25	13.03.2024 to 12.04.2024
		Total	**97**	

Details of training programme collaboration with NIAM on Agriculture Marketing

S. NO.	Name of the KVKs	Date/ Duration	Participants
1.	Katihar	28.11.2023 to 30.11.2023	30
2.	Bhagalpur	01.12.2023 to 03.12.2023	30
3.	Nalanda	18.12.2023 to 20.12.2023	30
4.	Rohtas	21.12.2023 to 23.12.2023	30
		Total	**120**

Details of Training Programme organized under CRA Programme

S. NO.	Name of the training	Number of days	Number of persons trained	Date/ Duration	Remarks
1.	Climate Resilient Agriculture and Sustainability of Soil Health	03	35	17-19 February, 2024	AP, PI, Co-PI, RA, TA
2.	E Agrology Application Training Programme	02	18	21-22 March,2024	RA &TA
		Total	**53**		

Training Programme in collaboration with IRRI- ISARC, Varanasi under CRA

During 2023-24 IRRI-ISARC, Varanasi organized 03 training programme for Progressive farmers and KVK personnels in which 100 participants were participated.

S. No.	Name of KVK/ Institute	Number of days	Number of persons trained	Date/ Duration
1.	Farmers (Araria, Khagaria, Sheikhpura, Kishanganj and Lakhisarai)	03	40	20.02.2024 to 22.02.2024
2.	Farmers (Banka, Saharsa, Supaul, Bhagalpur and Madhepura)	03	40	05.03.2024 to 07.03.2024
3.	CRA staff (RA/ TA) and SMS of KVKs	03	20	13.03.2024 to 15.03.2024
		Total	**100**	

BIHAR AGRIULTURAL COLLEGE, SABOUR

Report of 26th Extension Education Council Meeting (From October 2023 to May 2024)

Name of Department: Department of Agronomy

1. **Training (On-Campus)**

Subject/Area of Focus	Type Trainees	No. of Trainees	Month	Duration		
				From	To	No. of Days
Integrated Farming System	Farmers (ATMA, Banka)	30	Dec, 2023	06	08	03
Integrated Farming System	Farmers (ATMA, Banka)	30	Dec, 2023	12	14	03
Nutricereals	Farmers (ATMA Madhubani)	35	Dec, 2023	15	15	01
Weed management of Millets and maize	Farmers	30	Jan, 2024	09	09	01
Integrated weed management in nutricereals	Farmers	25	Jan, 2024	13	13	01
Weed management in different cereal crops	Farmers	25	Jan, 2024	19	19	01
Agronomy of Pulse Crop	Farmers	35	Feb, 2024	10	10	01
Hydroponic Technology	SMS	40	Feb, 2024	13	13	01

2. **Training (Off-Campus)**

Subject/Area of Focus	Name of Trainer Scientist	Venue	Organizing Agency/Funding Agency	Type of Trainees (Farmer/Ext Workers/NGOs)	Date of Training/Duration	No. of Trainees
Hydroponic	Dr. S. K.	Bihpur	ATMA	Farmers	17.10.2023	100

technology	Gupta		Bhagalpur			
Weed management in cereal crops	Dr. Saurabh kr. Chaudhary	Ismailpur	ATMA Bhagalpur	Farmers	19.10.2023	110
Organic farming	Dr. Shambhu Prasad	Rangra chowk	ATMA Bhagalpur	Farmers	28.10.2023	90
Package and practice of rabi crops	Dr. Saurabh kr. Chaudhary	Narayanpur	ATMA Bhagalpur	Farmers	30.10.2023	120
Water management in rabi crops	Dr. Hari Om	Sabour	ATMA Bhagalpur	Farmers	30.10.2023	95
Nutrient management	Dr. Mainak Ghosh	Jagdishpur	ATMA Bhagalpur	Farmers	31.10.2023	115
Water management in rabi crops	Dr. Hari Om	Goradih	ATMA Bhagalpur	Farmers	01.11.2023	85
Round the year fodder production	Dr. S. K. Gupta	Sanhaula	ATMA Bhagalpur	Farmers	02.11.2023	90
Weed management in pulses and oilseed crops	Dr. Shasank Tayagi	Sultanganj	ATMA Bhagalpur	Farmers	02.11.2023	92
Pacakage and practice of rabi pulses	Mr. Pravesh Kumar	Kahalgano	ATMA Bhagalpur	Farmers	03.11.2023	105
Integrated Farming	Dr.	Pirpaiti	ATMA	Farmers	04.11.2023	95

System	Sushant		Bhagalpur			

3. Demonstrations/ Field Trials on Farmer's Fields

Scheme	Demo. Crop	Demo. Type (varietal/ Nutrient/Agronomic) and Package in demo.	Location (Village/Block/District)	No. of Demo.	Total area of demo. (in Ha)	Type and Quantity of input supplied	Impact/yield
FLD-Linseed	Linseed	Agronomic whole package	Bhagalpur, Banka	50	10 ha	2.5 quintal seed	Yield enhancement up to 11% through improved varieties of linseed

4. Kisan Mela/Exhibition/Jhanki/Field days organization & Participation

Extension Activity	Date	Organized by	Location	Nature of Participation (Stall/Gosthi/discussion/visit, etc.)
Jhanki	26 Jan, 2024	BAU, Sabour	BAU, Sabour	Jhanki Exhibition
Kisan mela	17-19 Feb, 2024	BAU, Sabour	BAU, Sabour	Stall, Gosthi, discussion, Kisan prashnotari

5. Kisan Call Centre

Name of Scientist	Date	No. of Farmers call attended (Approx.)	5 most important problem w.r.t. Subject areas	Problems of which solution were not provided due to non-availability of one so far
Pravesh Kumar	03.10.2023	About 10-15	a. Problem regarding management of weeds. b. Problem regarding nutrient management. c. Question related organic farming.	Most of the questions were answered by the scientists. Some of the questions were referred to the Scientist of concerned department.
Dr. Amit Kumar	05.10.2023	About 10-15		
Dr. Birendra Kumar	12.10.2023	About 10-15		
Dr. S.S. Achrya	12.10.2023	About 10-15		
Dr. Sunil Kumar	13.10.2023	About 10-15		

Dr. Seema	16.10.2023	About 10-15	d. Question regarding weather forecasting. e. Question regarding disease and insect pest.	
Dr. Mainak Ghosh	17.10.2023	About 10-15		
Dr. Shambhu Prasad	20.10.2023	About 10-15		
Dr. Saurabh Kr. Choudhary	26.10.2023	About 10-15		
Dr. Sushant	30.10.2023	About 10-15		
Mr. Pravesh Kumar	01.11.2023	About 10-15		
Dr. Arnad Roy Chowdhury	02.11.2023	About 10-15		
Dr. S. Tyagi	06.11.2023	About 10-15		
Dr. Birendra kumar	10.11.2023	About 10-15		
Dr. S.S. Achrya	10.11.2023	About 10-15		
Dr. Sunil Kumar	13.11.2023	About 10-15		
Dr. Shambhu Prasad	21.11.2023	About 10-15		
Dr. Sushant	23.11.2023	About 10-15		
Dr. Arnad Roy Chowdhury	02.12.2023	About 10-15		
Dr. S.Tyagi	08.12.2023	About 10-15		
Dr. Subhashisa Praharaj	09.12.2023	About 10-15		
Dr. Subhashisa Praharaj	11.12.2023	About 10-15		
Dr. Mainak Ghosh	14.12.2023	About 10-15		
Dr. Gayatri Kumari	20.12.2023	About 10-15		
Ms. Shweta Kumari	28.12.2023	About 10-15		
Dr. Arnad Roy Chowdhury	03.01.2024	About 10-15		

Dr. S. Tyagi	04.01.2024	About 10-15		
Dr. Sunil Kumar	04.01.2024	About 10-15		
Dr. Raghubar Sahu	05.01.2023	About 10-15		
Dr. S.S. Acharya	05.01.2023	About 10-15		
Dr. S. K. Choudhary	06.01.2024	About 10-15		
Ms. Shweta Kumari	08.01.2024	About 10-15		
Dr. Mainak Ghosh	10.01.2024	About 10-15		
Dr. Birendra Kumar	18.01.2024	About 10-15		
Mr. Pravesh Kumar	24.01.2024	About 10-15		
Mrs. Archana Kumari	25.01.2024	About 10-15		
Dr. Gayatri Kumari	29.01.2024	About 10-15		
Dr. Subhashisa Prahraj	30.01.2024	About 10-15		
Dr. S. K. Gupta	31.01.2024	About 10-15		
Dr. Arnab roy Chowdhury	03.02.2024	About 10-15		
Dr. Sunil Kumar	05.02.2024	About 10-15		
Dr. Raghubar Sahu	06.02.2024	About 10-15		
Dr. S.S. Acharya	06.02.2024	About 10-15		
Dr. S. K. Choudhary	07.02.2024	About 10-15		
Ms. Shweta Kumari	08.02.2024	About 10-15		
Dr. Sushant	12.02.2024	About 10-15		
Dr. Subhashisa Prahraj	20.02.2024	About 10-15		
Mrs. Archana	28.02.2024	About 10-15		

Kumari				
Dr. gayatri Kumari	29.02.2024	About 10-15		
Dr. Alisha Kumari	04.03.2024	About 10-15		
Dr. Raghubar Sahu	06.03.2024	About 10-15		
Dr. S.S. Acharya	06.03.2024	About 10-15		
Dr. S. K. Choudhary	07.03.2024	About 10-15		
Ms. Shweta Kumari	11.03.2024	About 10-15		
Dr. Gayatri Kumari	11.03.2024	About 10-15		
Mrs. Archana Kumari	13.03.2024	About 10-15		
Dr. Garima Singh	14.03.2024	About 10-15		

Name of Department: Agricultural Engineering, BAC, Sabour

1. Training (On-Campus) :

Subject/Area of Focus	Type of Trainees	No. of Trainees	Month	Duration		
				From	To	No. of Days
Farm Mechanization	Mechanic	25	Jan. 24- Feb, 24	03.01.24	01.02.24	26
Farm Mechanization	Mechanic	25	Jan. 24- Feb, 24	23.01.24	21.02.24	26
Farm Mechanization	Mechanic	25	Feb,24 – Mar, 24	02.02.24	02.03.24	26
Farm Mechanization	Mechanic	25	Mar,24 – Apr, 24	13.03.24	11.04.24	26
BSDM Service and Maintenance Technician- Farm Machinery	Mechanic	30	Mar,24- May,24	15.03.2024	28.05.24	53

2. Training (Off-Campus) :

Subject/Area of Focus	Name of Trainer scientist	Venue	Organizing Agency/ Funding Agency	Type of Trainees	Date of Training/ Duration
Krishi Yantrikaran Mela 2023-24	Kumar Satya Prakash	कृषि विभाग, भागलपुर	कृषि विभाग, भागलपुर	Farmers	30.01.2024

Krishi Yantrikaran Mela 2023-24	Kumar Satya Prakash	कृषि विभाग, भागलपुर	कृषि विभाग, भागलपुर	Farmers	31.01.2024

3. Participation in State/District/ Block level meetings regarding current/ Future Programme of Extension nature

Date	Name of Participating Scientist	Agenda/ Issue of Meeting	Organizing Unit/ Department	Venue
13-15 .03. 2024	Kumar Satya Prakash	कृषि ज्ञान वाहन मे लगे उपकरणो का तकनीकी प्रसिक्षण	Director BAMETI	Patna
12-13.04. 2024	Brijesh Kumar	Planning and Evaluation of CRA project	BAU, Sabour	Sabour
03.05.2024	Brijesh Kumar	Namo Drone Didi	Depp of Agriculture, GoB	Patna

4. Number of Telephonic Calls/ Letters of farmers received, problems raised & solutions given

Name of Scientist	No. of Telephonic Calls from		No. of Letters from		Major Problems raised	Researchable issue identified, if any
	farmers	youth	farmers	Youth		
Dr. Sanoj Kumar	**5**	**10**	**0**	**0**	Regarding Happy seeder. Super seeder, Sprayer, Laser land leveller and Mini tiller	**No**

5. Plant Health Clinic duties performed:

Sr. No.	Date	Name of Scientist
1.	27.12.2023	Kumar Satya Prakash
2.	18.01.2024	Kumar Satya Prakash
3.	19.02.2024	Kumar Satya Prakash
4.	19.03.2024	Kumar Satya Prakash
5.	20.04.2024	Kumar Satya Prakash
6.	19.05.2024	Kumar Satya Prakash
7.	19.01.2024	Brijesh Kumar
8.	20.02.2024	Brijesh Kumar

6. Any other (Specify) :

Popular article:

1. अशोक कुमार, सतीश कुमार, सनोज कुमार "आधुनिक कृषि यंत्रों का परिचालन एवं रखरखाव" , तकनीकी खेती से सतत आत्मनिर्भरता , BAU, Sabour स्मारिका किसान मेला (17-19.02.2024) ISBN: 978-81-968687-5-8 176-180, pp: 176-180.

2. सतीश कुमार, अशोक कुमार, सनोज कुमार , अमरेन्द्र कुमार "धान की खेती की आधुनिक जानकारी" , तकनीकी खेती से सतत आत्मनिर्भरता , BAU, Sabour स्मारिका किसान मेला (17-19.02.2024) ISBN: 978-81-968687-5-8 176-180, pp: 210-212.
3. सतीश कुमार, सनोज कुमार, अशोक कुमार "गहाई (मड़ाई) यंत्रों का परिचालन एवं रखरखाव की जानकारी" , BAU, Sabour स्मारिका किसान मेला (17-19.02.2024) ISBN: 978-81-968687-5-8 176-180, pp: 258 -261.

Leaflets:

- खर पतवार नियंत्रण हेतु आधुनिक यंत्र
- पौधा संरक्षण हेतु आधुनिक यंत्र
- फसल कटाई के आधुनिक यंत्र
- सौर बबल शुष्कक
- दालमिल : एक अभिनव गृह उद्योग
- एस. टी. आर. शुष्कक

Proposed Action Plan
(June 2024 to September 2024)

Extension publication: 4
Radio Talk: 4
University YouTube channel video preparation: 2
Plant Health Clinic duties: 6

NALANDA COLLEGE OF HORTICULTURE, NOORSARAI, NALANDA

Report of 26th Extension Education Council Meeting
(From October 2023 to May 2024)

State Level Bagwani Mahotasava / Pushpa Mahotasava award winner students during 2023-24:

Sl. No.	Name of Students	Batch	Event	State Level	Money
01	Md. Ahmad Hussain	2021-22 (UG)	Vegetable Carving	3rd Prize	3000
02	Shreyanshi	2022-23(UG)	Vegetable Carving	3rd Prize	3000

Books (Authored/Edited)

1. Singh PK, Vishwkarma R, Singh B, Gupta SK, Kumar M, Kumar S, Singh S, Sahu R, Panday N, **Kumar Ajeet** & Kumar A (2024) **Kishan Mela Souvenir-2024**, Published by BAU, Sabour (ISBN 978-81-968687-5-8).
2. Karthikeyan C., Pandey, A.K and **Kumari Neeru** and Kumar. M (2023). Soil, Aquatic and Agricultural Microbiology. First edition, AGBH Books, Bhopal, M. P. India, ISBN: ISBN 978-81-19025-83-1
3. Sharma, M.K., **Kumari Neeru., N** Pandey, A.K. and Kumar. M. (2023). Management of Water Resources in Agriculture. First edition, AGBH Books, Bhopal, M.P. India, ISBN: ISBN 978-81-962414-8-3
4. Sharma, M.K., Pandey, A.K., **Kumari Neeru** and Kumar. M (2023). Natural Resource Management for Sustainable Agriculture. First edition, AGBH Books, Bhopal M.P. India, ISBN: ISBN 978-81-19338-33-7
5. Dr. Ajeet Kumar Editor of Kishan Diary-2024, published by BAU- Sabour

Book chapters

1.Jha AK, Singh RN and **Kumar Ajeet (2024)** वर्मी कोम्पोस्टिंग: जैविक खेती और स्वस्थ् पर्यावरण के लिए उत्तम तकनीकि; Kishan Mela Souvenir-2024, Published by BAU, Sabour PP.365-368. (ISBN 978-81-968687-5-8)

2 रंजु कुमारी, अनिल कुमार सिंह, **दिव्या तिवारी** और निकहत याश्मीन, आज़मी, 2018। ड्रैगन फ्रुट का लें भरपूर उत्पादन।।स्मारिका (किसान मेला–2024) प्रसार शिक्षा निदेशालय, बिहार कृषि विश्वविद्यालय, सबौर, भागलपुर, pp.244–246। ISBN: 978-81-968687-5-8

3.सुनील कुमार यादव 2024. संरक्षित खेती के अंतर्गत सब्जियों में एकीकृत नाशीजीव प्रबंधन. तकनीकी खेती से सतत आत्मनिर्भरता. पेज 169–175. ISBN: 978-81-968687-5-8

Technical Bulletins: .

1. B.N. Saha, S.K. Dutta, **S.S. Solankey**, S. Saha, A. Nag, D.K. Verma and K. Satyanarayana (2024). Micronutrient nutrition of vegetable crops widely cultivated in Bihar. Published by DKAC, Kishanganj(BAU Communication No. 1647/240229).
2. **S. S. Solankey**, A.P. Singh and R. Kumar (2024). आलूबीजउत्पादनकीआधुनिकतकनीक. Published by NCOH, Noorsarai(BAU Communication No. 1632/240213).

3. M. Pal and **S. S. Solankey** (2023). स्ट्रॉबेरीकीउन्नतउत्पादनतकनीक.Published by NCOH, Noorsarai(BAU Communication No. 1576/231026).

4. Bhardwaj A,Verma R B,Kant K,Akhtar S,Singh V K,Shree S,Singh A B,Adarsh A,Singh AK.(2024.).**पोलीहाउस में बीन्स की खेती**.Hort.(4-2023 to-24).BAU Communication Number 1631/240212.

5. Singh V K, Verma R B,Kant K,Akhtar Bhardwaj A,S, Shree S,Singh A B,Adarsh A,Singh AK.(2024.).**सब्जी की फसल हॉर्मोन का उपयोग.** Hort.(**2**-2023 to-24).BAU Communication Numbe 163**0**/240212.

Technical folders/ Leaflets etc.:

1. रीमा कुमारी सजीदा बनू पंकज कुमार और परवीन फातिमा (२०२४) ऊतक सम्वर्धन एम एरोपोनिक विधि से केसर का उत्पादन. किसान मेला २०२४ में पब्लिश्ड
2. B.N. Saha, S.K. Dutta, **S.S. Solankey**, S. Saha, A. Nag, D.K. Verma and K. Satyanarayana (2024). Micronutrient nutrition of vegetable crops widely cultivated in Bihar. Published by DKAC, Kishanganj (BAU Communication No. 1647/240229).
3. **S. S. Solankey**, A.P. Singh and R. Kumar (2024). **आलूबीजउत्पादनकीआधुनिकतकनीक**. Published by NCOH, Noorsarai (BAU Communication No. 1632/240213).
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Popular Article:

1) रंजु कुमारी, अनिल कुमार सिंह, **दिव्या तिवारी,** रजनीश सिंह एवं निकहत यासमीन आज़मी (2024)। स्वाद में कड़वा लेकिन सेति के लिए फायदेमंद है करेला। कृषक संदेश (गरमा विशेषांक), 22.24।
2) महेन्द्र पाल, विजय कुमार, दिव्या तिवारी एवं अनिरुद्ध प्रताप सिंह (2023)। भारत सरकार की कृषिगत–एवं अन्य जन–लाभकारी योजनाएंः जानकारी एवं परिदृश्य। कृषि कुंभ, 03(05): 89–95।
3) महेन्द्र पाल, विजय कुमार, दिव्या तिवारी एवं अनिरुद्ध प्रताप सिंह (2023)। ताड़ (पामिराह पाम): वृक्ष एक उपयोग अनेक। कृषि लोक, 03(04): 157–162।
4) हेमंत कुमार सिंहए **शशांक शेखर सोलंकी**ए अनुपम आदर्श और तेज प्रताप)2024(ण आम के मंजर एवं फल झड़ने की समस्या एवं प्रबंधनए कृषक संदेशए जनवरी-2024 ;गरमा विशेषांक(ए अंक-45ए वर्ष-13ए पृष्ठ संख्या 31.32ण
5) **शशांक शेखर सोलंकी**ए एस .बी .सिंह एवं अंजनी कुमार ;2023द्धण श्हरमन -99ष सेब भारत के मैदानी क्षेत्र के लिए वरदानए कृषक संदेशए अप्रैल: 2023ए अंक -38 वर्ष-11ए पृष्ठ संण 29.30ण
6) भोलानाथ साहाण **एस.एस .सोलंकी**ए अरिन्दम नागए ए.के .सिंहए डी.के .वर्माऔर एस.के .दत्ता ;2023द्धण अजैविक तनाव वाले वातावरण के तहत पोषक तत्वों से भरपूर विकल्प के रूप में कम उपयोग किए गए बाजराएकृषक संदेशए जूनः 2023ए अंक -40 वर्ष-11ए पृष्ठ संण :28.30ण
7) **शशांक शेखर सोलंकी**ए संगीता कुमारीए रणधीर कुमारए एन .वाइ .आजमी और के .के .सिंह)2023द्धण बैंगन की वैज्ञानिक खेती एवं देखभाल । फल -फूलए जनवरी -फरवरीए 2024। पृष्ठ संख्या.6 .7ण
8) कमलेश कुमार सिंहए शिव शंकर प्रसादए संजय कुमार सिंहए कुमारी सपनाए सुनीता कुमारी एवं **शशांक शेखर सोलंकी** (2023द्धण प्राकृतिक खेती में मल्चिंग का महत्व एवं उपयोगिता। आधुनिक किसानए जनवरी - जूनए 2023ए पृष्ठ संख्या 92.93 ;ैच्छ 09745270द्धण
9) संजीव कुमार, सी एस आजाद, अमरेंद्र कुमार और राकेश कुमार (२०२३) श्रीअन्न में समेकित रोग प्रबन्धन, खेती, दिसंबर, पृष्ठ संख्या १७–१६
10) संजीव कुमार, रमेश नाथ गुप्ता, चंद्रशेखर आजाद और हंसराज हंस (२०२३) मसूर के उकठा रोग का समेकित प्रबंधन खेती मई पृष्ठ संख्या ४–५ कुमारी मधुमाला एभारत में कम उपयोग किए गए फलों की आनुवंशिक विविधता पर्यावरणीय स्थिरता के लिए द्य कृषि कुम्भए जनवरी 2024ए पृष्ठ संख्या.58.66

11)कुमारी मधुमाला ए करणजीव कुमार॰ गौतम कुणाल ॰ सुमन कुमारी ध क्लाइमेट रेसिलिएंट एग्रीकल्चर द क्लाइमेट स्मार्ट विलेज ध कृषि कुम्भए मार्च2024ए पृष्ठ संख्या.40.42प 12) कुमारी मधुमाला ए करणजीव कुमार एथाई सेब की खेती किसानो की आय डुगुनी करने का सुगम रास्ताद्य कृषि कुम्भए फरवरी 2024ए पृष्ठ संख्या.15.16प
Success Stories: 1द्ध एम.डी. ओझाए एस॰एस॰ सोलंकीए अनुराधा सिन्हाए आलमगीर अनवरए सतीश कुमार एवं आर.के .सोहाने) 2024 .(बारहवा पास कृषक बने सफल व्यावसायिक आलू बीज उत्पादक । कृषक संदेशए जनवरी-2024)गरमा विशेषांक(ए अंक-45ए वर्ष-13ए पृष्ठ संख्या 31 – 32प 2) एम॰डी॰ ओझाए एस॰एस॰ सोलंकीए अनुराधा सिन्हाए ए. पी. सिंहए आलमगीर अनवर एवं आर.के .सोहाने) 2024 .(उच्च तकनीकी आलू बीज उत्पादन से आत्मनिर्भर बने: श्री जतन कुमार । कृषक संदेशए फ़रवरी-2024ए अंक-47ए वर्ष-13ए पृष्ठ संख्या 13 – 14प

Participated in Rabi/ Kharif Mahotsava/ Kisan Mela/ZREAC:

1.	Dr.C.S.Azad	Kharif Mahaabhiyaan, Integrated disease mangement in rice	05/06/2023
2.	Dr.C.S.Azad	Kharif Mahaabhiyaan, Scientific cultivation of Button and Oyster Mushroom,	08/06/2023
3.	Shashikant, Dr . R.B.Ramam.Dr Saheena Praveen,Miss Dhyanananda	Participated & exhibited the NCOH stall in University Kisan Mela - 2024.	17-19 Feb, 2024
4.	All scientist	Participated in field day programme on potato seed production at Jamunapur village of Noorsarai block.	23.02.2024
5.	Dr. Papia Biswas	Oyester mushroom production and value addition	15.03.2024
6.	Dr. Papia Biswas	Button mushroom production and marketing	16.03.2024
7.	Shashikant,Dr .R.B.Ramam. Dr. Shashank Shekhar Solankey,Dr.Birendra Prasad,Dr.Vinod kumar,	Kisan Mela at KVK, Harnaut	13th March, 2024
8.	Dr.Seema	Mushroom ke Phaiyde evam uttpadanTaknik in Rabi Mahabhiyan at Harnaut	25/10/2023
9.	Shashikant	Use of ICT In Agriculture production in Kharif mahaabhiyan at Chandi	06-06-2023
10.	Shashikant	Mushroom ke Phaiyde evam use se bane wale bibheen udat ki jankari Mahabhiyan at NagarNausa	04-11-2023
11.	Dr. Seema, Shashikant,	Participated in ZREAC meeting(Rabi) for	11th

	Sanjay singh ,Vinod Kumar	Zone-IIIB on at ARI, Patna.	August2023
12.	Dr. Divya Tiwari, Dr. Jaya Kumari	Kharif Workshop at Krishi Bhawan, Patna for horticultural crops	04/04/2024
13.	Karanjeev Kumar	Stall installation & Demonstration in Kisan mela-2024 (BAU SABOUR)	

Participation in Conference/Seminars/Workshops

i. **National:**

S. No.	Seminar/Symposia/Conference / Workshop	Organized by/at	Date
1.	National Seminar on MPTPIEG (6-7 Feb)	BPSAC, Purnea	6-7 Feb, 2024
2.	"Career opportunities and new avenues in plant Biotechnology and Bioinformatics"	CABT, Sabour	22-02-2024
3.	New Paradigm in Biotechnology and Molecular Biology	CABT, Sabour	22-05-2024
4.	Brainstorming Workshop on Horticulture, HRC, DKAC, Kishanganj, BAU, Sabour, Bihar, India.	HRC, DKAC, Kishanganj, BAU, Sabour	08-09 Feb., 2024
5.	*Conference-cum-Workshop on Traditional Super Foods: Maize, Millets and Makhana*	MBAC, Saharsa (BAU, Sabour)	6-8 December 2023
6.	Kharif Workshop for horticultural crops Dr. Divya Tiwari, Dr. Jaya Kumari	Krishi Bhawan, Patna	04/04/2024
7.	Brainstorming Workshop on Horticulture, HRC, DKAC, Kishanganj, BAU, Sabour, Bihar, India.	HRC, DKAC, Kishanganj, BAU, Sabour	08-09 Feb., 2024
8.	workshop on Bihar farmer, agripreneur, start-up, industry and investors meet-2023 on nutri cereals	BAU ,Sabour	29-30 Nov., 2024
9.	Climate smart practices in agricultre and allied science for sustainable development	Aastha Foundation Meerut	15-03-24 to 30-03-24
10.	Future Prospects of Crop Biofortification in India: An Antidote to Malnutrition	MANAGE, Hyderabad	Nov. 7-9, 2023
11.	Recent Approaches for Production & Value Addition of Millets (Shree Anna) in Changing Climate Scenario	Lucknow	29 Sep., 2023
12.	Livelihood and Food Security through Agriculture and Applied Sciences (LFSAAS-2023)	Ranchi	5 Nov., 2023
13.	Resource conservation and Utilization for Sustainable Agricultural Development In Indian Perspective	Janta Mahavidyalaya Ajitmal, U.P.	15-16 Feb., 2024
14.	3rd National Conference on Livelihood and Food Security through Agriculture and Applied Science	Society for Agriculture Innovation and Development (SAID), Ranchi at DSPMU, Morabadi, Ranchi	5th November, 2023

International:

S. No.	Seminar/Symposia/Conference / Workshop	Organized by/at	Date
1.	International conference on Advanced Agricultural Technologies for Self Reliant Farmers and Developed India.	KVK, Piprakothi, RPCAU, Pusa, Samastipur, Bihar.	11.02.2024
3.	International Conference on Biorevolution- Pioneering Innovations in Life Sciences(BIO-PILS-2024)	Dept. of Biotechnology, PSGR Krishnammal College for woman, Coimbatore	21-22 March, 2024.
4.	International Conference on Decarbonizing Agriculture	T.M.A Pai International Convention Centre, Mangalore, KA, Bharat	25-27 November,2023

Training Programmes/Summer/Winter course attended:

S. No	Training Programmes / Summer / Winter School	Organized by/at	Date
1.	Winter school-cum-International Training programme (online)	Just Agriculture, AEEFWS (Agri Environmental Education and Farmers Welfare Society in collaboration with PDKV, Akola	30 days (1-30th January 2024)
2.	NEP 2020Orientation & Sensitization Programme	Indian Institute of Tchnology	18-03-2024 to 31-03-2024
3.	21Days Winter School in Online Mode on "Emerging Problems & Recent Advances in Applied Science: Traditional & Innovative Approaches"	Astha Foundation, Meerut (U.P.) India	08-28 February, 2024
4.	TOT for the qualification pack of Mushroom Grower(Entrepreneur) (AGR/Q7803)-v3.0conforming to National Skill Qualification Framework Level-4, Date of issue:04/12/2023.	ASCI, New Delhi	10days

Organization of Workshop/Conference/Symposia/Summer/Winter School:

Farmers/Extension workers training programme organized

Programme	Topic	Duration &Date
Rabi Mahaabhiyaan at Tharthari Block	High Density Planting	01 day, 31.11.2023
05 Days training Inter state training Programe on top tribal conducted by Khistiz Agro tech., Nehusa,	Disease and management of Mango fruit crop and Nursery management	01 day, 06.11.2023

Harnaut,		
Farmers Dialogue at village- Sartha (Harnaut)	Climate Resilient Agriculture Programe	01 day, 06.03.2024
Diagnostic visit at village- Sartha (Harnaut)	Potato field	01 day, 06.03.2024
KVK Manpur Gaya	Rejuvenation of old orchards	01 day, 08/11/2023
Radio talk at Akashvani Patna	Care of Mango Orchard	01 day, 22 Nov., 2023
Makhana Mahotsav , Gyan Bhawan, Patna	Makhana Mahotsav	02 days, 01-02 Dec., 2023
Diagnostic visit of Potato field at village- Jamunapur, Noorsarai Nalanda	Climate Resilience Agriculture Programme	01 day, Feb. 23, 2024
PoshanWatika development for the eradication of malnutrition in the adopted village- Daruara, Noorsarai	PoshanWatika development for the eradication of malnutrition	01 day, 03.11.2023
training	vegetable production, kitchen gardening and water harvesting	13.2.2023-16.2.2023
Workshop	Brainstorming workshop on horticulture	08-09 Feb., 2024
Training	Scientific cultivation of pineapple	09-01-2024 to 10-01-2024
Rabi Mahabhiyan	Kisano ki Aay doguni karne ke upay	1 day, 19.10.2023
Radio Talk at Akashvani Patna	Parval kee kheti	1 day, 22.02.2024
Kisan Mela at KVK, Harnaut	Kheti me utpadan lagat par charcha	1 day, 14th March, 2024
Farmers Dialogue at village- Sartha (Harnaut)	Climate Resilient Agriculture Programe	1 day, 06.03.2024
Diagnostic visit at village- Sartha (Harnaut)	Potato field	1 day, 06.03.2024
Crop cutting Programme at KVK, Jahanabad	Crop cutting	25.11.2023
Crop cutting Programme at KVK, Barh	Crop cutting	22.12.2023
Training programme of 60 Farmers of Arwal districts	Micro Irrigation System	13.11.2023
60 Farmers of Bhojpur districts	Micro Irrigation System	14.11.2023
60 Farmers of Jehanabad districts	Micro Irrigation System	60 Farmers of Jehanabad districts
60 Farmers of Nawada districts	Micro Irrigation System	60 Farmers of Nawada districts
75 Farmers of Hazaribagh	Establishment of a new	75 Farmers of Hazaribagh

districts	orchard of Mango, Guava, Papaya & Banana and Protected Cultivation.	districts
50 Farmers of Aurangabad districts	Establishment of a new orchard of Mango, Guava, Papaya & Banana and Protected Cultivation.	50 Farmers of Aurangabad districts
50 Farmers of Nawada districts	Establishment of a new orchard of Mango, Guava, Papaya & Banana and Protected Cultivation.	50 Farmers of Nawada districts
50 Farmers of Nawada districts	Intensive Gardening and Dry Gardening	50 Farmers of Nawada districts
50 Farmers of Jamui districts	Restoration and Management of old Gardens and Dry Gardening	50 Farmers of Jamui districts
50 Farmers of Gaya districts	Intensive Gardening and Dry Gardening	50 Farmers of Gaya districts
100 Farmers of Bhojpur districts	Vegetable Production Technology	100 Farmers of Bhojpur districts
40 Farmers of Patna districts	Vegetable Production Technology	40 Farmers of Patna districts
BSDM Training to facilitate the assessment process of Domain Skill Training (O.O. No. 102/Est. /NCOH, dt-14/09/2023	Gardener	(390 Hrs.) & 19th Sept., 2023

Farmers-Scientist interface organized:

Programme	Topic	Duration &Date
Kisan helpline at Plant health Clinic	To resolve the problems of farmers through telephonic and online mode	2023(December) 2024 (Jan, Feb.)
The Seminar-cum-Exposure visit	Entrepreneurship development through Horticultural crops	12th April 2024
Training –cum-Exposure visit programme	Potato seed production	Two day 13-14th March 2024
Training –cum-Exposure visit programme	Entrepreneurship development through Horticultural crops	20th April 2024
Field Day	Seed treatment and planting of potato tubers	01 Day (31st October 2023)

Field Day	Identification of potato varieties and it's seed production at NCOH, Noorsarai	01 Day (13th February, 2024)
Field Day	Performance of potato varieties grown at Adapted Farmers' field at Jamunapur Village of Noorsarai Block	01 Day (23rd February, 2024)

Kisanmela:

(a) Participated:

1. Participation and Stall in KisanMela at BAU, Sabour on 17 to 19 febuary 2024.
2. Participation in Kisan Mela at Kvk Harnaut 13th to 14th March, 2024

Lectures delivered in Farmers/Extension workers training programme:

Programme	Name of the Scientist	Topic	Date
BSDM	Mrs Shaheena parveen	(Gardener)	6/11/2023
BAMETI, Patna	Dr. Ajeet Kumar	Protective cultivation of vegetables crops	06th – 07th Dec, 2023
Sub-divisional Horticulture exhibition & competition	Dr. Ajeet Kumar	Integrated nutrient management in horticultural crop	5th Feb, 2024
Farmers certificate course on organic grower by Khistiz Agro. Tech	Dr. Ajeet Kumar	Organic Farming	17th Feb, 2024
Farmers certificate course on organic grower by Khistiz Agro. Tech	Dr. Ajeet Kumar	Specialty and Advantages of Bio fertilizer	14th March 2024
Farmers certificate course on organic grower by Khistiz Agro. Tech	Dr. Ajeet Kumar	Specialty and Advantages of Bio fertilizer	19th March 2024
BSDM Classes at NCOH	Dr. Ajeet Kumar	INM in spice and medicinal crop Nursery raising of medicinal crop Use of soil less media for nursery raising	Three (3) Lecture
Kharif Onion production	Dr. Ajeet Kumar	Nutrient Management in *kharif* onion	25/05/2024
Skill Development Training Programme as Certified Trainer by ASCI for job role Gardener	Dr. Divya Tiwari	"बडिंग तकनीक द्वारा फल वृक्षों में पौध प्रवर्धन"	3rd October to 25thNovember 2023 (54 Days)

Skill Development Training Programme as Certified Trainer by ASCI for job role Gardener	Dr. Divya Tiwari	"बडिंग तकनीक द्वारा फल वृक्षों में पौध प्रवर्धन"	3rd October to 25thNovember 2023 (54 Days)
Skill Development Training Programme as Certified Trainer by ASCI for job role Gardener	Dr. Divya Tiwari	"पपीता का प्रवर्धन तकनीक (प्रायोगिक)"	3rd October to 25thNovember 2023 (54 Days)
Skill Development Training Programme as Certified Trainer by ASCI for job role Gardener	Dr. Divya Tiwari	"केले का स्वस्थ पौध तैयार करने की तकनीक"	3rd October to 25thNovember 2023 (54 Days)
Skill Development Training Programme as Certified Trainer by ASCI for job role Gardener	Dr. Divya Tiwari	"केले का स्वस्थ पौध तैयार करने की तकनीक (प्रायोगिक)"	3rd October to 25thNovember 2023 (54 Days)
Skill Development Training Programme as Certified Trainer by ASCI for job role Gardener	Dr. Divya Tiwari	"नर्सरी की रुप–रेखा तैयार करना (प्रायोगिक)"	3rd October to 25thNovember 2023 (54 Days)
Skill Development Training Programme as Certified Trainer by ASCI for job role Gardener	Dr. Divya Tiwari	"विभिन्न प्रकार के मौसमी फूलों की खेती (प्रायोगिक)"	3rd October to 25thNovember 2023 (54 Days)
Skill Development Training Programme as Certified Trainer by ASCI for job role Gardener	Dr. Divya Tiwari	विभिन्न प्रकार के मौसमी फूलों की क्यारियों का भ्रमण (प्रायोगिक)"	3rd October to 25thNovember 2023 (54 Days)
Skill Development Training Programme as Certified Trainer by ASCI for job role Gardener	Dr. Divya Tiwari	"फूलों से माला, गजरा, गुलदस्तए बटनहोल आदि तैयार करने हेतु आवश्यक सामग्री की व्यवस्था"	3rd October to 25thNovember 2023 (54 Days)
Skill Development Training Programme as Certified Trainer by ASCI for job role Gardener	Dr. Divya Tiwari	"रुफ गार्डेन में लगाए जाने वाले फलों के बारे में जानकारी"	3rd October to 25thNovember 2023 (54 Days)
Skill Development Training Programme as Certified Trainer by ASCI for job role	Dr. Divya Tiwari	"रुफ गार्डेन में फल वृक्ष लगाना एवं उनकी देख–रेख (प्रायोगिक)"	3rd October to 25thNovember 2023 (54 Days)

Gardener			
Skill Development Training Programme as Certified Trainer by ASCI for job role Gardener	Dr. Divya Tiwari	"रुफ गार्डेन हेतु सब्जियों का चुनाव"	3rd October to 25thNovember 2023 (54 Days)
Skill Development Training Programme as Certified Trainer by ASCI for job role Gardener	Dr. Divya Tiwari	"हेज, टॉपियरी तैयार करने की तकनीक"	3rd October to 25thNovember 2023 (54 Days)
Skill Development Training Programme as Certified Trainer by ASCI for job role Gardener	Dr. Divya Tiwari	"विभिन्न प्रकार के फूलों की क्यारी एवं लॉन का भ्रमण (प्रायोगिक)"	3rd October to 25thNovember 2023 (54 Days)
Skill Development Training Programme as Certified Trainer by ASCI for job role Gardener	Dr. Divya Tiwari	"नर्सरी की रुपरेखा तैयार करना (प्रायोगिक)"	3rd October to 25thNovember 2023 (54 Days)
Skill Development Training Programme as Certified Trainer by ASCI for job role Gardener	Dr. Divya Tiwari	"कारपेट में उपयोग होने वाली पौधों का चुनाव"	3rd October to 25thNovember 2023 (54 Days)
Skill Development Training Programme as Certified Trainer by ASCI for job role Gardener	Dr. Divya Tiwari	"रुफ गार्डेन में लगाए जाने वाले सजावटी पौधे"	3rd October to 25thNovember 2023 (54 Days)
Skill Development Training Programme as Certified Trainer by ASCI for job role Gardener	Dr. Divya Tiwari	"पुराने बागों के जीर्णोद्धार की तकनीक"	3rd October to 25thNovember 2023 (54 Days)
Skill Development Training Programme as Certified Trainer by ASCI for job role Gardener	Dr. Divya Tiwari	"पुराने बागों के जीर्णोद्धार की तकनीक (प्रायोगिक)"	3rd October to 25thNovember 2023 (54 Days)
Skill Development Training Programme as Certified Trainer by ASCI for job role Gardener	Dr. Divya Tiwari	"पुराने बागों के जीर्णोद्धार के उपरान्त छत्रप प्रबंधन (प्रायोगिक)"	3rd October to 25thNovember 2023 (54 Days)
Skill Development Training Programme as Certified Trainer by ASCI for job role	Dr. Divya Tiwari	"अमरुद के बाग में कटाई–छंटाई करने का समय एवं तरीका	3rd October to 25thNovember 2023 (54 Days)

Gardener		(प्रायोगिक)"	
Skill Development Training Programme as Certified Trainer by ASCI for job role Gardener	Dr. Divya Tiwari	"बोनसाई पौधा, परिचय, महत्त्व एवं भविष्य"	3rd October to 25thNovember 2023 (54 Days)
Skill Development Training Programme as Certified Trainer by ASCI for job role Gardener	Dr. Divya Tiwari	"अंगूर में ट्रेनिंग एवं कटाई–छंटाई"	3rd October to 25thNovember 2023 (54 Days)
Training Programme on "Doubling the income of farmers through cultivation of strawberry"	Dr Divya Tiwari	"Propagation of strawberry"	1-3 November 2023
RPL Training programmme on the job role of garderner	Kumari Madhumala	Preparation of root stock and scion	03-11-23
RPL Training programmme on the job role of garderner	Kumari Madhumala	Role of gardener and study the planting material for gardening	03-11-23
RPL Training programmme on the job role of garderner	Kumari Madhumala	Different plant propagation techqnices	04-03-23
RPL Training programmme on the job role of garderner	Kumari Madhumala	Transplanting of seedlings	09-03-23
स्ट्रॉबेरी की आधुनिक खेती द्वारा किसानो की आय को द्विगुणित करना	Dr. S. K. Yadav	स्ट्रॉबेरी के प्रमुख कीट एवं उनकी रोकथाम	02/11/2023
Extension personnel training	Dr. S. K. Yadav	Integrated disease and insect-pests management under protected cultivation	06/12/2023
मधुमक्खी पालन प्रशिक्षण	Dr. S. K. Yadav	मधुमक्खी पालन	12-14/03/2024
Rabi Mahotsav,2023 at Distic-Harnaut	Dr. Seema	Mushroom ke Mahatav evam uttapadan Vidhi	25/10/2023
Mali Prashikshan Programme under Floriculture (AGR/Q0701) – (BSDM Training)	Dr. Seema	1. नर्सरी के फूल बीज बुवाई पौघा प्रबंधन व बिचरा उखारने की तकनीक 2. नर्सरी में पौध लगाने के बाद प्रबंधन	08/04/2024
Mali Prashikshan Programme under	Dr. Seema	1. इंडोर गार्डन हेतु आवश्यक फूल व फल	12/04/2024

Floriculture (AGR/Q0701) – (BSDM Training)		की जानकारी 2. इंडोर गार्डन हेतु फूल व सजावटी पौधों का रखरखाव व प्रबंधन संबंधी जानकारी	
Mali Prashikshan Programme under Floriculture (AGR/Q0701) – (BSDM Training)	Dr. Seema	1. बीज व बिचरा उत्पादन तकनीक–प्रायोगिक 2. दैनिक कार्यों का रजिस्टर में अंकित करना –प्रायोगिक	18/03/2024
Mali Prashikshan Programme under Floriculture (AGR/Q0701) – (BSDM Training)	Dr. Seema	1. बोन्साई पौधों का चयन व निर्माण हेतु आवशयक जानकारी 2. बोन्साई पौधा का निर्माण–प्रायोगिक	02/05/2024
औषधीय एवं सगंधीय पौध उत्पादन (BSDM Training)	Dr. Seema	1. मशरुम उत्पादन तकनीक 2. मशरुम का औषधीय महत्व	18/03/2024 (Two Lectures)
Two days Residential training on "Protected cultivation of vegetable crops" at BAMETI, Patna	Dr. S.S. Solankey	Advanced techniques of vegetable seedling production and nursery management under protected structures.	06.12.2023
One day Workshop on "Enhancing livelihood opportunities for rural areas." at BAMETI, Patna	Dr. S.S. Solankey	Enhancing livelihood opportunities through exotic and specialized fruits for rural areas of Bihar.	30.09.2023
स्ट्रॉबेरी की आधुनिक खेती द्वारा किसी की आय द्विगुणित करना	Dr. S.S. Solankey	स्ट्रॉबेरी की उन्नत प्रजातियां	03.11.2023
सब्जी उत्पादन, शाक वाटिका एवं जल संचयन	Dr. S.S. Solankey	आलू बीज उत्पादन तकनीकी	13.02.2024

Radio talk/TV talks (Specify date, topic and place):

S. No.	Nature of work	Date of Broadcasting	Topic	Programme & Place	Booking No.
1.	TV Talk	4th Dec. 2023	Nutrient management in wheat	Krishi Darshan, DDK Patna	DDK P/KRISH/20342680

2.	Radio talk	26.04.2024	बाग लगाने की तैयारी”	All India Radio, Patna in “खेती–गृहस्थी” programme	Akash/Farm/20578839
3.	Radio talk	29.1.2024	Strawberry ki kheti	Media centre sabour	BAU, sabour
4.	. TV talk	13/11/2023	फलदार वृक्षों में कीट -व्याधि प्रबंधन और केला अमरुद का कीट प्रबंधन	Krishi Darshan, DDK Patna	Krishi Darshan, DDK Patna
5.	Radio Talk	10/03/2024,	Garma Kaddu ki Phasal ki Dekhbhal	All India Radio, Patna	Aakashvani, Patna ।
6.	TV Talk	18th Feb., 2024	गरमा सब्जियो की फसल की देखभाल	Krishi Darshan, DDK Patna	Krishi Darshan, DDK Patna
7.	TV Talk	13th Dec., 2023	बिहार में आलू उत्पादन की संभावनाएं	Krishi Darshan, DDK Patna	Aakashvani, Patna ।
8.	TV Talk	29th Nov., 2023	आलू का सामयिक रोग एवं फसल प्रबंधन	Krishi Darshan, DDK Patna	Aakashvani, Patna ।
9.	Radio Talk	23rd Sep., 2023	बैगन की खेती	All India Radio, Patna	Aakashvani, Patna ।
10.	TV Talk	28th Aug., 2023	कद्दूवर्गीय सब्जियों का प्रबंधन	Krishi Darshan, DDK Patna	DDK Patna
11.	TV Talk	26th Jul., 2023	बरसाती भिन्डी की प्रमुख किस्मे एवं वैज्ञानिक प्रबंधन और लोबिया की उन्नतशील किस्मे एवं फसलप्रबंधन	Krishi Darshan, DDK Patna	DDK Patna
14.	TV Talk	18th Aug 2023	Sabji ke Unnat poudh utpadan	Krishi Darshan, DDK Patna	DDK Patna
15.	TV Talk	25th Nov2023	Pyaj avem Lahashun ka Samayic Rog avem Phasal Prabandhan	Krishi Darshan, DDK Patna	DDK Patna
16.	TV Talk	11th Dec 2023	Matar Phasl ki Vaigyanic Kheti	Krishi Darshan, DDK Patna	DDK Patna
19.	Radio Talk	07/03/2024	Garma Kaddu ki Phasal ki Dekhbh	All India Radio, Patna	Aakashvani, Patna ।

Seminars, Conferences and Workshops Organized

Sl.No.	Name of Seminar/Conference/Workshop	Organizers	Date
1.	Brainstorming workshop on horticulture	DKAC, Kishanganj	08-09 Feb., 2024

Conferences/ Workshops/ Seminars/ Participated or Presented by the faculty members

Sl No.	Name of the Faculty	Name of the event with Place and Mode	Participation/ Presentation/ Resource Person	Date/ Duration of Event
1.	Dr. Parveen Fatima	National Seminar on MPTPIEG	Oral Presentation	6-7 Feb,2024
2.	Karanjeev Kumar	Brainstorming workshop on horticulture (Offline)	Participation	08-09 Feb., 2024
3.	Karanjeev Kumar	workshop on Bihar farmer, agripreneur, start-up, industry and investors meet-2023 on nutri cereals	BAU ,Sabour	29-30 Nov., 2024

Department/College Level Activities

Sl. No.	Department	Activity	Date	Participants	Collaborations (If any)
1.	**College Level Activities**	"Bhartiya Mahila Sanrakshan Diwas-2024"	14th April,2024	Professores & Students	**Department & College**
2.	**College Level Activities**	"World Intellectual Property Day"	26April,2024	Professores & Students	**Department & College**

Other Extension Activities:

1. Participated in Adaptation of Kasturba Vidyalaya .
2. Participated in Educational Tour Programme at Vikramsheela. On 21.01.2024 from CABT, Sabour

Proposed Action Plan
(June 2024 to September 2024)

ACTION PLAN FOR THE COMING SIX MONTHS

1. Nalanda College of Horticulture is committed to continue all extension activities to fulfil its mandate decided by the university.
2. In consequence of Hon,ble Vice Chancellor's vision for accelerating the agricultural extension activities up to grass root level by organizing KisanChaupal on every Saturday of the month in the selected village, accordingly we will organize and continue in future.
3. NCOH is organizing residential in service training programme to train the Extension Officers and other associates of the State Dept. With financial support of BAMETI, Bihar.
4. NCOH will also continue the advisory service to the farming community and other as and when required.
5. NCOH will also support to Agricultural and Horticultural Dept. for his revolutionary activities like SRI Mahotsvava, KharifMahotsava, NHM, RKVY and Hariyali Mission as and when directed by the University.
6. NCOH will also continue to promote the farmers who are engaged in the horticultural activities especially organic farming.
7. NCOH will also performing other extension activities as allotted by BAU, Sabour.
8. NCOH will also performing other extension activities like Radio Talk and TV talk time to time.

BHOLA PASWAN SHASTRI AGRICULTURAL COLLEGE, PURNEA

Report of 26th Extension Education Council Meeting

(From October 2023 to May 2024)

(Oct. 2023 – May 2024)

At present, four batches of B.Sc. (Ag) students are studying at the college. The students of academic session 2011-12, 2012-13, 2013-14, 2014-15, 2015-16, 2016-17, 2017-18, 2018-19 and 2019-20 have completed their graduate degree. The college is not only offering B.Sc. (Ag) courses for the development of human resources in the field of agriculture but a number of research projects as well as seed production activities and production of quality planting material are undertaken, to resolve the problems of farmers. The Scientists / teachers of the college serve to cater the need of the farmers by active participation in extension activities organized by Agriculture Department, ATMA and other line departments. The college is also organizing different extension activities to focus on innovative Agril. Technology suited to the farmers of the region, to raise production, productivity and overall income of the farmers.

1. Training organized by the college.

i. 15 Days Training Programme organized by BPSAC, Purnea

S. No.	Name of the programme	Duration	Date of training	No. of Fertilizer Dealers Benefited
01.	Certificate Training Course on INM for Fertilizer Dealers	15 days	17 May, 2023 to 31 May,2023	40
02.	Certificate Training Course on INM for Fertilizer Dealers	15 days	07 July, 2023 to 21 July,2023	40
03.	Certificate Training Course on INM for Fertilizer Dealers	15 days	01 August, 2023 -15 August, 2023	40
04.	Certificate Training Course on INM for Fertilizer Dealers	15 days	17 February, 2024 – 02 March, 2024	40
05.	Certificate Training Course on INM for Fertilizer Dealers	15 days	06 March,2024 20 March, 2024	40

ii. Training on Makhana Production Technology organized by BPSAC, Purnea

S. No.	Name of the programme	Duration	No. of Participants Benefited
1.	One day Makhana Production Technology	22.12.2023	120 Farmers ADH, Khagaria
2.	One day Makhana Production Technology	05.03.2024	85 Farmers ADH, Bhagalpur
3.	Five days Training on Makhana Production Technology	22-26 January, 2024	56 ATMA, Kisanganj
4.	Five days Training on Makhana Production Technology	02-06 March, 2024	30 ATMA, Madhubani
5.	One day Makhana Production	03 March, 2024	25

	Technlogy		MDS, BPSAC, Purnea
6.	One day Makhana Production Technlogy	05 March, 2024	25 MDS, BPSAC, Purnea

iii. Millet value chain training organized by BPSAC, Purnea

S. No.	Name of the programme	Duration	No. of Participants Benefited
1.	Coarse cereals (Millets) Production Technology in collaboration of BAMETI, Patna	20.09.2023 to 22.09.2023	25 (ATM, BTM, AC, ASTM,ASTM-cum-BTM)
2.	Production technology of millets and its value addition	30.01.2024 to 01.02.2024	25 farmers

iv. One Day Farmers Training –cum-Exposure Visit at BPSAC, Purnea

S. No.	Date of Visit	Topic	Number of Farmers/ Participants/ Retailers	District	Agency
1.	04.09.2023	Importance of Nutrient Management	40	Kisanganj	ATMA, Kisanganj
2.	11.09.2023	Makhana Production Technology	100	Araria	ATMA, Araria
3.	12.09.2023	Makhana Production Technology	100	Araria	ATMA, Araria
4.	14.09.2023	Awareness on IFFCO nano urea & Nano DAP	35	Purnea	IFFCO, Purnea
5.	25.09.2023	Production Technology of Millets	52	Purnea	Purnea Social and Educational Society
6.	09.10.2023	Integrated Nutrient management	40	Araria	ATMA, Araria
7.	09.10.2023	Musroom Production technique	25	Purnea	ATMA, Purnea
8.	10.10.2023	Makhana Production Technology	40	Purnea	ATMA, Purnea
9.	02.11.2023	Insecticides management Techniques	40	Araria	ATMA, Araria
10.	05.1.2024	Makhana Production Technology	40	Supaul	ADH, Supaul
11.	06.1.2024	Integrated Nutrient management	40	Araria	ATMA, Araria
12.	13.01.2024	Integrated Nutrient management	40	Araria	ATMA, Araria
13.	17.01.2024	One Day Retailers Meet on Awareness on IFFCO nano urea & Nano DAP	55	Purnea	IFFCO, Purnea
14.	20.01.2024	Production of Horticultural crops	45	Araria	ADH, Araria

15.	23.01.2024	Makhana Production Technology	45	Araria	ADH, Araria
16.	03.03.2024	Makhana Production Technology	85	Katihar	ADH, Katihar
17.	06.04.2024	Integrated Nutrient management	40	Purnea	ATMA, Purnea

v. Natinal Seminar organized by BPSAC, Purnea

S. No.	Name of the programme	Duration	No. of Participants Benefited
1.	National Seminar on Maize Production Technology: Perspective for Income and Employment Generation.	06-07.02.2024	186

vi. Farmer Scientist interface programme organized by BPSAC, Purnea

S. No.	Name of the programme	Place	Duration	No. of Participants Benefited
1.	Farmer scientist interface programme on Maize Production Technology: Perspective for Income and employment Generation.	Basantpur village, Kasba, Purnea	07.02.2024	205

2. Participation in different extension activities of line departments

(i) Participation as a resource person in trainingof line departments

S. No,	Date	Place	Lecture topic/Type of training / prog.	Resource persons name	No. of Participants	Sponsoring agency
1.	04.10.2023	Rupauli, Purnea	To impart training on Millets	Dr. Anuj Kr. Choudhary & Dr. J. Prasad	65	Archana agro pvt.
2.	16.10.2023	Purnea East	ATMA organised training program	Dr. Radhey Shyam & Dr. Ruby Saha	40	Dept. of Agriculture, Purnea
3.	06.11.2023	Purnea East	ATMA organised training program	Dr. Radhey Shyam & Dr. Abhinav Kumar	30	ATMA, Purnea
4.	09.12.2023	ETC, Khuskibagh	DAEST training organized by ATMA, Purnea	Dr. Tapan Gorai	30	ATMA, Purnea
5.	16.12.2023	Purnea East	To impart training Phulon ke kheti	Dr Vikas Kumar & Smt. Akanksha	45	ATMA, Purnea
6.	16.12.2023	Baisa, Purnea	To attend NBHM training programme	Dr. Chunni Kumari	45	Horticulture Department, Purnea
7.	22.12.2023	Dhamdaha	To impart Makhana	Dr. Tapan		DoA, Purnea

			training to farmers	Gorai & Dr. Ruby Saha		
8.	06.01.2024	Purnea, East	To deliver lecture under DAEST training	Dr. Tapan Gorai	40	ATMA, Purnea
9.	10.03.2024	Banmankhi	To impart 2 days mushroom production training	Smt. Anupam Kumari	40	DoA, Purnea
10.	10.03.2024	Banmankhi	To impart mushroom production training	Smt. Anupam Kumari	40	DoA, Purnea
11.	07.05.2024	Banmankhi	To take a lecture in district level training	Dr. Chunni Kumari	40	DoA, Purnea
12.	14.05.2025	K. Nagar	To take a lecture in district level training	Dr. Abhinav Kumar	40	DoA, Purnea

ii. Actively participated in Seminar/Symposium/Workshop/conference

Sl. No.	Date	Name of the event	Participation	Organized by
i.	05-06.01.2024	Participated in Second National Seminar Organized (Online)	Participation	Society of Krishi Vigyan
ii.	14-20.10.2023	Participated in 19th IUAES- WAU (World Anthropology Congress-2023	Participation	University of Delhi Mode: Online
iii.	06-07.02.2024	National Seminar on Maize Production Technology: Perspective for Income and Employment Generation.	Participation & Oral presentation	BPSAC, Purnea
iv.	11.02.2024	Advanced Agricultural Technologies for Self Reliant Farmers and Developed India	Participation	KVK, Piprakothi, RPCAU, Pusa

iii. Training Programmes/Summer/Winter course attended:

S. No	Training Programmes / Summer / Winter School	Organized by/at	Date
1.	21 Days Training Programme on "Nutrisensitive: Novel Value Chain Approaches for Agri, Horti and Allied Components"	Centre for Advanced Faculty Training in Community Science at Professor Jayashankar Telangana State Agricultural University, Rajendranagar, Hyderabad – 500 030.	23rd January, 2024 to 12th February, 2024
2.	Workshop on Dealing with Disruptions of Personal and Professional Life.	BAU, Sabour	01-30 April, 2024
3.	Workshop on Dealing with Disruptions of Personal and Professional Life.	BAU, Sabour	07-08, January 2024

3. Field Visit, Exposure visit and Field day

Date	Programme	Resource persons name	Place
03-10-2023	Field visit of makhana growing area of Purnea	Dr. Anil Kumar	Jankinagar
11-10.2023	Exposure visit to KVK, Jalalgarh and KVK, Araria	Dr. Anil Kumar & Dr. Paras Nath	KVK, Araria KVK, Purnea
16-10-2023	Diagnostic visit of Chaur land of Banmankhi block of Purnea district	Dr. Anil Kumar & Dr. P.K. Yadav	Banmankhi
25-10-2023	Field visit for arrangement of Sabour makhana seeeds	Dr. Anil Kumar	Kishanganj
07-11-2023	Field & diagnostic visit for training makhana farmers of Kishanganj	Dr. Anil Kumar, Dr. P.K. Yadav	Kishanganj
07-11-2023	Attending passing out parade celebration at BSAP-7, Katihar	Dr. Paras Nath & Dr. P.K. Yadav	BMP, Katihar
23-11-2023	Field & diagnostic visit of makhana growing areas of Araria & Kishanganj	Dr. Anil Kumar & Dr. P.K. Yadav	Araria & Kishanganj
25-11-2023	Field visit & one day Capacity building programme under MDS	Dr. Anil Kumar & Dr. P.K. Yadav	Khuskibagh
11-01-2024	Exposure visit to fertilizer factory at Maranga, Purnea	Dr. P.K. Yadav, Dr. Tapan gorai & Shri Dhananjay Kumar	Purnea
09-02-2024	To mobilize the ,makhana growers for use of G.I makhana	Dr. Anil Kumar	Kishanganj
12-02-2024	Visit to District Horticulture Office, Khuskibagh for evaluation of flower show on the occasion of district foundation day	Dr. Vikash Kumar	Khuskibagh
28-02-2024	Field visit of makhana growing area of Purnea	Dr. Anil Kumar	Jankinagar
14-03-2024	Participation in Kisan mela-2024 organized by KVK, Katihar	Dr. Paras Nath & Dr. Anil Kumar	KVK, Katihar
15-03-2024	Exposure visit of INM trainees to KVK, Jalalgarh and KVK, Araria	Shri Jai Prakash Prasad	KVK, Jalalgarh and KVK, Araria

4. Kisan Mela, Farmers' Fair/ Exhibitions

Nature of work	Date	Office order
Participation and demonstration of college stall during three days Farmer Fair – 2024 organized by Bihar Agricultural University, Sabour	17-19.02.2024	O.O.No. 173/BPSAC, Purnea dated 13.02.2024
Participation and demonstration of college stall during 2 days district level Kisan Mela-cum-Yashaswi Kisan Samman-2024 organized by Dainik Jagran, Hindi Dainik, Purnea	23-24.02.2024	O.O. No 175/BPSAC, Purnea dt 22.02.2024
State level Bagwani Mahotsav organized by Directorate of Horticulture and State Horticulture Mission	15-18.02.2024	Lt. No.-1287 dated 13.02.2024

5. Participation in Rabi Mahabhiyan

S. No	Date	Place	Resource person	Programme name	Sponsoring Agency
1.	25.10.2023	K. Nagar	Dr. Anuj Kumar Choudhary & Miss Priyanka	Rabi Mahabhiyan	Dept. of Agriculture, Purnea
2.	26.10.2023	B. Kothi	Dr. Abhinav Kumar & Mohd. Zakir Hussain	Rabi Mahabhiyan	Dept. of Agriculture, Purnea
3.	16.12.2023	East Purnea	Dr Vikas Kumar & Smt. Akanksha	Rabi Mahabhiyan	Dept. of Agriculture, Purnea
4.	18.12.2023	Baisi, Purnea	Dr. Minu Mohan & Shri. Dhananjay Kumar	Rabi Mahabhiyan	Dept. of Agriculture, Purnea
5.	19.12.2023	Amour, Purnea	Mohd. Jakir Hussain & Dr. Chunni Kumari	Rabi Mahabhiyan	Dept. of Agriculture, Purnea
6.	20.12.2023	Srinagar, Purnea	Dr. Mithilesh Kumar & Smt. Sneha	Rabi Mahabhiyan	Dept. of Agriculture, Purnea
7.	21.12.2023	Banmankhi, Purnea	Dr. P. K. Yadav & Dr. Anil Kumar	Rabi Mahabhiyan	Dept. of Agriculture, Purnea
8.	22.12.2023	Dhamdaha, Purnea	Dr. P. K. Yadav & Dr. Anil Kumar	Rabi Mahabhiyan	Dept. of Agriculture, Purnea
9.	23.12.2023	Rupauli, Purnea	Dr. Mithilesh Kumar & Dr. Alpana Kusum	Rabi Mahabhiyan	Dept. of Agriculture, Purnea

6. Participation in Kharif Mahabhiyan

S. No	Date	Place	Resource person	Programme name	Sponsoring Agency
1.	30.05.2024	Kasba	Shri. Dhananjay Kumar & Dr. Asheesh Chaurasia	Kharif Mahabhiyan	Dept. of Agriculture, Purnea
2.	31.05.2024	Jalalgarh	Jai Prakash Prasad & Anupam Kumari	Kharif Mahabhiyan	Dept. of Agriculture, Purnea

7. Kisan Gosthi

S. No	Date of training	Name of Block	Name of resource person	Organized by
1.	03.10.2023	K. Nagar Block, Purnea	Dr. Tapan Gorai & Dr. Abhinav Kumar	ATMA, Purnea
2.	07.11.2023	Kasba, Purnea	Dr. Chunni Kumari &	ATMA, Purnea

			Dr. Minu Mohan	
3.	08.11.2023	Baisa, Purnea	Dr. Chunni Kumari & Dr. Vikash Kumar	ATMA, Purnea

8. Kisan Chaupal

S. No	Date of	Place	Total	Organized & sponsored
1.	03.10.2023	K. Nagar	50	BPSAC, Purnea
2.	26.10.2023	B. Kothi	36	BPSAC, Purnea

9. Resource person in Radio Talk (AIR, Purnea)

Sl No.	Date	Name of resource person	Topic	Name of Radio station
i.	03.10.2023	Dr Vikas Kumar	Aloo ki unnat kheti	AIR Purnea
ii.	10.11.2023	Dr Vikas Kumar	Aloo ki unnat kheti	AIR Purnea
iii.	13.11.2023	Dr Vikas Kumar	Gobhi vargiya sabjiyo me samsamayik dekhbhal	AIR Purnea
iv.	12.12.2023	Dr. Mithilesh Kumar	Aloo me lagne wale rog evam unka prabandhan	AIR Purnea
v.	19.12.2023	Dr. Suraj Prakash	Orchard management of mango & Litchi	AIR Purnea
vi.	26.12.2023	Dr. S. P. Sinha	Gehoo evam makka me sinchai evam urvarak prabandhan	
vii.	02.01.2024	Dr. P. K. Yadav	Intergrated nutrient management	AIR Purnea
viii.	09.02.2024	Dr Vikas Kumar	Latar vargiya sabjiyo ki kheti	AIR Purnea
ix.	13.02.2024	Dr Vikas Kumar	Medicinal and aromatic plant cultivation	AIR Purnea
x.	22.02.2024	Dr Vikas Kumar	Garma bhindi ki kheti	AIR Purnea
xi.	27.02.2024	Dr. Bibha Kumari	Packages and practices of strawberry cultivation	AIR Purnea
xii.	19.03.2024	Dr. J. Prasad	Makka me poshak tatva prabandhan	AIR Purnea
xiii.	23.03.2024	Dr Vikas Kumar	Garma tamatar ki kheti	AIR Purnea
xiv.	02.04.2024	Dr. Ruby Saha	Jaivik urvarak evam mrida sanrakshan	AIR Purnea
xv.	07.05.2024	Dr Vikas Kumar	Haldi ki kheti	AIR Purnea
xvi.	28.05.2024	Dr Vikas Kumar	Rainy season vegetable cultivation	AIR Purnea
xvii.	31.05.2024	Dr Vikas Kumar	Garma sabjiyo me samsamayik kriya	AIR Purnea

10. Visit to Adopted Village

S. No	Date	Purpose	Resource person	Name of Adopted Village
1.	10.11.2023	Visit to adopted village	Dr. Ashish Ranjan, Dr. Suraj Prakash, Dr. Vikash Kumar & Dr. Bibha Kumari	Dimiya Chhatarganj
2.	10.01.2024	Malnutrition Eradication Awareness Programme	Dr. Ashish Ranjan, Dr. Vikash Kumar & Shri Amrender Kumar	Dimiya Chhatarganj
3.	07.03.2024	Malnutrition Eradication Awareness Programme and	Dr. Ashish Ranjan & Dr. Vikash Kumar	Dimiya Chhatarganj

		organization of medical camp		
4.	13.03.2024	Distribution of seed & seedlings of different vegetables to the beneficiary of adopted village	Dr. Ashish Ranjan & Dr. Vikash Kumar	Dimiya Chhatarganj
5.	08.04.2024	Organization of medical camp	Dr. Ashish Ranjan, Dr. Suraj Prakash & Dr. Vikash Kumar	Dimiya Chhatarganj
6.	30.05.2024	For training and Planting Material distribution	Dr. Suraj Prakash & Dr. Vikash Kumar	Dimiya Chhatarganj

11. Details of NSS/NCC/RRC activities organized and sponsored by BPSAC, Purnea during October, 2023 to May, 2024 are given below:

Sl. No	Date/Month	Observed Events/Regular Activities	Place	Sponsoring Agency
1.	01 October, 2023	Swachhata Shramdan EK TARIKH EK GHANTA	BPSAC, Purnea	BPSAC, Purnea
2.	01 October, 2023	Awareness Programme of Blood Donation on National Voluntary Blood Donation Day	BPSAC, Purnea	BPSAC, Purnea
3.	2nd Oct., 20223	154 Birth Anniversary of Mahatma Gandhi as Swachhta Diwas & Lal Bahadur Shastri (Swachhata Programme at college) under MERI MATI MERA DESH & Azadi ka Amrit Mahotsav INDIA @75	BPSAC, Purnea	BPSAC, Purnea
4.	05 Oct., 2023	One Day Personality Development Programme of students under G-20 YUVA Manthan Model G-20 Summitt	BPSAC, Purnea	BPSAC, Purnea
5.	13 Oct., 2023	Fit India Freedom Run 4.0 Awareness Programme	BPSAC, Purnea	BPSAC, Purnea
6.	14-15 October,2023	Debate competition under FIT INDIA FREEDOM RUN 4.0 & MERI MATI MERA DESH	BPSAC, Purnea	BPSAC, Purnea
7.	16 Oct., 2023	World Food Day under MERI MATI MERA DESH Awareness programme.	BPSAC, Purnea	BPSAC, Purnea
8.	16 Oct., 2023	Swachhata Abhiyan, Fit India Freedom Run 4.0	BPSAC, Purnea	BPSAC, Purnea
9.	16 Oct., 2023	Swachhata Abhiyan Fit India Freedom Run 4.0	BPSAC, Purnea	BPSAC, Purnea
10.	17 Oct., 2023	Fit India Freedom Run 4.0	BPSAC, Purnea	BPSAC, Purnea
11.	17 Oct., 2023	KHADI MAHOTSAV PROGRAMME	BPSAC, Purnea	BPSAC, Purnea
12.	30 Oct., 2023	SPECIAL SANITATION DRIVE, FIT INDIA FREEDOM RUN 4.0, KHADI MAHOTSAV awareness programme	BPSAC, Purnea	BPSAC, Purnea
13.	30 Oct., 2023	VIGILANCE AWARENESS WEEK	BPSAC,	BPSAC,

	to 05 October, 2023		Purnea	Purnea
14.	31st Oct., 2023	Unity Sapath on National Unity Day & Run for unity programme under Azadi ka Amrit Mahotsav INDIA @75	BPSAC, Purnea	BPSAC, Purnea
15.	31st Oct., 2023	CHANDRAYAN MAHA QUIZ,Special Sanitation Drive, Khadi for Nation and Khadi for Fassion, FIT INDIA FREEDOM RUN 4.0	BPSAC, Purnea	BPSAC, Purnea
16.	31st Oct., 2023	Live Telecast programme of Honorable P.M. Narendra Modi Ji on Meri Mati Mera Desh National Event organized by Ministry of Youth & Sports Gove. of India.	BPSAC, Purnea	BPSAC, Purnea
17.	05th November, 2023	Valedictory function of Vigilance Awareness Week & Financial Literacy Awareness programme in Joint collaboration with S.B.I. Rambagh, Purnea	BPSAC, Purnea	BPSAC, Purnea
18.	06th November, 2023	Digital Literacy Awareness Programme in Joint collaboration with S.B.I. Rambagh, Purnea	BPSAC, Purnea	BPSAC, Purnea
19.	08th November, 2023	Orientation Programme of NSS volunteers batch 2023-24		
20.	22 November, 2023	Sanitation drive conducted in college campus under swachhataShramdan	BPSAC, Purnea	BPSAC, Purnea
21.	23 November, 2023	Cleanliness drive under Swachha Bharat Abhiyan	BPSAC, Purnea	BPSAC, Purnea
22.	24 November, 2023	Registration of College YOUTH on MY BHARAT YUVA PORTAL under VIKSIT Bharat Abhiyan@2047	BPSAC, Purnea	BPSAC, Purnea
23.	26th November, 2023	National Milk Day, Madya Nidesh Day, Kaumi Ekta Week awareness Programme under MERI MATI MERA DESH AWARENESS PROGRAMME	BPSAC, Purnea	BPSAC, Purnea
24.	26th November, 2022	Awareness programme National Constitution Day under Azadi ka Amrit Mahotsav India@75, Constitution Quiz on constitution quiz.nic.in	BPSAC, Purnea	BPSAC, Purnea
25.	1st Dec., 2023	Awareness programme World AIDS Day	BPSAC, Purnea	BPSAC, Purnea
26.	03 Dec., 2023	Agricultural Education Day as birth anniversary of Dr. Rajendra Prasad first President of India under Azadi ka Amrit Mahotsav India @75 & Meri mati Mera Desh Awareness Programme	BPSAC, Purnea	BPSAC, Purnea
27.	4th December, 2023	Special Sanitation Drive under Meri Mati Mera Desh programme	BPSAC, Purnea	BPSAC, Purnea
28.	5th December, 2023	Quiz competition, Poster Competetion and Debate competition on World Soil Day under MERI MATI MERA DESH	BPSAC, Purnea	BPSAC, Purnea
29.	07 December,	Armed force Flag Day under Azadi ka	BPSAC,	BPSAC,

	2023	Amrit Mahotsav India@75	Purnea	Purnea
30.	08 December, 2023	JAL JIWAN HARIYALI AWARENESS PROGRAMME	BPSAC, Purnea	BPSAC, Purnea
31.	10 December,2023	World Human Right Day under Azadi ka Amrit Mahotsav India@75 Guest of the Programme Dr. M. Haque, Registrar, BAU, Sabour, Bhagalpur	BPSAC, Purnea	BPSAC, Purnea
32.	15 Dec.,2023	MY BHARAT YOVA BHARAT AWARENESS PROGRAMME	BPSAC, Purnea	BPSAC, Purnea
33.	19 December, 2023	JAL JIWAN HARIYALI AWARENESS PROGRAMME and Registration of students on VIKSIT BHARAT PORTAL UNDER VIKSIT BHARAT @ 2047	BPSAC, Purnea	BPSAC, Purnea
34.	22 December, 2023	SWACHHATA SHRAMDAN UNDER VIKSIT BHARAT @ 2047	BPSAC, Purnea	BPSAC, Purnea
35.	23 Dec.,2023	Farmers Day as Birth Anniversary of Ex. P.M. Chaudhary Charan Singh UNDER VIKSIT BHARAT @ 2047 & Started Jai Kisan Jai Vigyan Week (23-29 December)	BPSAC, Purnea	BPSAC, Purnea
36.	24 Dec.,2023	Awareness of Youth UNDER VIKSIT BHARAT @ 2047	BPSAC, Purnea	BPSAC, Purnea
37.	25 Dec.,2023	Birth Anniversary of Ex. P.M. Atal Bihari Vajpayee UNDER VIKSIT BHARAT @ 2047	BPSAC, Purnea	BPSAC, Purnea
38.	26 Dec.,2023	Debate competition under Viksit Bharat Abhiyan @2047	BPSAC, Purnea	BPSAC, Purnea
39.	27 Dec.,2023	College level Debate competition under Viksit Bharat Abhiyan @2047	BPSAC, Purnea	BPSAC, Purnea
40.	28 Dec.,2023	College level Poster competition under Viksit Bharat Abhiyan @ 2047	BPSAC, Purnea	BPSAC, Purnea
41.	29 Dec.,2023	Selfy and Half Marathan awareness programme under Viksit Bharat Abhiyan @ 2047	BPSAC, Purnea	BPSAC, Purnea
42.	30 Dec.,2023	Voters Awareness under Viksit Bharat Abhiyan @ 2047	BPSAC, Purnea	BPSAC, Purnea
43.	01 January, 2024	Cyclothone by 35 BN NCC, Purnea Chief Guest Col. Anjan Sen Gupta	BPSAC, Purnea	BPSAC, Purnea
44.	01 January, 2024	News Year Celebration-2024	BPSAC, Purnea	BPSAC, Purnea
45.	02 January, 2024	Jal JiwanHariyali Diwas under VIKSIT BHARAT ABHIYAN @ 2047	BPSAC, Purnea	BPSAC, Purnea
46.	04 January, 2024	Students Credit Card Awareness Programme under Sat Nischay Programme in collaboration with DRCC, Purnea under VIKSIT BHARAT ABHIYAN @ 2047	BPSAC, Purnea	BPSAC, Purnea
47.	05 January, 2024	Plantation and Sanitation Awareness programme under VIKSIT BHARAT ABHIYAN @ 2047	BPSAC, Purnea	BPSAC, Purnea
48.	06 January, 2024	One Day District Level Debate Competition in Collaboration NYK, Purnea with under VIKSIT BHARAT	BPSAC, Purnea	BPSAC, Purnea

		ABHIYAN @ 2047		
49.	08 January, 2024	Digital Literacy Awareness (Retail Loan & Salary Account) Programme in Collaboration Bank of India, Purnea with under VIKSIT BHARAT ABHIYAN @ 2047	BPSAC, Purnea	BPSAC, Purnea
50.	11 January, 2024	Exposure visit of NSS volunteers at Triguna Fertilizer Factory, Ufrail, Purnea under VIKSIT BHARAT ABHIYAN @ 2047	BPSAC, Purnea	BPSAC, Purnea
51.	12 January, 2024	Rastriya Yuva Utsav-2024 live telecast programme on the occasion of National Youth Day in Collaboration NYK, Purnea with under VIKSIT BHARAT ABHIYAN @ 2047	BPSAC, Purnea	BPSAC, Purnea
52.	12-19 January, 2024	National Youth Week under VIKSIT BHARAT ABHIYAN @ 2047	BPSAC, Purnea	BPSAC, Purnea
53.	12 January, 2024	Registration of college youth on Yuva Portal under Viksit Bharat @ 2027	BPSAC, Purnea	BPSAC, Purnea
54.	13 January, 2024	Exposure vist of youth under Viksit Bharat @ 2047	BPSAC, Purnea	BPSAC, Purnea
55.	17 January, 2024	Voters Awareness Programme (NAMO NAV MATDATA JAGRUKTA) under Viksit Bharat @ 2047	BPSAC, Purnea	BPSAC, Purnea
56.	17 January, 2024	Mass Account Opening Camp under Viksit Bharat @ 2047 in collaboration with SBI, Rambagh,Purnea	BPSAC, Purnea	BPSAC, Purnea
57.	23 January,2024	Parakram Diwas/Desh Prem Diwas as Birth Anniversary of Neta Ji Subash Chand Bosh under Viksit Bharat @ 2047	BPSAC, Purnea	BPSAC, Purnea
58.	25th Jan.,2024	National Voters Day under underViksit Bharat @ 2047	BPSAC, Purnea	BPSAC, Purnea
59.	26th Jan.,2024	Republic Day under Viksit Bharat @ 2047	BPSAC, Purnea	BPSAC, Purnea
60.	29 January,2024	Live Telecast Programme of Honorable P.M. Narendra Modi Ji on Pariksha Pe Charcha under Viksit Bharat @ 2047	BPSAC, Purnea	BPSAC, Purnea
61.	30 January,2024	Personolity Development Programme of Students on the Occasion of Sahid Diwas (as death Aniversary of Mahatma Gandhi) under Viksit Bharat @ 2047	BPSAC, Purnea	BPSAC, Purnea
62.	02 February, 2024	World Wetland Day under Viksit Bharat @ 2047	BPSAC, Purnea	BPSAC, Purnea
63.	04 Feb., 2024	SwachhataShramdan under Viksit Bharat @ 2047	BPSAC, Purnea	BPSAC, Purnea
64.	05 Feb., 2024	Cleanliness drive under Viksit Bharat @ 2047	BPSAC, Purnea	BPSAC, Purnea
65.	11 Feb., 2024	Road Safety Awareness Programme under Viksit Bharat @ 2047	BPSAC, Purnea	BPSAC, Purnea
66.	20 Feb., 2024	Live Telecast of Appointment letter distribution ceremony	BPSAC, Purnea	BPSAC, Purnea
67.	22 Feb., 2024	Voter Awareness Programme under Viksit Bharat Abhiyan @ 2047	BPSAC, Purnea	BPSAC, Purnea

68.	24 Feb., 2024	One Day District Level PasodYuva Sansad Karyakram under Viksit Bharat Abhiyan @ 2047. Chief guest of the programme Honorable MLA, Purnea Sadar, Purnea Sri. Vijay Khemka Ji.	BPSAC, Purnea	BPSAC, Purnea
69.	02 March, 2024	Lymphatic Phylariyasis (Hathi Paon) UnmulanJagrukta Programme -cum-Free Health Checkup Camp under Viksit Bharat Abhiyan @ 2047	BPSAC, Purnea	BPSAC, Purnea
70.	08 March, 2024	International Women's Day under Viksit Bharat Abhiyan @ 2047	BPSAC, Purnea	BPSAC, Purnea
71.	18 March, 2024	Voters Awareness Rally and Oath Programme	BPSAC, Purnea	BPSAC, Purnea
72.	14th April, 2024	World Health day	BPSAC, Purnea	BPSAC, Purnea
73.	14th April,2024	Birth Anniversary of Dr. B.R. Ambedakar Ji	BPSAC, Purnea	BPSAC, Purnea
74.	22nd April, 2024	World Earth Day	BPSAC, Purnea	BPSAC, Purnea
75.	23rd April, 2024	Birth Anniversary of Late Veer Kunwar Singh Ji	BPSAC, Purnea	BPSAC, Purnea
76.	1st May,2024	World Labour Day	BPSAC, Purnea	BPSAC, Purnea
77.	8th May, 2024	World Red Cross Day	BPSAC, Purnea	BPSAC, Purnea
78.	31st May,2024	World No Tobacco Day	BPSAC, Purnea	BPSAC, Purnea

12. Awareness Programme on Importance of Agricultural EducationAmong School Student:

As and when the school students visiting the college the following lectures were delivered before them.

1. Introduction about late Bhola Paswan Shastri Ji, Ex. Chief Minister of Bihar.
2. Personality Development.
3. Scope of agricultural education.
4. Digital platform in information technology.

Details are given below:

S. No.	Date of Awareness programme	Name of School	Number of Students and Teachers
1.	17.07.2023	G.D. Goyanka Public School, Purnea	111+8
2.	14.08.2023	KPC Knowledge point Convent JalalgarhPurnea	35+5
3.	19.12.2023	Upgraded Middle School Durgapur, Bhawanipur, Purnea	19+04
4.	29.02.2024	+2 Dukhirai High School Chandpur, KadwaKatihar	57+3
5.	12.03.2024	Ramdas Middle School, Dheriya, Katihar	47+08
6.	07.03.2024	UKMS, Katihar	47+08
7.	12.03.2024	Middle School Teja Tola, Katihar	25+4
8.	09.03.2024	Middle School Mirchaibari, Katihar	35+05
9.	11.03.2024	Middle School HariprasadMansahi, Katihar	40+03
10.	07.03.2024	Shukhdeye Middle School Gosala, Katihar	45+6
11.	07.03.2024	Middle School Vastol, Katihar	29+3

12.	10.03.2024	Al-Hera Academy, Baghmara Chowk	47+6
13.	12.04.2024	Upgraded Middle School MohanpurMansahi, Katihar	30+5
14.	13.04.2024	Upgraded Urdu Middle School Makhdumpur, Katihar	130+08
15.	09.05.2024	S.S. Vidya Niketan, Kasba, Purnea	110+7
16.	10.05.2024	Upgraded Middle School, Sirsa, Katihar	48+4
17.	10.05.2024	Government Midle School, Katihar	57+6
18.	22.05.2024	DON BOSCO SCHOOL, Mahanth Nagar, Katihar	78+7

13. Awareness Programme under Viksit Bharat Abhiyan 1947 to 2047

A Vikisit Bharat @ 2047 awareness programme was organized on 19th Dec., 2023 at Bhola Paswan Shastri Agricultural College by NSS unit. This programme was organized to aware the students of B.Sc (Hons.) Agriculture about the idea behind the Vikisit Bharat @ 2047. In this programme Associate Dean-cum-Principal Dr. Paras Nath address the students and teachers and told the idea behind the Vikisit Bharat @2047. Under this programme various activities were organized detailed are given below:

Sl. No.	Name of the event	Date	No of teachers participated	No of students participated
1.	Awareness programme @VIKSIT BHARAT @ 2047	16.12.2023	10	55
2.	Registration of students onVIKSIT BHARAT @ 2047portal	19.12.2023	9	176
3.	Farmers Day celebration under VIKSIT BHARAT @ 2047	23.12.2023	11	85
4.	One Farmers Training Programme VIKSIT BHARAT @ 2047	24.12.2023	7	45
5.	Birth anniversary of Bharat Ratna Ex. P.M. of India A.B.Bajpayeeji under VIKSIT BHARAT @ 2047	25.12.2023	8	68
6.	Elocution competition on VIKSIT BHARAT @ 2047	26.12.2023	9	54
7.	Extempore on VIKSIT BHARAT @ 2047	27.12.2023	10	45
8.	Debate competition on VIKSIT BHARAT @ 2047	28.12.2023	9	40
9.	Poster competition on VIKSIT BHARAT @ 2047	29.12.2023	12	28
10.	Cultural events on VIKSIT BHARAT @ 2047	29.12.2023	15	147

Brief Report of Voters Awareness Programme

Name of the College: BholaPaswanShastri Agricultural College, Purnea

Name of University: Bihar Agricultural University Sabour, Bhagalpur

Sl. No.	Name of the event	Date	No of students participated
1.	Voting Awareness Programme (speech ceremony)	17/01/24	76
2.	National voters day	25/01/24	70
3.	Voting Awareness Programme (oath ceremony)	22/02/24	66
4.	Voting Awareness Programme (rally took place)	18/03/24	68
5.	Voting Awareness Programme	12/04/24	70

	(participation of U.M.S MOHANPUR Katihar)		
6.	Voting Awareness Programme (Visit of village Pothiyabad for voting awareness)	16/04/24	36
7.	Voting Awareness Programme (Visting of village sora Gumti)	17/04/24	31
8.	Voting Awareness Programme (awaring idea through newspaper Prabhat	20/04/24	52
9.	Voting Awareness Programme (Installation of selfie point in B.P.S.A.S campus)	21/04/24	80
10.	Scientist of B.P.S.A.C Aware through Newspaper	23/04/24	65
11.	Principal aware the people regarding voting dead line	26/04/24	78

MGMG Annual Progress Report for the Nov 2021 – 15th Oct 2022

Institute's Team-wise progress

	No. of institutes/ universities involved	Total No. of Groups formed	No. of Scientist Involved	No. of village covered	No. of activities conducted	No. of messages/ advisory sent	Farmers beneficiary (No.)
State Universities	Bhola Paswan Shastri Agricultural College, Purnea	Nil	11	6	12	3 (Advisory)	300

Other extension activities:

- The Scientists / teachers of the college serve to cater the need of the farmers by active participation in extension activities organized by Agriculture Department, ATMA and other line departments.
- The college is also organizing different extension activities to focus on innovative Agril. Technology suited to the farmers of the region, to raise production, productivity and overall income of the farmers.
- Scientists of the college participated in ATMA sponsored programmes, as for examples Kharif Mahotsav, Rabi Mahotsav and Kisan Gosthi. Different topic like general management in standing crops, SRI in hybrid paddy, Intensive Farming system in wheat, enhancing yield through line sowing in Rabi crops had been discussed with the farmers in these programmes.
- Scientists of the college organize weakly Kisan Chaupal and Mera Gaon Mera Gaurav in co-operation with KVKs in different villages of block like Purnea East, Kasba, Jalalgarh, BarharaKothi.
- Scientists participated as a resource person in block level training or programme of SRI-MAHAABHIYAN sponsored by ATMA.
- Scientists of BPSAC, Purnea participated in ZREAC, Kharif Meeting held at MBAC, Agwanpur.
- Soil Scientist organized World Soil Day, Education day etc at BPSAC, Purnea. .
- Celebrated National Voters Day-2023 at BPSAC, Purnea for Electoral Literacy Club on dated 25/01/2024.

Proposed Action Plan
(June 2024 to September 2024)

Proposed action plan

- Participation of scientists in different training programmes organized by department of agriculture, ATMA and other line departments.
- As per direction the BSDM training will be conducted at BPSAC, Purnea .
- Organization of Farmers Scientist Interface in the villages of Purnea District
- Participation in the Kisan Chaupal-06
- Organization of Training Program – 01
- Organization of meeting in adopted village of Mera Gaon Mera Gaurav
- Organization of meeting in the adopted village of Zero Budget and Natural Farming.

Proposed extra-curricular activities to be organized by NSS, boys wing during April.2023 to Sept 2023:

Sl. No	Date/Month	Events/Regular Activities	Place	Sponsoring Agency
1.	1st June, 2024	Word Milk Day	BPSAC, Purnea	BPSAC, Purnea
2.	3rd June, 2024	World Cycle Day	BPSAC, Purnea	BPSAC, Purnea
3.	5th June, 2024	Word Environment Day	BPSAC, Purnea	BPSAC, Purnea
4.	12th June ,2024	Child Labour Awareness Programme	BPSAC, Purnea	BPSAC, Purnea
5.	14th June, 2024	World Blood Donation Day	BPSAC, Purnea	BPSAC, Purnea
6.	21st June, 2024	International Yoga Day	BPSAC, Purnea	BPSAC, Purnea
7.	01-07 July, 2024	Van Mahotsava Week	BPSAC, Purnea	BPSAC, Purnea
8.	9th August, 2024	Bihar Prithvi Diwas &August Kranti Day	BPSAC, Purnea	BPSAC, Purnea
9.	12th August, 2024	International Youth Day	BPSAC, Purnea	BPSAC, Purnea
10.	15th August, 2024	Independence Day	BPSAC, Purnea	BPSAC, Purnea
11.	5th September, 2024	Birth Anniversary of S.P. Radhakrishanan as Teachers Day	BPSAC, Purnea	BPSAC, Purnea
12.	8th September , 2024	International Literacy Day	BPSAC, Purnea	BPSAC, Purnea
13.	9th September , 2024	Death Anniversary of Ex. C.M. Bihar Bhola Paswan Shastri Ji	BPSAC, Purnea	BPSAC, Purnea
14.	14th September, 2024	World Hindi Diwas	BPSAC, Purnea	BPSAC, Purnea
15.	16th September, 2024	World Ozone Day	BPSAC, Purnea	BPSAC, Purnea
16.	21st September, 2024	Birth Anniversary of Late Bhola Paswan Shastri Ji Ex. C.M. of Bihar	BPSAC, Purnea	BPSAC, Purnea
17.	24th September, 2024	National Service Scheme (NSS) Day	BPSAC, Purnea	BPSAC, Purnea

- There is no Action taken report of previous Extension Council Meeting (Kharif, 2023) from BPSAC, Purnea

MANDAN BHARTI AGRICULTURAL COLLEGE, SAHARSA

Report of 26th Extension Education Council Meeting

(From October 2023 to May 2024)

Extension activities performed at Mandan Bharti Agriculture College, Agwanpur (Saharsa) from October 2023 to May 2024. The details are being enlisted below:

1. **Training and Workshop organized at MBAC:-**
   - Conducted 2 days district level training on Mushroom production, processing and marketing on **December 21-22, 2023**.
   - Organized 15 days training for Agricultural Input Dealers on "**Integrated Nutrient Management"** during **January 12-26, 2024**.
   - Conducted Ten days training programme of Biotech student of MLT College during **February 2024**.
   - Training on Mushroom production technology from **24 April to 26 April 2024**.
   - INM training organized from **1 May 2024 to 15 May 2024**.
   - Organized one day workshop on GRE, TOFEL and higher education in abroad on **21 May 2024.**
   - One day seminar cum workshop for developing market linkages for mushroom based entrepreneurial acumen on **12 June 2024**.

2. **special achievement**
   I. A MoU was signed between MBAC, Saharsa and Comfed (Sudha Dairy) , Supaul
   II. Dr Arunima Kumari, Assoc Dean-cum-Principal, MBAC, Agwanpur (Saharsa) has been invited to conduct training programme for Extension Personnel of Jamica by **AIAEE, USA.**

3. **Farmers visit to the PHC:**

One hundred eight (108) farmers have visited the Plant Health Clinic of MBAC, Agwanpur (Saharsa) for their various problems of *rabi* season crops including vegetables and fruits. Their problems have been addressed by the concerned scientists of the college.

4. **Scientist visit to the farmers field:**

Scientists of MBAC, Agwanpur (Saharsa)visited to seventeen (17) farmer's field. The scientists diagnose the problems and suggested their remedial strategies on spot.

5. **Advisory Service to the local farmers:**

Eighty-seven (87) phone calls of the farmers of Koshi zone-II were attended by the scientists of various disciplines advising them properly regarding existing problems to crop up with them. Most of the calls were based on availability of improved varieties and plant protection measures of different crops including fruits and vegetables.

6. Adoption of Village:

A village namely Kumhara Ghat (Panchayat Purikh), Saharsa was adopted on the basis of mal nutrition and socio economic status of the village by MBAC, Agwanpur (Saharsa). Following activities were organised in the adopted village

Date	Particulars	No. of beneficiaries
07.02.2024	Distribution of seed of turmeric and Elephant Foot Yam (Suran/Oal/Jimikand), their planting technique and awareness programme	23
16.03.2024	Distribution of summer vegetables seed, sowing technique. Lecture on Importance of green vegetable in life	25

7. Seminar/Symposia/Training attended:

- Dr Rajesh Kumar, Asstt Prof-cum-Jr Scientist (SSAC) participated in 3rd National Conference on Livelihood and Food Security through Agriculture and Applied Sciences (LFSAAS-2023) organized Society for Agriculture Innovation and Development Ranchi (SAID) at Dr. Shyama Prasad Mukherjee University, Ranchi on Nov 05, 2023.
- Dr Rajesh Kumar, Asstt Prof-cum-Jr Scientist (SSAC) participated in Conference-cum-Workshop on Traditional Super Foods: Millets. Maize & Makhana organised by Madan Bharti Agricultural College, Agwanpur, Saharsa, Bihar Agricultural University, Sabour during Dec 06-08, 2023.
- Dr Rajesh Kumar, Asstt Prof-cum-Jr Scientist (SSAC) participated in workshop on Soil Health Dimensions Challenges and opportunity organised by Director Agriculture, Patna At BAMETI, Patna(Bihar) on Dec 05, 2023

8. Lectures Delivered in Training Programmes:

Dr. Rajesh Kumar, Asstt. Prof.-cum- Jr. Scientist**,** MBAC, Agwanpur, Saharsa delivered following lectures:

- Problematic soil and their management.
- Biofertilizers:- A key player in enhancing soil fertility and crop productivity.
- Tillage, its objective and influence of tillage on soil properties.
- Brief description of Tall and Diara land.
- Brief introduction of Indian Soil and soils of Bihar.
- Vermiculture: A viable solution for sustainable agriculture.
- Vermicomposting and its importance in improvements of soil nutrients and agricultural crops.
- Functioning and Instrumentation of Atomic Absorption Spectrophotometer.

9. Research Publication:

- Janmejay Kumar, **Pavan Shukla**, Shiv Kumar Chaudhary, **Vinod Kumar Singh**, Nitu Kumari, Gautam Kunal, Ranvir Kumar and Suman Kalyani (2023). Beekeeping barriers: Unravelling constraints to foster sustainable enterprise adoption: A holistic examination. *The Pharma Innovation Journal*. SP-12(12) 2023: 745-749.

- Nitu Kumari, Pranava Pandey, **Pavan Shukla,** V.C. Verma, S.R.P. Singh and J.P. Srivastava (2023). Diallel cross analysis of tomato (*Lycopersicon esculentum* Mill.) for quality and yield using Hayman's numerical approach. *Frontiers in Crop Improvement.* Volume 11 Special Issue-VI December 2023: 2713-2715.
- VC Verma, Pranava Pandey, **Pavan Shukla** and Vivek C Verma (2023). Fermentation: A Nutritional Additive Process in Food Products. *Frontiers in Crop Improvement.* Volume 11 Special Issue-V December 2023: 2541-2545.
- Pranava Pandey, VC Verma and **Pavan Shukla** (2023). Role of Rootstock in Crop Improvement. *Frontiers in Crop Improvement.* Volume 11 Special Issue-V December 2023: 2558-2560.
- Nitu Kumari, V.C. Verma, **Pavan Shukla**, Pranava Pandey, **Vinod Kumar Singh** and J.P. Srivastava (2023). Diallel cross analysis of tomato (*Lycopersicon esculentum* Mill) for different quantitative traits. *Frontiers in Crop Improvement.* Volume 11 Special Issue-VI December 2023: 2716-2717
- Nitu Kumari, **Pavan Shukla**, V.C. Verma, Pranava Pandey, **Vinod Kumar Singh** and J.P. Srivastava (2023). Combining ability for various traits in vegetable pea (*Pisum sativum*). *Frontiers in Crop Improvement.* Volume 11 Special Issue-VI December 2023: 2718-2727.
- AS Jayara, Chayan Pant, SN Singh, **Pavan Shukla**, Shubham Singh and Sharad Pander (2023). Physiological Impact of Heat Stress and their Alleviation Measures in Agriculture. *Journal of Applied and Natural Science.* 15(4) 2023: 1741-1749

10. Popular Articles

- VC Verma, Pranava Pandey, Pavan Shukla and Vivek Ch Verma (2023). Pyaz Bhandaran ka sasta tarika. *Krishak Aradhana* May, 2023 (in Hindi).
- Anmol Kumar, VC Verma, Pranava Pandey and Pavan Shukla (2023). Udhyaniki phaslon me upyog hone wale mahatwapurna aujaar evam uske karya. *Krishak Aradhana* May, 2023 (in Hindi).
- VC Verma, Pranava Pandey, Pavan Shukla and Nitu Kumari (2023). Phasal Awshesh prabandhan uchit vikalp evam aamdani ke sadhan. *Madhya Bhart Krishak Bharti,* Year-18, Issue: 03 June, 2023 (in Hindi).
- Pranava Pandey, VC Verma and Pavan Shukla (2024). Sharad ritu me naye phal paudhon evan phaslon ka rakhrakhaw. *Madhya Bhart Krishak Bharti,* Year-18, Issue: 10 Jan, 2024 (in Hindi).
- Gautam Kunal, Madhumala and Pavan Shukla (2024). Unveiling the Exotic Beauty: The Rise of Dragon Fruit in Global Palates. Agricoe; E-News Letter Vol. 05, Issue: 01, 2024

11. Celebration of Days:

- Celebrated Health Checkup Camp on the occasion of Blood Donation Day, **Oct 01, 2024** at MBAC, Agwanpur (Saharsa).
- Celebrated Birth Anniversary of Mahatma Gandgi and Lal Bahadur Shastri on , **Oct 02, 2024** at MBAC, Agwanpur (Saharsa).
- Organized Debate and Speech programmers on the occasion of World Food Day, **Oct 31, 2023**.

- ➢ Organized Agricultural Education Day on **Dec 03, 2023**.
- ➢ Organized World Soil Day on **Dec 05, 2023**.
- ➢ Celebrated “Republic Day” on **January 26, 2024**.
- ➢ Organized International Women Day on **March 08, 2024**.
- ➢ World Earth Day was organized on mass scale on **22 April 2024** in which all the scientists of MBAC, KVK & RRS had planted the trees.
- ➢ World Rat Day was celebrated on **4th April 2024.**
- ➢ World Environment Day was organized on **5 June 2024.**

12. Others:

- ❖ Arranged the visit of school students for awareness of agricultural education among the students on January 10, 2024.
- ❖ Visit of Biotech students of MLT College, Saharsa and delivered lecture on Functioning and Instrumentation of Atomic Absorption Spectrophotometer on February 13, 2024.
- ❖ Awareness programme has been created on utilization of millets and eradication of malnutrition.

13. Media coverage

14. Action plan for the next six month:

- ✓ Millet Production has been started in an area of 1.25 acres.
- ✓ MBAC, Agwanpur (Saharsa) is committed to continue all extension activities to fulfil its mandate directed by the university.
- ✓ Continue the advisory services to the farming community.
- ✓ Weekly chaupal in adopted village.
- ✓ Awareness and training programmes in the adopted village.
- ✓ Establishment of Poshak Vatika at MBAC, Saharsa & adopted village.
- ✓ **Training Programme will be conducted as per following enclosed schedule:**

Sl. No.	Month	Topic	Duration	Target Beneficiaries
1.	June	Women empowerment through skill development training	3-4 days	Rural Farm Women
2.	July	Millets for nutritional securities of farmers	2 days	Farmers, Farm Women & Rural Youth
3.		Integrated pest management of Rice	2 days	Farmers & Rural Youth
4.		Inculcating & nurturing agripreneurial ecosystem for regional development	1-21 days	Rural Youth, Farmers, Research Scholars, Faculty Members,
5.	August	Agronomical practices for oilseed crop in Kosi region of Bihar	2 days	Farmers & Rural Youth
6.		Production technology of vermicomposting	3 days	Rural youths, Farmers, Students
7.		Managing social science data collection, classification, analysis & presentation	1-10 days	Faculty Members/ Staff, Research Scholars, Students
8.		Layout, planning and establishment of nutritional garden	1 week	Farmers, Farm Women & Rural Youths
9.		Enriched compost preparation	3 days	Rural Youth
10.	September	Integrated weed management for major crops of Kosi region	3 days	Farmers & Rural Youth
11.		Basic analytical tools for handling economic data	1-10 days	Faculty Members/Staff, Research Scholars, Students
12.		Propagation techniques for fruit crops	2 days	Farmers, Farm Women & Rural Youth
13.		Seasonal management of Honey Bee	1 week	Rural Youths, Farmers, Students

VEER KUNWAR SINGH COLLEGE OF AGRICULTURE, DUMRAON (BUXAR)

Report of 26th Extension Education Council Meeting (From October 2023 to May 2024)

1. Introduction:

To facilitate and speed up the agricultural education, research, extension and training in the state, four agriculture, one horticulture colleges and one state agricultural University had been established in different part of the state by the Government of Bihar in last 10 years. During this period, College of Agriculture, Dumraon (Buxar) was established on 27th April, 2010 by the Government of Bihar (Letter No. PPM- 08/2009/402/ Krishi, Patna, dated 22.01.2010) as a constituent college of Rajendra Agricultural University, Pusa, Samastipur. The Bihar Agricultural University, Sabour had been established near Bhagalpur on the 5th August 2010. The College of Agriculture became the part of newly established Agricultural University of the state i.e. Bihar Agricultural University, Sabour. Later, in the year 2013 the name of the college has been renamed to Veer Kunwar Singh College of Agriculture, Dumraon (GUDETED get notification no. PPM-08/2009/3799/ Krishi, Patna, Dated 29.07.2013) on the name of Shaheed Veer Kunwar Singh ji, a famous freedom fighter of India's First War of Independence against British government in 1857. This college has been established to fulfil the requirements of farming communities and rural people of Zone-III B of Bihar with 11 districts of the state are under its jurisdiction viz. Rohtas, Bhojpur, Buxar, Bhabhua, Arwal, Patna, Nalanda, Nawada, Jehanabad, Aurangabad, Gaya to speed up the human recourse development in the field of agriculture, conduct research on specific requirement of the zone, facilitate the farmers with advanced production technology with transfer of technology and impart training to rural youth and farming community to enhance the production and productivity of farm for sustainable livelihood with food and nutritional security keeping in view with present and future climatic change.

Mandate:

- Teaching
- Research
- Extension and Training

Goals:

- Building of human resources in the field of agriculture and allied sector through quality education, training to agriculture officers and farmers for overall development of agriculture sector and food and nutritional security of the people.
- Increase in agricultural production and productivity of Bihar in particular and of the country in general through appropriate, advance and sustainable technological development and their dissemination to the farmers.
- Development of food production systems based on agriculture diversification, water & soil conservation and efficient land use planning
- Technology adoption by farmers experiencing common agriculture challenges.

Objectives:

- To impart quality education to the students in the field of Agricultural Sciences.

- To undertake basic, strategic and applied research for over all development of agriculture and its allied sector through advance and novel technology development
- To undertake extension education programme for the farmers, rural youths & women by organizing on campus and off campus training programmes for dissemination of advance and sustainable farm technology for their better livelihood.
- To produce and supply of breeder seeds for multiplication of foundation and certified seeds.

2. Training /Workshop organised

During the period of reporting, 7 trainings of different topics related to millet production, horticulture, nutrient management, and crop residue management were organised. One workshop on crop residue management was also organised in the college on 27 December 2024. Total 500 farmers, rural youth were trained in the college on various topics. The list of training programme organised in the college are as below

Name of Seminars/Conference/Workshop	Date	No. of Participants	Expenditure incurred	Type of Event
Integrated Nutrient Management to Enhance Soil Health and Farmer's Income	15-16 March, 2024	40	72,741.00	Training
Horticultural techniques for enhancing farmers' income and nutritional security	6-7, March, 2024	40	71,841.00	Training
Integrating New Technologies for Crop Residue Management	11-12 March, 2024	30	68,810.00	Training
Workshop on Crop Residue Management	27-Dec-23	250	64,015.00	Workshop
Millets production techniques and value added products	30-31 Jan, 2024	30	55,368.00	Training
Millets production techniques and value added products	12-14 Feb, 2024	30	76,635.00	Training
Millets production techniques and business opportunities	27-29 Feb, 2024	30	86,254.00	Training
Millets (Shri Anna) for sustainability and nutritional security	13-15 March, 2024	30	80,786.00	Training

3. Adopted Village : Kuposhan Unmulan Mahaabhiyan

Under the Malnutrition eradication program after baseline survey village named "KULHWA" of Dumraon block, District- Buxar had been selected as adopted village.

Total population: 850.

Total household number: 225.

Total cultivated area: 130 acre.

Major crop cultivated: Paddy, Maize, Bajra, Wheat, Barley, vegetables

Activities Performed in village Kulhwa so far:

S. No	Activities	Date	No. of Participants
1	Base line survey of villages and "Kulhwa" had been selected	February 2023	08 (Village)
2	Organised Training program of digital innovation and	06 March 2023	31

	Technology for gender equity		
3	Organised Chowpal for malnutrition eradication at adapted village Kulwa	31-05-2023	28
4.	Health check-upcampaign(6 To 15 Years) Height, Weight and Haemoglobin	04-06-2023	55
5.	World Environment Day, Plantation of Mango and Guava Plants	05-06-2023	20
6.	Identification of 19 beneficiary for Establishing Poshan Vatika	17-06-2023	17
7.	Organised Chowpalat Kulwa Village	28-06-2023	21
8.	Organised Chowpal at Kulwa Village	20-07-2023	14
9.	On the Occasion of Van Mahotsaw Organised Kisan Gosthi and Distribution of Plants (Mango, Guava Lemon among the Farmer	05-08-2023	32
10	Choupal at Kulhwa village	07-10-2023	11
11	Chowpal at Kulwa village	18-10-2023	15
12	Plantation drive Distribution of Plant (Mango, Guava, Lemon, Dram stric, Carry Patta)	28-10-2023	19
13	Awareness program organised for already distributed plants for establishing Nutri-garden	11-01-2024	13
14	Monitoring of Nutri-garden established in the village	07-02-2024	13
15	Choupal at Kulhwa village	20-03-2024	22
16	Awareness programme & Survey	09-04-2024	18
17	Monitoring of Nutri garden	22-04-2024	25
18	Awareness program on the occasion of world Environment Day	04-06-2024	31

Impacts:

1. Increase in awareness about nutrition among villagers.
2. Changes in Food habits among villagers.
3. Use of unused lands around their resident areas.
4. Established Nutri- Garden made beneficiaries self- reliant for nutritional food sources.
5. Establishment of Nutri garden encourages community participation, foster a sense of ownership and pride for small land holders.

Glimpses of Adopted Village (Kulhwa)

Malnutrition Eradication Programme for rural population has launched by the Honourable Agricultural Minister of Bihar and Dr. D. R. Singh, Vice-Chancellor of Bihar Agricultural University, Sabour on June 8,2023 from Kishanganj.

Health Check up campaign: Organised on 04-06-2023, Total no.of participants-55 (Height, Weight, Haemoglobin of children and women has been taken)

Van Mahotsav Programme: Conducted on 05-06-2023,Total no. of Participants-20 (Saplings of Mango, Guava, Lemon have been distributed among farmers)

Nutri-Garden Establishment:Total 19 Nutri- Garden Established.
(Saplings of Mango,Guava,Lemon,Curryleaves,Moringa have been given to selected 19 beneficiary for nutria garden establishment)

Kisan Choupal Programme: Nutrition Education- To change in food habit ,Health Benefits of Nutri-Garden, Establishment of Nutrigarden, Management and Care in Nutrigarden, Nutrition for women &Children, Anaemia–causes and dietary management, Role of Vitamins &Minerals, Benefits of Moringa.

Monitoring of Nutri -Garden: Monitoring of nutri- Garden at regular interval allows us to identify any issues early on and implement appropriate interventions to maintain the garden.

Consultations: Regular Consultations conducted with the beneficiaries as it provides valuable insights into their needs and feedbacks.

World Environment Day program: An awareness program was organized in the week of world Environment Day on 4th June 2024 to spread awareness on the importance of planting, land restoration and its impact on health.

4. Publication:

i) Training manual
4 training manual published on various topic listed below

Sl. No.	Title of Manual / Book	Author/s	Total Pages	Year of Publication
01.	Integration of Technologies for Crop Residue Management (In Hindi)	M.H. Ansari, Suman Lata and M.K. Sinha	85	2024
02.	Integrated Nutrient Management for Enhancement of Soil Health and Farmers Income (In Hindi)	Suman Lata, M.H. Ansari and M.K. Sinha	76	2024
03.	Millet Production Technology and Value Added Product (In Hindi)	Shanti Bhushan, A.S. Saxena and M. K. Sinha	93	2024
04.	Horticulture Techniques for Enchantment of Farmers' Income and Nutritional Security (in Hindi)	Kumari Nandita, M.H. Ansari and M.K. Sinha	67	2024

ii. Popular Article:

1. Kunal G, Das R and **Prabhakar CS. 2024**. Navigating the buzz: challenges and opportunities in beekeeping during dearth periods. Indian Entomologist, 5(1): 81-84.

2. Prabhakar CS and Sinha A. 2023. Aam ke videshon me niryat ke liye rakhen dhayan. Keti Bari, 5 (1):43-44 (Published by Bameti, Govt. of Bihar)

3. Prabhakar CS. 2023. Dhan ke keet evam rog prabandhan. Keti Bari, 5 (3):45-48 (Published by Bameti, Govt. of Bihar)

4. Sanjeev Kumar Gupta, Rajesh Kumar, Amit Kumar and AK Jain. 2023. HYDROPONICS – A high-tech farming technique for green fodder production under urban and flood affected areas. AgriGate- An International Multidisciplinary e-Magazine, 3(10):290-297.

5. प्रणव पाण्डेय, विकाश चन्द्र वर्मा, पवन शुक्ला (2024) शरद ऋतु में नए फल पौधों एवं फसलों का रख-रखाव, पृष्ठ 87, जनवरी, कृषक भारती कृषि पत्रिका, ISSN-2582-5976

6.विकाश चन्द्र वर्मा, प्रणव पाण्डेय,पवन शुक्ला, नीतू कुमारी, अनमोल कुमार (2023) फसल अवशेष प्रबंधन उचित विकल्प एवं आमदनी के साधन, पृष्ठ 85, जून, कृषक भारती कृषि पत्रिका, ISSN-2582-5976

7. Gautam Kunal, KumariMadhumala and PavanShukla. 2024. Unveiling the Exotic Beauty: The Rise of Dragon Fruit in Global Palates. AgriCos e-Newsletter. 01(09):25-29.

8. Gautam Kunal and Abhinaw Kumar Singh. 2024. Quinoa: A Nutrient-Rich Superfood with a Sustainable Footprint. Sunshine Agriculture. 4(1): 20-24.

9. K. Madhumala, K. Kumar, Gautam Kunal and Suman kumara. 2024. A Versatile Plant: Noni. The Agriculture Magazine. 03(04): 516-520.

10. Kiran Rathod, Shemoo Nisar, Biswajit Karmakar, Jyoti and Gautam Kunal. 2024. Harvesting Gold from Green: The Integrated Crop-Vermiculture System for Sustainable Farming and Waste Management. AgriCos e-Newsletter. 05(02):58-60.

11. K. Madhumala, K. Kumar, Gautam Kunal and Suman kumari. 2024. Climate Smart Agriculture/ Climate Smart Village. KrishiKumbh. 03(10):40-42.

12. Gautam Kunal, Rakesh Das and Chandra ShekharPrabhakar. 20204. Navigating the Buzz: Challenges and Opportunities in Beekeeping During Dearth Periods. Indian Entomologist. 05(01): 81-84.

13. Kiran Rathod, Shemoo Nisar, Biswajit Karmakar, Susmita Dey and **Gautam Kunal**. 2024. From Tomato Trash to Liquid Gold: Turning Tomato Processing Waste into Valuable. AgriCos e-Newsletter. 05(02):52-54.

14. Kiran Rathod, Shemoo Nisar, Biswajit Karmakar, Jyoti and **Gautam Kunal.** 2024. Turning Trash into Treasure: The Green Revolution of Bioethanol Production from Fruit and Vegetable Waste. AgriCos e-Newsletter. 05(02):55-57.

iii. Technical/Extension Bulletin:

1. Prabhakar CS and Gautam Kunal. 2024. Sahajan kee vaigyanik kheti. Extension Bulletin no. 01/2024, VKSCOA, Dumraon (BAU, Sabour)

5. Radio talk/ TV talk:

1. Dr. Chandra Shekhar Prabhakar, Assistant Professor (Entomology) delivered radio talk on Chana Ke Keet Evam Niyantran, recording date: 24th January, 2024 at Akashwani Patna, Broadcasting Date: 27th January, 2024

2. Dr. Gautam Kunal, Assistant Professor (Entomology) delivred T. V talk on Insect pest and diseases of Moringa/Drum stick to Nature Degree channel, broadcasted on November 10 2023.

6. Kisan Mela:

The college has participated in the Kisan Mela organised at BAU, Sabour from 17 -19 Feb 2024.

Veer Kunwar Singh College of Agriculture, Dumraon participated in the *Kisan Mela* –2024 organized by Bihar Agricultural University, Sabour from 17 February to 19 February, 2024 at BAU, Sabour, Bhagalpur. The *Kisan Mela*-2024 inaugurated by Hon'ble Rural Development Minister,

Government of Bihar Sri Shravana Kumar in the presence of Hon'ble Vice–Chancellor, Bihar Agricultural University, Sabour Dr. D. R. Singh. Both the dignitaries also visited the college stall. Our dynamic Associate Dean-cum- Principal Dr. Mukesh Kumar Sinha welcomes the dignitaries with flower bouquet on college stall. We demonstrated the farmers' friendly technologies for economic and sustainable farming in the state. We demonstrated the *Sonachur* rice under one district one product of district Buxar, linseed seed production on farmers field under linseed hub project, production technology of green pea, crop residue management under centre of excellence on crop residue management and millet value production and value added products under centre of excellence on millet value chain etc during the Kisan Mela –2024. Dr. C.S. Prabhakar, Dr. Suman Lata, Dr. M.H. Ansari, Dr. Nandita were among the experts from VKSCOA participated in the Kisan Mela-2024.

7. Day celebration:

1. Sawachhata Pakhawara 17 September to 02 October 2023.

Cleanliness drive organised on the occasion of Sawachhata Pakhawara 17 September to 02 October 2023.

ii. Birth Anniversary of Rashtrapita Mahatma Gandhi and former Prime *Minister Sri Lal Bahadur Shastri celebrated on 2nd October 2023*

The birth anniversary of *Rashtrapita* Mahatma Gandhi and former Prime Minister of India Sri Lal Bahadur Shastri celebrated on 2nd October 2023 in the college. The programme was chaired by Dr. D. K. Singh, Associate Professor and in-charge Principal of the college. Other members of the college namely, Dr. S. R P. Singh, Dr. C. S. Prabhakar, Mr, Jitendra Kumar, Mr. Avinash S. Saxena, Dr Pranava Pandey etc. were also present.

8. Faculty participation in Conference/Seminars/Workshops/trainings

1. Dr. Pranava Pandey, Assistant Professor (Horticulture) participated in online training programme on "operationalization and uses of Agri-DIKSHA web education channel" under NAHEP Component-2 project "Resilient Agricultural Education System" organised by ICAR-IASRI, New Delhi, during 29 to 31 May, 2023.

2. Dr. Pranava Pandey, Assistant Professor (Horticulture) participated in a Brain storming workshop on Horticulture at DKAC, Kishanganj during 8-9 March, 2024

3. Dr. Pranava Pandey, Assistant Professor (Horticulture) participated in an Online 21 Days Summer School on "Emerging Challenges and Opportunities in Biotic and Abiotic Stress Management (ECOBASM-2023)" during 10-30 August 2023 organized by Astha foundation, Meerut (UP), India.

4. Dr. Pranava Pandey, Assistant Professor (Horticulture) participated in an Online 30 Days Winter School Training Program on "Technological advances leading to Smart Farming & Agripreneurship" during 01st Jan to 30th Jan, 2024 organized by Utkarsh PDKV- Agribusiness Incubation Centre, Dr.PanjabraoDeshmukhKrishiVidyapeeth, Akola in collaboration with Just Agriculture Education Group.

5. Dr. Pranava Pandey, Assistant Professor (Horticulture) participated in a 14 Days NEP-2020 orientation and sensitisation programme under Malviya Mission Teachers Training Programme (MM-TTP) of UGC during 02-03-2024 to 15-03-2024 organized by Indian Institute of Technology, Dhanbad in online mode.

6. Dr. Kamal Kant, Assistant Professor (Horticulture) participated in a Brain storming workshop on Horticulture at DKAC, Kishanganj during 8-9 March, 2024

7. Dr. Kamal Kant, Assistant Professor (Horticulture) participated in ISVS Golden Jubilee National Seminar at ANDUAT, Ayodhya, IIVR, Varanasi during 24-26 February, 2024

8. Dr. Kamal Kant, Assistant Professor (Horticulture) participated in an online NEP 2020 Orientation & Sensitization Programme organised by Malaviya Mission Teacher Training Programme, IIT, Patna during 16-26 April, 2024

DR. KALAM AGRICULTURAL COLLEGE, KISHANGANJ

Report of 26th Extension Education Council Meeting

(From October 2023 to May 2024)

Report on Extension Activities of College

Dr Kalam Agricultural College, Kishanganj is involved in advisory services, diagnostic services, awareness generation, human resource development etc. among farmers, rural youth and villagers through the below mentioned activities.

I. Awareness Programme

A. Bihar Start-up Policy

Awareness programme on Bihar start up policy was conducted on 24.11.2023 at DKAC, Kishanganj wherein students, faculties and others were present

B. Eco Friendly Week

Eco friendly week celebrated on third week of November 2023 for sensitizing about the changes in climate and its impact in daily life among the faculties and students.

C. Health Camp at adopted village

Health camp was organized at adopted village for creating awareness about nutritional benefits of foods, dietary habits and collection of health parameters etc. as per details below

Sl. No	Date of health camp	Location	Number of participants
01	27.11.2023	Ganiyabari village	48
02	21.05.2024	Ganiyabari village	61

II. Training:

A. Farmers' Field Day cum Exposure Visit

A Farmers' Field Day cum Exposure Visit was made on 02.03.2024 for the farmers where lecture on Maize cultivation practices were delivered. It was followed by the exposure visit for inter-cultivation of maize.

B. Off campus training on Mushroom Cultivation

A training programme on Mushroom cultivation was organized during 19.03.2024 to 21.03.2024 at Ganiyabari village to promote Mushroom cultivation to the tribal farmers. It was followed by supply of spawn and awareness activity. Later, diagnostic visit was made regularly to monitor the mushroom cultivation among the farmers.

C. Seminar-cum-Training on unleashing Agri-entrepreneurship

A seminar cum training on unleashing agri-entrepreneurship was organized by DKAC, Kishanganj on 21.03.2024 for the benefits of the students and faculty. It was attended by the Registrar, BAU-Sabour and 05 renowned agri-business persons of Bihar to motivate the students.

D. Sponsored training conducted at DKAC, Kishanganj

DKAC Kishanganj has conducted following training programmes in association with different sponsoring agencies for capacity development of farmers and line department personnel.

Sr. No	Name of the training program	Funding Agency	Date	Number of Participants
1.	Pineapple & dragon fruit cultivation, marketing &Value addition	ATMA Katihar	25th - 29th September 2023	34
2.	Organic, natural farming and marketing	ATMA Katihar	30th September to 04th October2023	32
3.	Scientific cultivation of dragon fruit	ATMA Madhepura	1st -5th November 2023	57
4.	Scientific Cultivation of Tea		21- 23 November 2023	25
5.	Scientific Cultivation of pineapple	BAMETI Patna	9th -10th January 2024	25
6.	Scientific cultivation of Tea	ATMA Kishanganj	21st -23rd February 2024	27
7.	Scientific cultivation on Tea	BAMETI patna	07th -09th May, 2024	30
8.	Natural farming, marketing, value addition	ATMA katihar	25th -31th May, 2024	32

III. Interaction with Farmers:

A. Scientist-Farmer interaction

Faculties of DKAC, Kishanganj were involved in various scientist-farmer interactions at different places of Kishanganj district. The details are mentioned below

Sr. No.	Date	Place	No of Participants (Approx.)	Title of the event	Sponsoring agency
1.	08.09.2023	Kisan Gosthies /Field Day at Sarogara, Pothia	60	Pineapple Production	ATMA Kishanganj
2.	09.09.2023	Kisan Gosthies /Field Day at Chhaital, Thakurganj	60	Tea Production	ATMA Kishanganj
3.	13.09.2023	Kisan Gosthies /Field Day at Khaniyabad, Tedhagachha	60	Climate Resilient Agriculture	ATMA Kishanganj
4.	14.09.2023	Kisan Gosthies /Field Day at Belwa, Kishanganj	60	Tea Production	ATMA Kishanganj
5.	25.10.2023	Rabi Mahaabhiyan	60	Agriculture Technology and Market Linkage	ATMA Kishanganj

B. Farmer-Student interaction

Students of DKAC, Kishanganj participated in farmers–student interaction on 14.05.2024 at Ganiyabari village of Bhotathana gram panchayat in Pothia block of Kishanganj for sensitizing them about developmental scenario of village as well as agricultural situation at village level

IV. Programme celebration

A. Gandhi Jayanti celebration

Gandhi Jayanti was celebrated on 02.10.2023 at Dr. Kalam Agricultural College, Kishanganj. Floral tribute was given by faculties and staff. During this event, Associate Dean-cum-Principal asked everybody to promote the principles of truth and non-violence.

A. Republic Day

Dr. Kalam Agricultural College, Kishanganj celebrated 75th Republic Day at DKAC, Kishanganj campus on 26.01.2024. All the students and teachers participated in the programme. Associate Dean-

cum-Principal hoisted the flag and appealed the student and faculty for following the duty stated in the constitution of India for the development and progress of the country

A. International Women's Day celebration

The International Women's Day was celebrated at DKAC, Kishanganj on 8th March, 2024. It was celebrated by the lecture series about the contribution of women in agriculture and followed by facilitating the progressive women farmers.

A. List of NSS activities organized at DKAC Kishanganj (2023-24)

Sr. No.	Date	Title of the event	No. of Participants (Approx.)
1.	01.10.2023	Blood donation camp and cleanliness drive	98
2.	02.10.2023	Mahatma Gandhi Jayanti and Lal Bahadur Shastri Jayanti	46
3.	15.10.2023	National Wowen farmers day World Students' day Dr. APJ Abdul Kalam Jayanti	89
4.	16.10.2023	World food day	104
5.	30 Oct- 05 Nov 2023	Vigilance Awareness Week	65
6.	07.01.2024	Cleanliness drive	100
7.	12.01.2024	National youth day	86
8.	28.02.2024	National Science Day	52
9.	03.03.2024	Neighbourhood Youth Day	243
10.	08.03.2024	International women's Day	120
11.	04.04.2024	World Rat Day	40
12.	14.04.2024	Babasaheb Ambedkar Jayanti	30

New Initiatives

a. Museum Upgradation:

Museum was upgraded with different thematic areas so that visitors can learn from different sub-areas of agriculture. A show case for exhibition of medals & trophy were installed. A separate student's corner was developed in the museum to showcase different creativity of the students in the museum. In this corner various paintings, collage and different other activities of students were shown.

a. Agricultural Technology Information Center (ATIC)

The Agricultural Technology Information Centre at Dr. Kalam Agricultural College was established in 2024 to serve as a hub for disseminating knowledge and information on various aspects of agriculture through single window system.

Advance Centre on Sericulture Arrabari (Kishanganj)
Report of 26th Extension Education Council Meeting
(From October 2023 to May 2024)

1. Training and Exposure visit at Central Tasar Research and Training Institute, Ranchi

Two scientists of Dr. Kalam Agricultural College associated with the ACS, Dr. Kalmesh M. and Dr. Swaraj Kumar Dutta, attended a five days "Technology Orientation Training Program" from 9.10.2023 to 13.10.2023 at Central Tasar Research and Training Institute, Ranchi. The training aimed to equip the participants with advanced knowledge and practical skills in the cultivation and management of tasar silkworms and their host plants.

2. Participation in the "Kisan Mela-2024" held at Bihar Agricultural University, Sabour

The Advanced Centre for Sericulture (ACS) actively participated in the Kisan Mela 2024, showcasing innovative technologies pertinent to mulberry and tasar sericulture. This event took place at Bihar Agricultural University (BAU), Sabour, from 17th to 19th February 2024. The ACS's display highlighted cutting-edge advancements in sericulture practices, attracting significant attention from farmers as well as the scientific community. Their efforts were recognized with the second prize among all research centers for their impressive technology exhibition. This accolade underscores ACS's commitment to advancing sericulture through the introduction and promotion of new technologies.

3. Visit of officials from the Directorate of Handloom & Sericulture, Bihar at ACS

Two officials from the Directorate of Handloom & Sericulture, Bihar, Ms. Preeti Kumari (Assistant Director of Industries) and Mr. Pranay Kumar (Project Officer), visited the Advance Center for Sericulture (ACS) from March 13 to March 14, 2024. Their visit aimed to review ACS's activities for promoting sericulture in Bihar. During this visit, productive discussions were held between the Directorate's officers and the scientific staff of ACS. These discussions, chaired by Dr. K. Sathyanarayana, Officer-In-Charge, ACS and Associate Dean-cum-Principal of DKAC, focused on several key areas like organizing training and exposure visits for various stakeholders at ACS, particularly in the eri-sector due to its potential in the state; conducting field surveys to investigate the decline in mulberry sericulture and explore revival strategies, and incorporating the Officer-In-Charge of ACS or his nominee as a permanent invitee in the State Level Sericulture Coordination Committee meetings to actively contribute to the development of sericulture in Bihar.

4. Training and Exposure visit at Central Muga Eri Research and Training Institute, Jorhat

Four faculty members from Dr. Kalam Agricultural College, associated with the ACS, participated in the "Skill Training & Enterprise Development Programme" at the Central Muga Eri Research and Training Institute in Jorhat, Assam, from March 26 to March 28, 2024, followed by a field exposure visit on March 29, 2024. The attendees included Dr. Shafi Afroz (Assistant Professor-cum-Junior Scientist, Extension), Dr. Snehel Chakravarty (Assistant Professor-cum-Junior Scientist,

Entomology), Dr. Nagarjun P. (Assistant Professor-cum-Junior Scientist, Agronomy), and Dr. Sankarganesh E. (Assistant Professor-cum-Junior Scientist, Entomology). The training aimed to provide these faculty members with specialized knowledge and understanding of Muga and Eri sericulture, covering aspects such as host plant cultivation, silkworm rearing, and post-cocoon processing techniques. Additionally, the program included guidance on preparing and submitting research proposals to the Central Silk Board. The insights gained from this training will be instrumental in initiating rearing activities and conducting research on Muga and Eri silkworms at the centre.

5. **Marketing of mulberry cocoons in Kaliachak market (Malda), under the Department of Sericulture, Government of West Bengal, and exposure visit of the ACS team to sericulture units under CSB, state and private reeling units**

The Advance Centre on Sericulture (ACS) in Kishanganj is actively engaged in various sericulture-related activities aimed at benefiting farmers and students. As part of their Experiential Learning Program (ELP), final-year students from Dr. Kalam Agricultural College are attached to ACS to enhance their knowledge in this field. Recently, these students participated in mulberry cocoon-rearing activities at ACS and successfully harvested 93.2 kg of mulberry cocoons. With the cocoons needing to be marketed promptly, and the absence of government markets in Bihar, a decision was made to explore the cocoon market in Kaliachak, Malda district, under the Department of Sericulture, Government of West Bengal. This market boasts numerous reelers, both multi end and otherwise. Following discussions with relevant units there, it was decided to market the harvested cocoons in Kaliachak. Furthermore, three newly appointed Assistant Professors-cum-Junior Scientists associated with ACS (Dr. Snehel Chakravarty, Dr. Nagarjun P. and Dr. Sankarganesh E.), were taken on exposure visits (30.4.2024 to 01.5.2024) to various units and markets by the consent of the Hon'ble Vice Chancellor of Bihar Agricultural University. The purpose of these visits was to facilitate an exchange of experiences and best practices among farmers, scientists from CSB institutions and ACS, thereby enriching their understanding of sericulture operations. Visits to seri-farms and reeling units offered a firsthand grasp of the methods and approaches used by farmers and local reelers, as well as the challenges they encounter in their operations, while visits to the Regional Sericultural Research Station and the Regional Silk Technological Research Station provided comprehensive insights into the latest advancements in sericulture.

6. **Training program on "Advances in post-cocoon technologies" at ACS, Kishanganj**

A one-day training program on "Advances in Post-Cocoon Technologies was organized by the Advance Centre on Sericulture at DKAC, Kishanganj on 24.05.2024. The event was inaugurated by Dr. K. Sathyanarayana, Officer In-charge, ACS and Associate Dean-cum-Principal, DKAC. Dr. Debasis Chattopadhyay, Scientist-D at the Regional Silk Technological Research Station, CSTRI, CSB, Malda, delivered a series of lectures on quality standards and handling parameters for post-cocoon silk, and also provided expert suggestions regarding the establishment of a model

demonstration unit under post-cocoon technology at the centre. The scientists from DKAC actively participated in the training program, making the event highly fruitful.

7. Exposure visits of the farmers from Katihar district at ACS farm

Under the sponsorship of the ATMA, Katihar, a training program on "Natural Farming, Marketing, and Value Addition" was organized from 26.05.2024 to 30.05.2024. On May 30, 2024, Dr. Nagarjuna P. led an exposure visit for 40 farmers from Katihar district and neighboring regions of Bihar to the mulberry and arjuna fields at the ACS farm. During this visit, the farmers were introduced to the practices of mulberry and tasar sericulture, explaining the cultivation and management of their host plants. The farmers gained valuable insights into sustainable farming techniques, the economic potential of sericulture, and the processes involved in the production and marketing of silk. This hands-on learning experience aimed to enhance their understanding and skills, promoting the adoption of sericulture in their agricultural practices.

Proposed Action Plan
(June 2024 to September 2024)

Future plan of action

- In response to the increasing demand from the Directorate of Handloom and Sericulture, Government of Bihar, comprehensive training programs will be organized for the sericulture farmers
- Training of the scientific staff associated with the centre at different CSB institutions
- Training modules will be developed to include practical demonstrations, expert-led lectures, and field visits for effective training to stakeholders.
- To showcase the potential benefits of sericulture, model display centers for mulberry, tasar, and ericulture will be established at the centre
- To support and disseminate knowledge among sericulture farmers, relevant publications such as leaflets, folders, brochures, etc. will be prepared focusing on mulberry and vanya sericulture

BETELVINE RESEARCH CENTRE, ISLAMPUR

Report of 26th Extension Education Council Meeting
(From October 2023 to May 2024)

Highlight of extension activities:(October 2023 to May 2024) of BRC, Islampur			
Sl. no.	**Extension other activities**	**:**	**Achievements (in number)**
(a). Training and extension activities			
1	Training programme	:	13 training + 527 beneficiaries
2	Farmer producer company formation	:	01
3	Kisan Goshthi	:	04
4	Participation in Kisan Mela	:	05
5	Field/Exposure visit	:	02
6	Participation in Conference/Seminars/Workshops	:	05
7	Award/Recognition received during the year	:	07
8	Environmental Awarnes Programme	:	01
9	Participation in Research Review Meeting/ ZREC/ Pre RCM/RCM/etc	:	09
10	Visit of higher officers at BRC, Islampur	:	04

1. Training programme farmers/Extension functiories: 13 and beneficiaries: 527					
Date & Topic	**Assigned work**	**Participated as resources person in the training prog on the given topic/lecture**	**No. of Farmer participated**	**Orga nized at**	**Orga nized by**
22.09.2023	Dr. Prabhat Kumar participated as a resource person	Insect-pest management in Mango & Litchi	30 ATM/BTM/ Agriculture Coordinators	BAMETI, Patna	BAMETI, Patna
05.10.2023	Dr. Prabhat Kumar participated as a resource person	Seed borne disease & their management in Rabi Oilseed Crops	40 ATM/BTM	BAMETI, Patna	BAMETI, Patna
08.11.2023	Dr. Prabhat Kumar participated as a resource person	Disease and pest management in sugarcane	120 farmers	Village-Rounia, Naubatpur, Patna	Deptt of Sugarcane , Govt Bihar Patna
Training on Commercial cultivation of Mushroom From 9-11 Oct 2024	Dr. Shivnath Das participated as a resource person	Government scheme for Mushroom cultivation in Bihar on 09.10.2024	26 farmers	ARI, Patna	Mushroom Unit ARI, Patna
	Dr. Prabhat Kumar participated	Seasonal cultivation of different Mushroom on 09.10.2024			

	as organizer and resource person	Preparation of PDA media and Master culture for spawn substrate preparation of Oyster Mushroom on 09.10.2024			
		Technology of button mushroom cultivation & diseases and pest management in Mushroom on 10.10.2024			
		Preparation and bagging of oyster mushroom (Practical) on 10.10.2024			
		Different instruments used in spawn production technique on 11.10.2024			
		Branding and marketing of mushroom products on 11.10.2024			
22.11.2023	Dr. Prabhat Kumar participated as a resource person	Disease and pest management in sugarcane	120 farmers	Village-Babhanai, Bihta, Patna	Deptt of Sugarcane, Bihar Govt, Patna
28.12.2023 (10:00-11.15 am)	Dr. Prabhat Kumar participated as a resource person	Diseases and their management in oil seed crops	30 farmers	BAMETI, Patna	BAMETI, Patna
28.12.2023 (11:15 am-12:30 pm)		Diseases and their management in spices crops			
Training Programme : Commercial production technology of Mushroom from 22-24 January 2024	Dr. Prabhat Kumar participated as organizer and resource person	Preparation of PDA media and Master culture for spawn substrate preparation of Oyster Mushroom on 22.01.2024	26 farmers	ARI, Patna	Mushroom Unit ARI, Patna
		Technology of button mushroom cultivation & diseases and pest management in Mushroom on 23.01.2024			
		Preparation and bagging of oyster mushroom (Practical) on 23.01.2024			
		Different instruments used in spawn production technique on 24.01.2024			
	Dr. Shivnath Das participated as a resource	Government scheme for Mushroom cultivation in Bihar on 24.10.2024			

	person				
23.02.2024	Dr. Prabhat Kumar participated as a resource person	Disease and Pest management in sugarcane			
SCSP training on Agri-entrepreneurship development through medicinal and aromatic plant cultivation on 11.03.2024	Dr. Shivnath Das organized and participated as a resource person	Agronomical package and practices of commercial medicinal & aromatic plants	25	Village-Hukka, District-Buxer	BRC, Islampur
	Dr. Prabhat Kumar participated as a resource person	Integrated Disease management for control of diseases in commercial medicinal plants			
SCSP training on Agri-entrepreneurship development through medicinal and aromatic plant cultivation on 14.03.2024	Dr. Shivnath Das organized and participated as a resource person	Agronomical package and practices of commercial medicinal & aromatic plants	35	KVK Arwal	BRC, Islampur
SCSP training on Agri-entrepreneurship development through medicinal and aromatic plant cultivation) on 20.03.2024	Dr. Shivnath Das organized and participated as a resource person	Agronomical package and practices of commercial medicinal & aromatic plants	25	Villege+ Post-Ekma District Saran (Chhapra)	BRC, Islampur
	Dr. Prabhat Kumar participated as a resource person	Integrated Disease management for control of diseases in commercial medicinal plants			
SCSP training on Agri-entrepreneurship development through medicinal and aromatic plant cultivation) on 21.03.2024	Dr. Shivnath Das organized and participated as a resource person	Agronomical package and practices of commercial medicinal & aromatic plants	25	Villege-Bauridih Post-Islampur District – Nalanda**)**	BRC, Islampur
	Dr. Prabhat Kumar participated as a resource person	Integrated Disease management for control of diseases in commercial medicinal plants			
SCSP training on Agri-	Dr. Shivnath Das	Agronomical package and practices of	25	Villege-Matia	BRC, Islampur

entrepreneurship development through medicinal and aromatic plant cultivation) on 30.03.2024	organized and participated as a resource person	commercial medicinal & aromatic plants		Post-Laxmipur District – Jamui	
	Dr. Prabhat Kumar participated as a resource person	Integrated Disease management for control of diseases in commercial medicinal plants			
Total beneficiaries from 13 training			**527 beneficiaries**		

2. Farmer producer company formation: 01

Scientist, BRC, Islampur (Dr. Shivnath Das, O/I and Dr. Prabhat Kumar) perform the responsibility towards coordination among farmers and CA for formation of Farmer producer company in Nawada, district has been made to take advantage of 50% subsidy on Magahi Pan under "Special Horticulture Crop scheme " Government of Bihar

Sl. No.	Formation of SHG/FPO/FPC	Year of registration	Place/ Address	Nature of Responsibility
1	Renu and Rajendra Magahi Paan Producer Company Limited-2023	2023	Village-Divari, (Panch-Hadsa), Block- Hisua, District-Nawada	As facilitator between farmers and CA for registration from Government office for promotion of Betelvine cultivation

3.Kisan Goshthi: 04

Programme	Scientist name	Topic	Date
Sonepur Mela 2023	Dr. Shivnath Das participated as a resource person	Kisan Goshthi on Medicinal and Aromatic Plants	14.12.2023
Sonepur Mela 2023		Kisan Goshthi on Medicinal and Aromatic Plants	18.12.2023
Sonepur Mela 2023	Dr. Prabhat Kumar participated as a resource person	Kisan Goshthi on IDM for Rabi Crops	13.12.2023
Sonepur Mela 2023		Kisan Goshthi on IDM for Rabi Crops	19.12.2023

4. Participation in Kisan Mela: **05**

S.No	Name of events	Participated and laid exhibition stall for display of medicinal plants
1.	Sonepur mela (04.12.2023 to 26.12.2023)	In Sonepur mela (04.12.2023 to 26.12.2023) Dr. Shivnath Das, O/In, BRC Islampur participated as Coordinator for execution of University stall at Sonpur Mela-2023, where value added products (dry leaf/seed/powder) of Medicinal and Aromatic plants and Magahi Pan were displayed at BAU Stall.
2.	State level Bagwani Mahotsav 2024	Participation of BRC Islampur ((Dr. Shivnath Das, Dr Prabhat Kumar and Dr AK Pandey) for Exhibition of Magahi pan and medicinal plants in State level Bagwani Mahotsav 2024 at Gandhi Maidan Patna during 15-18 Feb 2024). BAU received First Prize in Bihar Diwas 2023 and BRC islampur is one of the participants among members of BAU Team for display of Magahi Pan

3.	BAU, Kisan Mela (23-25 February 2023)	Participation of BRC Islampur ((Dr. Shivnath Das and Dr AK Pandey) for display of Live medicinal plants and its different products along with betelvine cultivation model under shednet in the exhibition stall during BAU Kisan mela(17-19 February 2024 at BAU Sabour.
4	Kisan mela 2024 KVK Nalanda (13-15 March 2024)	Participation of BRC Islampur ((Dr. Shivnath Das & Dr AK Pandey on 13.03.2024 and Munna Lal on 14-15 March 2024) for display of exhibition stall of medicinal plants & Magahi pan in Kisan mela 2024 organised by KVK Nalanda during 13-15 March 2024
5	Kisan mela 2024 KVK Arwal (14-15 March 2024).	Participation of BRC Islampur ((Dr. Shivnath Das and Dr AK Pandey) for display of exhibition stall of medicinal plants & Magahi pan in Kisan mela 2024 organised by KVK Arwal during 14-15 March 2024

5. Field/Exposure visit: 02

Date	Purpose of visit	Palace of visit	Associted scientist
21.03.2024	Magahi Pan **farmer's field visit**	Village-Bauridih Block -Islampur District-Nalanda	Dr. Shivnath Das, Dr. Prabhat Kumar Mr. Rajkishore Roy and Dr. AK Pandey
15.04.2024	Exposure visit Tof 35 Rural youth. was made at BRC Islampur on 15.04.2024 under BSDM programme of NCOH, Noorsarai, Nalanda. for exposure about medicinal plants, oil distillation unit, Betelvine cultivation under shednet and various research activities of medicinal plants running at BRC, Islampur	BRC, Islampur	Dr. Shivnath Das, Dr. Prabhat Kumar Mr. Rajkishore Roy and Dr. AK Pandey

6. Participation in Conference/Seminars/Workshops: 05

Sl. No.	Name of Scientist	Seminar/Symposia/Conference / Training / Workshop	Organized by/at	Date
1	Dr. Shivnath Das and Dr. Prabhat Kumar	Brain-storming session on developing cropping pattern, cropping system with Climate resilient stategy of contigent crop planing for Bihar	Organised by Directorate of Research at BAU Sabour	02.09.2023
2	Dr. Shivnath Das	First Global symposium on farmers right	Jointly organised by FAO, Rome and ICAR-PPV & FRA at NASC Complex, New Delhi	12-15 Septmeber 2023
3	Dr. Shivnath Das	Workshop on Viksit Bharat @ 2047	Organised by Governor House at Rajbhawan Patna	11.12.2023
4	Dr. Shivnath Das	QRT review workshop on AICRP Medicinal and Aromatic Plants and Betelvine	Organised by ICAR-DMAPR , Anand at AAU, Jorhat (Assam) from	29-30 Dec, 2023
5	Dr. Shivnath Das and	31st Annual workshop of AICRP MAPB	Organised by ICAR-DMAPR , Anand at	7-9 Feb 2024

	Dr. Prabhat Kumar		ANDUAT, Ayodhya (UP).	

7. Award/Recognition received during the year: 07

- Our Medicinal plant farmer (Sri Arjun Mandal ji) awarded with "Plant Genom Saviour Farmers Award for the year 2021-22 by ICAR-PPV & RA, New Delhi on 12 Sept 2023 during Global symposium on farmers right to be held from 12-15 Sept 2023 at NASC Complex , New Delhi.
- Again our progressive medicinal farmer Sri Arjun Mandal (Chinberiya, Laxmipur, Jamui) has felicitated by Dr. Humanshu Patak, Secretary DARE & DG ICAR on 22.01.2024 on the occasion of Kisan Mela organized at the ICAR-DMAPR, Anand, Gujrat. The Felicitation of Sri Arjun Mandal was honoured due to his remarkable contribution made in the area of medicinal plants conservation in Bihar state
- BRC Islampur received first prize award in BAU Kisan mela (17-19 Feb) 2024 for display of Live medicinal plants and its different products along with betelvine cultivation model under shednet in the exhibition stall.
- BRC Islampur received first prize award in Kisan mela (13-15 March 2023 at KVK, Harnout, Nalanda for display of best stall of medicinal and aromatic plants and Betevine

- BRC Islampur received first prize award in Kisan mela (14-15 March 2023 at KVK, Arwal for display of best stall of medicinal plants and its different products in the exhibition stall

- Bihar Ashwagandha farmer Sri Shailendra Kumar Chaudhary feliciated by Chairman of QRT (Dr.NC Gautam) on behalf of ICAR-DMAPR in gracious presence of Hon'ble DDG Horticulture and Vice-Chancellor, ANDUAT, Ayodhya during 31 annual group meeting (on 07.02.24) for remarkable contributions for cultivation of Ashwagandha in Bihar first time.
- Our Magahi Pan farmer Sri Ranjit Chaurasiya feliciated by Director ICAR-DMAPR (Dr Manish Das) in gracious presence of Hon'ble DDG Horticulture and Vice-Chancellor ANDAUT Ayodhya during 31st annual group meeting (on 07.2.24) for his remarkable work made for GI of Magahi

8. Environmental Awarnes Programme:: **01**.

- World Forest Day (21 March 2024):Plantation of Bael plant (Aegle marmelos) at BRC Islampur made on 21.03.2024

9.Participation in Research Review Meeting/ ZREC/ Pre RCM/RCM/etc: 12					
Sl. No.	**Name of scientist**	**Date of event**	**Place**	**Organizer**	**Event/Remarks**
1	Dr.Shivnath Das &. Prabhat Kumar	18.03.2024	BAU, Sabour	DR, Office, BAU, Sabour	Participation in Review meeting of RSS under chairmanship of Dr AK Singh , DR, BAU, Sabour
2	Dr.Shivnath Das &. Prabhat Kumar	02.04.2024	BAU, Sabour	DR, Office, BAU, Sabour	Participation in Review meeting of RSS under chairmanship of Dr D.R. Singh , VC, BAU, Sabour
3	Dr.Shivnath Das & Dr.Prabhat Kumar	06.04.2024	ARI, Patna	ARI, Patna	Participation in 27th ZREAC meeting

4	Dr.Shivnath Das	10.04.2024	BAU, Sabour	DR, Office, BAU, Sabour	Participation in GI meeting
5	Dr.Shivnath Das	19..04.2024 to 20.04.2024	Department of Agronomy, BAU, Sabour	Department of Agronomy, BAU, Sabour	Meeting attended & presented research highlights of Agronomy
6	Dr.Prabhat Kumar	20.04.2024	Department of Plant Pathology,	Department of Plant Pathology, BAU, Sabour	Meeting attended & presented research highlights of Plant pathology
7	Dr.Shivnath Das & Dr.Prabhat Kumar	22.04.2024	ARI, Patna	RD, ARI, Patna	Participation in meeting regarding organising a workshop at ARI, Patna
8	Dr.Prabhat Kumar	10.05.2024	DR office, BAU, sabour	DR office, BAU, sabour	Pre RCM- of plant protection group Meeting attended & presented research highlights
9	Dr.Shivnath Das	8-13 May .2024	Library at Patna	RD, ARI	For searching Historical records of Digha maldah mango to obtained GI
10	Dr.Shivnath Das & Dr.Prabhat Kumar	27-28 May .2024	Digha Patna	RD, ARI	Geographical survey work of Digha maldah mango to obtained GI
11	Dr.Shivnath Das	29.05.2024	DR office, BAU, sabour	DR office, BAU, sabour	Pre RCM- of NRM group meeting attended & presented research highlights
12	Dr.Prabhat Kumar	30.05.2024	Department of Plant Pathology,	Department of Plant Pathology, BAU, Sabour	Meeting of synopsis seminar of M.Sc. student as major and Co-major advisor

10. Visit of higher officers at BRC, Islampur: 04	
1.	Agriculture Secretary, Govt of Bihar (Sri Sanjay Kumar Agrawal, IAS) visited BRC Islampur on 08.09.2023 and viewed various work of medicinal and aromatic plants along with betelvine oil distillation unit and shed net.
2.	Dr. Vishal Nath sir, OSD ICAR-IARI, Hazaribag (Jharkhand) visited BRC Islampur today (25.09.2023) and very much appreciated the work of the centre with information to Project Co-ordinator, AICRP MAP & Betelvine, DMAPR, Anand .
3.	Visit of Hon'ble Vice-Chancellor, BAU, Sabour (Dr. D.R Singh) at BRC, Islampur (19.10.2023) and LAXMITARU PLANT planted by him and monitered the Betelvine cultivation under shednet and processing unit. Hon'ble Vice-Chancellor very much appreciated Tulsi + millet intercropping trials and adviced to incorporate Honeybee production with Tulsi in order to produce medicinal honey. Modal of Bio-compost pit is very much appreciated by Hon'ble Vice-Chancellor sir and directed to devlope this modal at University H.Q. and submitt its technical proposal for patenting
4	Dr. Muneshwar Kumar, Sr. Scientist and head, KVK, Jehanabad visited BRC Islampur today (02.03.2024) and expressed his feelings with our F.O (Sri Munna Lal) about medicinal plant conservation and Magahi pan cultivation under Shednet and Traditional bareja system.

KRISHI VIGYAN KENDRA, ARARIA

Report of 26th Extension Education Council Meeting
(From October 2023 to May 2024)

1. Achievement of Training Programme :

A. Training Programme for Practicing Farmers/Farm women :-

Sl. No.	Discipline	No.	No. of Beneficiaries					
			Others		SC/ST		Total	
			M	F	M	F	M	F
(i)	Extension Education	3	70	12	3	1	73	13
(ii)	Plant Protection	15	208	108	92	37	300	145
(iii)	Agronomy	20	268	222	63	26	331	248
(iv)	Horticulture	11	108	62	36	44	144	106
(v)	Soil Science	3	63	15	5	3	68	18
	Total	**49**	**647**	**407**	**196**	**110**	**843**	**517**

B. Training Programme for Rural Youth:-

Sl. No.	Discipline	No.	No. of Beneficiaries					
			Others		SC/ST		Total	
			M	**F**	**M**	**F**	**M**	**F**
(i)	Extension Education	0	0	0	0	0	0	0
(ii)	Plant Protection	5	105	15	25	5	130	20
(iii)	Agronomy	1	9	5	5	0	14	5
(iv)	Horticulture	1	12	8	7	7	19	15
(v)	Soil Science	1	9	5	5	0	14	5
	Total	**8**	**135**	**33**	**42**	**12**	**177**	**45**

C. Extension Functionary

Sl. No.	Discipline	No.	No. of Beneficiaries					
			Others		SC/ST		Total	
			M	**F**	**M**	**F**	**M**	**F**
(i)	Extension Education							
(ii)	Plant Protection	2	55	1	3	1	58	2
(iii)	Agronomy	2	31	2	15	0	46	2
(iv)	Horticulture	-	-	-	-	-	-	-
(v)	Soil Science	-	-	-	-	-	-	-
	Total		**86**	**3**	**18**	**1**	**104**	**4**

PF- Practicing Farmer /RY- Rural Youth/EF- Extension Functionaries

3. Front Line Demonstration

Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demonstration	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
CEREALS															
Wheat	ICM	Varietal (BHU-25, Bio-fortified)	16	5	37	40	7.5	30000	78625	48625	2.60	28500	88000	59500	2.98
TOTAL			**14**	**5**											
HORTICULTURAL															
Chilli	ICM	Varietal (Kashi Anmol)	25	2.4	63.28	47.07	25.9	31820	89679	57859	1.8	30820	72085	41265	1.33
Tomato	ICM	Varietal (Kashi Aman)	16	1.5	189.5	150.7	19.6	52981	390220	337239	6.30	50827	308279	257452	5.00
Brinjal	ICM	Varietal (Kashi Sandesh)	21	1.7	187.6	165.8	21.8	45076	337000	291924	6.4	40076	237000	196924	4.9
Nutritional garden	Nutritional garden	Varietal	130	2.5	Leafy - 6.7	4.96	25.9	600	9920	9320	15.5	540	8740	8200	15.1
					Green-8.6	5.08	40.9	1090	7620	6530	5.9	976	5843	4867	4.9
					Cucurbets-12.6	9..98	20.79	1200	9980	8780	7.3	1087	8763	7676	7.0
					Others-5.98	4.93	17.55	1000	4000	3000	3.0	912	2308	1396	1.5
TOTAL			159	13.1											
OTHER CROPS															
Makhana	ICM	Sabour Makhana-1	20	10.6	Crop Standing										

2.(a) Cluster Front Line Demonstration.

Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demons Ration	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Linseed	Crop Production	Sabour Tisi-1, INM & IPM	77	20	12.17	9.88	23.28	23540	73080	49540	3.10	21710	69280	37570	2.73
Sunflower	IPM	IPM	18	10	16.25	15.10	7.6	37500	109850	72350	2.92	35500	102076	66576	2.87

Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demons Ration	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Linseed	Crop Production	Sabour Tisi-1, INM & IPM	77	20	12.17	9.88	23.28	23540	73080	49540	3.10	21710	69280	37570	2.73
Sunflower	IPM	IPM	18	10	16.25	15.10	7.6	37500	109850	72350	2.92	35500	102076	66576	2.87

3. Details of On Farm Trial (OFT)

ON FARM TRAIL-1

Agronomy

I.	**Season:**	Rabi
II.	**Title of the OFT**	**Assessment of efficacy of nitrogen in wheat.**
III.	**Thematic Area:**	SSNM
IV.	**Cause Identified**	Excess use of Chemical fertilizer and spiraling prices of urea leads to increase cost of cultivation
V.	**Important Cause**	Excess use of granular Urea
VI.	**Production system:**	Rice Based production System
VII.	**Micro farming system:**	Wheat crop
VIII.	**Technology for Testing:**	Nano urea with reduced recommended dose of nitrogen
IX.	**Existing Practice:**	No use of Nano urea
X.	**Hypothesis:**	Use of Nano- urea with reduced dose of granular urea may enhance the yield and net return
XI.	**Objective(s):**	Efficacy of Nano urea in Rice crop
XII.	**Treatments** Farmer Practice :RDF (100:40:20 Kg/ha NPK) **TO1:**50% of RDN & 100% PK + nano urea @ 4 ml/litre of water at tillering TO2:50% of RDN & 100% PK + 2 spray of nano urea @ 4 ml/litre of water at tillering and booting formation stage.	
XIII.	**Critical Inputs:**	Nano Urea
XIV.	**Unit Size:**	1000 m^2
XV.	**No of Replications:**	10
XVI.	**Unit Cost:**	1000
XVII.	**Total Cost:**	10000
VIII.	**Monitoring Indicator:**	I. Soil data before and after (pH, EC, OC, NPK) II. No. of effective tillers/m^2, III. Yield Data, 1000 grain Seed weight, Grain and straw yield & Economics
XIX.	**Source of Technology (ICAR/AICRP/SAU/ Other, please specify):**	ICAR-RCER, Patna

Table 1 : Effect of nano-urea-based nitrogen management on yield and yield attributing characters of wheat (2022-23)

Technology option	**effective tillers/m^2**	**Spike length (cm)**	**Spikelets /spike**	**Grains/spike**	**1000 grain wt. (g)**	**Grain yield (g/ha)**	**Straw yield (q/ha)**
FP-RDF (100:40:20 Kg/ha NPK)	298	10.79	17.26	36.19	39.00	38.59	54.00
TO_1 - 50% of RDN & 100% PK + nano urea @ 4 ml/litre of water at tillering stage.	253	10.01	16.15	30.05	38.55	34.10	47.40
TO_2 - 50% of RDN & 100% PK + 2 spray of nano urea @ 4 ml/litre of water at tillering and booting formation stage	276	10.43	17.00	33.44	38.74	36.35	51.20

Table 2 : Effect of nano-urea-based nitrogen management on economics and soil fertility status of wheat (2022-23)

Treatment					After harvest soil fertility status					
	Cost of cultivation (Rs/ha)	Gross return (Rs/ha)	Net return (Rs/ha)	B:C	pH	EC (dSm^{-1})	OC (%)	Avai. N (Kg/ha)	Avai. P_2O_5 (kg/ha)	Avai. K_2O (Kg/ha)
FP	36585	109004	72419	2.98	6.31	0.33	0.54	200.5	25.1	213.9
TO-I	36218	96163	59945	2.66	6.28	0.30	0.53	181.5	24.6	210.0
TO-II	36422	102844	66422	2.82	6.30	0.31	0.54	189.0	24.1	203.4
						Before sowing soil fertility status				
					6.35	0.33	0.55	198.4	25.60	212.8

Results:

The highest wheat (Var. HD 2967) yield produced farmer's practice (100:40:20 Kg/ha NPK) *i.e.* 38.59 q/ha. The highest net return and B:C ratio was also obtained from farmer's *i.e.* 66422 Rs./ha and 2.82, respectively.

OFT -2

Agronomy

I.	**Season:**	Kharif-Rabi-Zaid
II.	**Title of the OFT**	Intensification of rice-based cropping system
III.	**Thematic Area:**	Integrated Crop Management
IV.	**Problem diagnosed**	Low profitability of existing cropping system
V.	**Important Cause**	Mono-cropping of Rice-Maize/Wheat
VI.	**Production system:**	Irrigated medium land
VII.	**Micro farming ystem:**	Rice-Maize/Wheat
VIII.	**Technology for esting:**	Inter-cropping
IX.	**Existing Practice:**	Mono-cropping
X.	**Hypothesis:**	Inter cropping may enhance the net return from the system.
XI.	**Objective(s):**	Effect of Intercropping on yield and net return.
XII.	**Treatments** **Farmers' Practice**: - Rice – Wheat (prominent cropping system of district) **Technology Option 1**: - Rice –Maize + Potato **Technology Option 2** : -Rice –Maize + Vegetable Pea **Technology Option 3** : -Rice –Wheat – Green Gram	
XIII.	**Critical Inputs:**	Seed, Pesticides
XIV.	**Unit Size:**	1000 m^2
XV.	**No of Replications:**	6
XVI.	**Unit Cost:**	2000
XVII.	**Total Cost:**	12000
VIII.	**Monitoring Indicator:**	I. Soil data before and after (pH, EC, OC, NPK) II. Rice equivalent yield q/ha of all crops (Sole crop and intercropping) III. Cost of cultivation
XIX.	**Source of Technology (ICAR/AICRP/SAU/ Other, please specify):**	BAU, Sabour

OFT-3
Plant Protection:

I.	**Season:**	Rabi
II.	**Title of the OFT**	**Assessment of Bio-intensive management practices for major pests in Tomato**
III.	**Thematic Area:**	Bio control of pests and diseases
IV.	**Problem diagnosed**	In-discriminate use of chemical pesticides in Tomato cultivation
V.	**Important Cause**	Lack of Bio intensive measures.
VI.	**Production system:**	Upland Irrigated
VII.	**Micro farming system:**	Tomato cultivation
VIII.	**Technology for Testing:**	Bio-intensive practices for major pests in Tomato
IX.	**Existing Practice:**	Chemical pesticides for major pests in Tomato
X.	**Hypothesis:**	Bio-intensive management practices for major pests may reduce cost of cultivation, higher yield and net return
XI.	**Objective(s):**	Bio-intensive management practices for major pests
XII.	**Treatments** **Farmers practice:** use of chemical pesticides. **T.O. 1:** Application of Bio-consortia of IIHR (Soil application) Seed treatment by *P.fluorescens* @ 10g/kg Nursery bed treatment by *P.fluorescens* @ 20g/m^2, Soil application of *P.fluorescens* @ 5 kg/ha mixed with 500 kg Vermi-compost at 30 DAT. Spray of HNPV @ 250 LE/ha **T.O. 2:** Application of Bio-consortia of IARI (Soil application) Seed treatment by *Trichoderma viride* @10g/kg Nursery bed treatment by Trichoderma viride @ 20g/m^2, Soil application of *Trichoderma viride* @ 5kg/ha mixed with 500 kg Vermi-compost at 30 DAT. Spray of HNPV @ 250 LE/ha	
XIII.	**Critical Inputs:**	Bio- consortia, Bio-Control Agents
XIV.	**Unit Size:**	400 sq. metre
XV.	**No of Replications:**	10
XVI.	**Unit Cost:**	100
XVII.	**Total Cost:**	10000
XVIII.	**Monitoring Indicator:**	Yield, Disease and Pest incidence, Net Return, B:C Ratio
XIX.	**Source of Technology (ICAR/AICRP/SAU/ Other, please specify):**	ICAR

Table: Performance of Bio-intensive management practices for major pests in Tomato

Treatments	% damage by Bacterial Wilt	% damage by Fruit Borer	Yield* Qt./ha	% Increase in Yield	Cost of Cultivation Rs./ha	Gross Return Rs./ha	Net Return Rs./ha	B:C Ratio
FP	36.4	15.2	684	…	220000	547200	327200	2.49
T.O.1	12.8	8.4	844	23.4	220000	675200	455200	3.07
T.O.2	22.2	7.8	762	11.4	220000	609600	389600	2.77

Conclusion: T.O.1 showed the best performance with minimum incidence of wilt and fruit borer and maximum increase of fruit yield by 23.4%, net-return of Rs.455200/ha and B:C Ratio of 3.07.
* Tomato Var. Hybrid: VRTH-101(KashiAbhiman), Source:ICAR-IIVR,Varanasi,2011

OFT-4

Plant Protection:

I.	**Season:**	Summer
II.	**Title of the OFT**	**Management of Insect pests of Makhana crops**
III.	**Thematic Area:**	IPM
IV.	**Problem diagnosed**	Insect pests of Makhana damage the crop and reduce the yield widely.
V.	**Important Cause**	Insect pests.
VI.	**Production system:**	Low-land Irrigated
VII.	**Micro farming system:**	Low land pond
VIII.	**Technology for Testing:**	Use of pesticides for control of Makhana pests.
IX.	**Existing Practice:**	Indiscriminate use of chemical pesticides in Makhana.
X.	**Hypothesis:**	Management of pests of Makhana may give higher yield and net return.
XI.	**Objective(s):**	Management of Makhana pests insect pests
XII.	**Treatments** **Farmers practice:** Chlorpyrifos @ 1.5-2.0 litre/ha. **T.O. 1:** * Seed treatment by Imidacloprid 70 WG @ 2g/kg; *Root dip in solution of Imidacloprid 70 WG @ 2g/litre water for half hour at the time of transplanting. *Foliar spray of NSKE @ 5% at 25 days interval starting from 40 DAT. T.O. 2: * Seed treatment with Thiomethoxam 25 WG @ 5 g/kg. *Root dip in solution of Thiomethoxam 25 WG @ 5g/litre water for half hour at the time of transplanting. *Foliar spray of NSKE @ 5% at 25 days interval starting from 40 DAT.	
XII.	**Critical Inputs:**	Pesticides
XI.	**Unit Size:**	2000 Sq. metre
XV.	**No of Replications:**	10
XV.	**Unit Cost:**	Rs. 1500
XVII.	**Total Cost:**	Rs. 15,000
XVIII.	**Monitoring Indicator:**	Yield, Pest incidence, Net Return, B:C Ratio

XIX.	**Source of Technology (ICAR/AICRP/SAU/ Other, please specify):**	ICAR

Result:

Table 1: Table: Performance of Management options of insect pest in Makhana crop.

Treatments	Replication	% Incidence of Insect Pest	Yield* Qt./ha	% Increase in Yield	Cost of Cultivation* (Rs./ha)	Gross Return** (Rs./ha)	Net Return (Rs./ha)	B:C Ratio
FP	10	38.60	19.80		1,71,200	3,56,400	1,85,200	2.08
T.O.1		12.50	22.60	15.31	1,82,400	4,06,800	2,24,400	2.23
T.O.2		9.11	24.80	26.53	1,91,200	4,46,400	2,55,200	2.33

Conclusion: T.O.2 showed the best performance with minimum incidence of insect and pest with maximum increase of seed yield by 26.53%, net-return of Rs.2,55,200/ha and B:C Ratio of 2.33.
Makhana Var. Sabour Makhana 1, Source: BAU Sabour,
*COC/ha: Lease Rent=50,000, Production Exp=42000+ Harvesting Exp. @ 4000/quintal.
**Market Price of Makhana Seed in November 2023 Rs.18000/quintal.

5. Seed material produced at KVK, farm :

Sl. No.	Name of Crop	Variety	Area (ha)	Quantity (q)	Type
1.	Paddy	S. Sampan	4.20	163.59	CS
2.	Wheat	HD-2967	3.0	48.00	CS
3.	Potato	K. Pukhraj	0.24	21.00	G2
4.	Potato	K. Yuesi Map	0.006	05.00	G2
5.	Potato	K. Kanchan	0.15	34.00	G2
6.	Potato	B. Aaloo-72	0.006	06.00	G2
7.	Potato	K. Khayati	0.10	11.00	G2
8.	Potato	K. Sundari	0.006	01.00	G2
9.	Potato	K. Mohan	0.006	06.50	G2
10.	Potato	K. Pukhraj	0.10	13.50	G2
11.	Ragi	RAU-8	0.28	02.15	FS

6. List of special programmes undertaken by the KVK, which have been financed by ATMA/ Central Govt./ State Govt./NHM/NFDB/RKVY (Kisan Salahkar) Other Agencies

Name of the programme/scheme	Purpose of programme	Date/ Month of initiation	Funding agency	Amount (Rs.)
RPL(Beekeeper)	Skill Development	18/03/2024	BSDM	1,79,544
RPL(AESP)	Skill Development	18/03/2024	BSDM	1,93,980
Beekeeping	Income generation	13/01/2024	SSB Araria	50,000
RPL(Musroom production)	Skill Development	21/03/2024	ICAR	84,000

7. Soil samples analysed :

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
	207	197	7	
Total	**207**	**197**	**7**	

8. Other Extension Activities:

Sl. No.	Activities & Sub- activities	No.	No. of Beneficiaries
1	Field Day	9	758
2	Scientist Visit to farmer's field	33	139
3	Farmer's Visit to KVK	68	542
4	Exposure Visit	11	943
5	Newspaper coverage	38	Mass circulated
6	Diagnostic Service	2	27
7	Advisory published	54	27840
8	Lecture delivered as resource person	48	2190
9	Consultancy through Mobile	480	480
11	Live Telecast programme	3	193
13	RAWE Programme	2	16
14	World Environment Day	1	150
15	Viksit Bharat Sankalp Yatra	127	14605
16	Awareness of Agriculture Education in School	5	312
TOTAL		**881**	**48195**

9. Climate Resilient Agriculture

(A) Rabi 2023-24

Sl. No.	Name of Crop	Technology	Variety	Target (acre)	No. of beneficiaries	Grain Yield (q/ha)		Cost of cultivation (Rs./ha)		Net Return (Rs./ha)		B:C Ratio	
Rabi Season						**Demo**	**Check**	**Demo**	**Check**	**Demo**	**Check**	**Demo**	**Check**
1.	Wheat	Zero Tillage Technology	DBW 187	40	75	44.15	40.53	30457	31256	72236	60949	3.37	2.95
2.		Happy seeder wheat		5	15	44.91	40.53	33120	31256	69050	60949	3.08	2.95
3.		NE/Green seeker based NM		43	51	47.15	40.53	32150	31256	75123	60949	3.34	2.95
4.	Maize	Raised Bed Planting	P 3526	468	476	123.17	110.74	61749	58380	195676	173066	4.17	3.96
5.	Mustard	ZT Planting	Pitambari	10	16	8.55	7.87	16420	19540	31887	24925	2.94	2.28
6.	Potato	Raised Bed Planting	K Pukhraj	111	32	275	270	122655	124250	207345	199750	2.69	2.61
7.	Potato + Maize	Raised Bed Planting	P 3526	5	12	117+262	115.25	133580	59360	425350	181512	4.18	4.06
8.	Makhana	HYV	Sabour Makhana 1	20	18	Standing Crop							

(B). Summer 2024

Sl. No.	Name of Crop	Technology	Variety	Target (acre)	No. of beneficiaries	Grain Yield (q/ha)		Cost of cultivation (Rs./ha)		Net Return (Rs./ha)		B:C Ratio	
Summer Season						**Demo**	**Check**	**Demo**	**Check**	**Demo**	**Check**	**Demo**	**Check**
1	Green Gram	ZT	Sikha	260	391	Crop is standing							

10. Gramin Krishi Mousham Sewa (GKMS)

Sl. No.	Programme	Advisory
1	GKMS	➢ Block level agro advisory bulletin published on every Tuesday and Friday (Hindi and English Language)
		➢ Importance of weather forecast related awareness programme.

11. SC-SP:

Progress of SCSP 2023-24						
Item/Activity		Units	No. of Programme		No. of Beneficiaries	
			Annual Targets	Achievement	Annual Targets	Achievements
Trainings	Trainings (1-3 days)	No.	12	12	300	360
	Trainings (4-10 days)	No.	0	1	0	35
Input Distribution	Vegetable Mini kits	No.	0	5	0	200
	Mushroom Spawns (in Packets)	Pkts	500	740	50	58
	Backyard Poultry chicks	No.	1000	1000	50	50
	Knapsac Sprayer	No.	25	35	25	35
	Poultry starter Feed	Kg	0	100	0	50
	Poultry Feeder & Drinker set	No.	0	35	0	35

Proposed Action Plan
(June 2024 to September 2024)

A. Training Programme

Sl. No.	Clientele	Course No.	No. of Beneficiaries					
			Others		SC/ST		Total	
			M	F	M	F	M	F
(i)	Practicing Farmers/Farm women	54	1128	280	300	72	1428	352
(ii)	Rural Youth:-	36	829	186	103	43	952	232
(iii)	Extension Functionaries:-	15	293	101	43	18	371	128
	Total	105	2250	567	446	133	2751	712

B. Frontline demonstration

Season	Crop	Variety/ Technology	No. of demonstration	No./area (ha)
Summer	Makhana	Sabour Makhana-1	40	20
Kharif	Rice	Bio-fortified	25	10
Rabi	Mushroom	Oyster/Button	50	250 Bags
Rabi	Wheat	Bio-fortified	25	10
Rabi	Brinjal	Sabour Sadabahar / IPM	10	1.0
Rabi	Tomato	Hybrid Kashi Abhiman	10	1.0
Rabi	Cabbage	DBM-IPM	10	1.0

C. Extension Activities

SL. No	Activities	No.	Participants
1	Field Day	5	480
3	Kisan Gosthi	3	265
5	Scientific visit to farmers field	45	165
6	Farmers visit to KVK	340	340
7	Ex-trainee sammelan	1	60
10	Exposure visit	10	500
11	Radio talk	2	Mass Benefited
12	T. V. Talk	2	Mass Benefited
13	Extension Literature	4	Mass Benefited
15	Advisory services	60	Mass Benefited

D. ON-FARM TRIAL

1. Assessment of efficacy of nitrogen in wheat
2. Assessment of effect of weed management in rabi maize
3. Assessment of effect of intensification of rice-based cropping system
4. Assessment of efficacy of NUE & PUE through different sources in Rice
5. Assessment of efficacy of Potassium in Maize
6. Management of Insect pests of Makhana crops
7. Assessment of Bio-intensive management practices for major pests in Tomato
8. Assessment of the Arka mango special and sorbitol to reduce the fruit dropping mango

E. Climate Resilient Agriculture (CRA)

Sl. No.	Name of Crop	Technology	Variety	Target (acre)	No. of beneficiaries
Kharif, 2024					
1	Paddy	DSR	S. Sampann	200	200
2	Paddy	Un- puddled line transplanting	S. Sampann	260	260
3	Jute	Line Sowing	JRO 524	70	65
4	Finger millet	Line Transplanting	RAU-8	25	25
5	Barnyard millet (Sanwa)	Sowing/ Transplanting	RAU-5 & RAU-9	20	20
6.	Community irrigation			20	20
7.	Laser Land Leveling			100	100
Rabi, 2024-25					
1`	Maize	Raised bed planting	Hybrid	623	623

F. Cluster Frontline Demonstration

crop	**Season**	**Area (ha)**	**No. of Demo**
Groundnut	Kharif	20	50
Mustard	Rabi	320	800

KRISHI VIGYAN KENDRA, ARWAL

Report of 26th Extension Education Council Meeting
(From October 2023 to May 2024)

1. Achievement on Training Programme

A) Training for Farmers (On/Off/Virtual Mode): -

Sl. No	Discipline	No. of course	Duration (Days)	No. of Beneficiaries						Grand Total
				Other		SC/ST		Total		
				M	F	M	F	M	F	
1	Crop Production	5	5	82	0	12	2	94	2	96
2	Horticulture	11	11	110	41	42	103	152	144	296
3	Plant Protection	11	11	177	24	54	6	231	30	261
4	Home Science	14	14	34	200	12	73	46	273	319
5	Animal Science	11	11	110	50	37	45	147	95	242
Total		**52**	**52**	**513**	**315**	**157**	**229**	**670**	**544**	**1214**

B) Training for Rural Youths (On/Off Campus): -

Sl. No	Discipline	No. of course	Duration (Days)	No. of Beneficiaries						Grand Total
				Other		SC/ST		Total		
				M	F	M	F	M	F	
1.	Horticulture	1	3	12	11	8	5	20	16	36
2.	Plant Protection	1	8	17	4	2	0	19	4	23
3.	Home Science	4	8	2	66	0	19	2	85	87
4.	Animal Science	1	1	17	2	4	2	21	4	25
Total		**7**	**20**	**48**	**83**	**14**	**26**	**62**	**109**	**171**

C) Training for Extension Functionaries (On/Off Campus): -

Sl. No	Discipline	No. of course	Duration (Days)	No. of Beneficiaries						Grand Total
				Other		SC/ST		Total		
				M	F	M	F	M	F	
1.	Crop Production	1	1	18	0	4	0	22	0	22
2.	Horticulture	1	1	20	1	2	0	22	1	23
3.	Plant Protection	1	1	22	1	1	1	23	2	25
4.	Home Science	1	1	22	3	4	1	26	4	30
5.	Animal Science	1	1	21	0	4	0	25	0	25
Total		**5**	**5**	**103**	**5**	**15**	**2**	**118**	**7**	**125**

C) Other Training Programmes

Sl. No	Project/ Schemes	Duration (Days)	No. of Participants			Sponsoring Agency
			Other	SC	Total	
1.	SCSP	4	0	106	106	ICAR
2.	CFLD	3	60	8	68	ICAR
3.	CRA	20	481	87	568	GoB
4.	International Year of Millet 2023	3	69	7	76	ICAR & GoB
5.	Malnutrition Eradication	5	58	40	98	BAU
6.	NARI	4	60	22	82	ICAR
7.	BSDM-RPL (Beekeeping)	8	21	2	23	GoB

8.	RKVY-RPL (Gardener)	3	23	13	36	ICAR
7.	Lecture Delivered as Resource Person	60	18367	5765	24132	VBSY/ATMA/ DAO/Others
Total		**110**	**19139**	**6050**	**25189**	-

D) CRA Training Programme

Sl. No.	Topic	Duration (Days)	No. of Participants		Total
			Other	SC	
1	Resource Conservation Technology	3	79	44	123
2	Water and Nitrogen management in Paddy crop	1	15	3	18
3	Value addition in millet by preparing millet recipe	1	27	2	29
4	ZT in Rabi crops	1	14	2	16
5	IPM in Chickpea	1	30	0	30
6	Preparation of Millet Products	1	30	0	30
7	IDM in Lentil	1	22	3	25
8	Weed management in wheat	2	65	2	67
9	IPM on chickpea	1	37	4	41
10	Oyster mushroom cultivation	2	61	12	73
11	Oyster mushroom cultivation and their product	2	48	7	55
12	Summer moong cultivation by ZT Method	1	14	3	17
13	Cultivation of summer moong	1	12	2	14
14	Water management in summer moong	2	27	3	30
Total		**20**	**481**	**87**	**568**

E) Training Programme on International Year of Millet 2023

Sl. No.	Topic	Duration (Days)	No. of Participants		Total
			Other	SC	
1	Millets for nutritional well-being	1	22	6	28
2	Post harvest management of millet crops	1	27	1	28
3	Awareness programme about Millet products	1	20	0	20
Total		**3**	**69**	**7**	**76**

E) Activities under Malnutrition Eradication (Adopted Village – Sarwarpur)

Sr. No.	Name of the activity	Number of Activities	Number of Participants
1.	Awareness program	7	410
2.	Training	17	348
3.	Demonstration (Millet Seed)	1.1 Acre	31
4.	Nutri-garden Unit developed	25	25
5.	Health Camp Organized	01	59
6.	Value Added Products/ Recipe Contest	01	25
7.	Nutrition Related Pamphlets	03	100
8.	Special Programme on Malnutrition Eradication (13-12-2023)	01	23
9.	Field Day	01	30

3. Special Event/Programmes -

Date of event	Event	Activities	No. of farmers/ participants
13-10-2023	Kisano Ki Baat Krishi Mantri Ke Sath	Live telecast & Goshthi	21
15-10-2023	Celebration of Mahila Kisan Diwas	Mahila Kisan Goshthi	44
16-10-2023	Celebration of World Food Day	Awareness Programme	47
03-11-2023	PM Address on Inauguration of World Food India 2023	Live telecast & Awareness Programme	24
05-11-2023	Live telecast of 15th PM-Kisan Samman Nidhi Programme	Live telecast & Awareness Programme	75
05-12-2023	Celebration of World Soil Day	Training & Awareness Programme	42
09-12-2023	PM address on Viksit Bharat Sankalp Yatra	Live telecast & Awareness Programme	29
16-12-2023	PM address on Viksit Bharat Sankalp Yatra	Live telecast & Awareness Programme	12
23-12-2023	Celebration of Kisan Diwas	Viksit Bharat Sanlkalp Yatra Programme at Manikpur & Nidhwan village	1237
27-12-2023	PM address on Viksit Bharat Sankalp Yatra (Rural)	Live telecast & Awareness Programme	13
28-12-2023	Live telecast of 16th PM-Kisan Samman Nidhi Programme	Live telecast & Awareness Programme	65
TOTAL			**1609**

4. SCSP Programme

Sl.	**Activities**	**Physical Achievement**	
1)	**Trainings**	**No. of Trainings**	**No. of beneficiaries**
	PF/RY	04	106
2)	**FLD**	**Area (ha)**	**No. of beneficiaries**
a.	Button Mushroom	30 Units	30
b.	Veg. Saplings	30000 Nos.	50
c.	Chick pea	10 ha	120
d.	Mustard	4 ha	20
e.	Mini Hatchery (Instrument)	1 Nos.	01
3)	**Provided Items to Beneficiaries**	**No. of Items**	**No. of beneficiaries**
a.	Button Mushroom	250 Kg	30
b.	Veg. Saplings	30000 Saplings	50
c.	Chick pea	800 Kg	120
d.	Mustard	20 Kg	20
e.	Mini Hatchery (Instrument)	1 Nos.	01

5. Achievements of Front Line Demonstrations

(A) Cereals & Other Crops

Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	Area (h)	Yield (q/ha)		% change in yield	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demonstration	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Finger Millets (Bhairvi)	Crop Production	Seed	8	0.4	8.75	7.40	18.24	17890	33852	15962	1.89	17650	28560	10910	1.62
Bitter Gourd (Vishakha)	Veg. Production	Seedling	25	0.4	105.6	84.18	20.4	65540.50	211200.00	145659.50	3.2	63150.50	151524.00	88373.50	2.4
CFLD Programme															
Lentil (IPL-316)	Crop Production	Seed	70	20.0	8.65	7.43	16.42	27580	55576	31456	2.14	25870	50709	24839	1.96
SC-SP Programme															
Pigeon Pea (IPA-203)	Crop Production	Seed	80	8.0	13.8	11.15	23.76	25670	96600	70930	3.76	24135	78050	53915	3.23
Chickpea (GNG-2299)	Crop Production	Seed	120	10.0	10.60	8.55	23.98	29670	59664	29994	2.01	27535	48212	20677	1.75
Paddy (Sabour Shree)	Crop Production	Seed	55	27.0	49.50	41.25	20.0	41965	103950	61985	2.47	39982	86625	46643	2.16
TOTAL			**238**	**55.8**											

(B) Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
					Demonstration	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Dairy (Dewormer)	Animal Disease Management	Dewormers	50	100	7.10 l/day	6.55 l/day	8.40	4650	8450	3800	1.82	4605	7850	3245	1.70
Sheep and goat (Dewormer)	Goatry	Endoparasiticide + Liver tonic	40	100	84.5% (Survival rate)	61% (Survival rate)	38.50	625	2000	1375	3.20	550	1525	975	2.77
Others, Fodder Crop (Berseem)	Fodder Production	Seed demo.	50	2.0 ha	555 q/ha	460 q/ha	20.65	26345	112550	86205	4.27	24125	91250	67125	3.78
SC-SP Programme															
Chicks (Sonali) – SCSP 2022-23	Backyard Poultry farming	Chicks	75	750 chicks	2.25	1.65	36.36	560.0	1620.0	1060.0	2.89	510.0	1150.0	640.0	2.25
Total			**215**	**-**											

(C) Enterprise

Category	Name of the technology demonstrated	No. of Farmer	No.of units	Major parameters		% Change in major parameter	*Economics of demonstration (Rs.) or Rs./unit				*Economics of check (Rs.) or Rs./unit			
				Demonstration	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Kitchen Garden - Finger Millet (Bhairvi)	Nutrition Management	44	1.1 ha	8.75	7.40	18.24	17890	33852	15962	1.89	17650	28560	10910	1.62
Button Mushroom	Enterprise development	30	30 Nos.	16 Kg	12.5 Kg	28	640	2400	1760	3.75	580	1875	1295	3.23
SC-SP Programme														
Button Mushroom	Enterprise development	30	30 Nos.	24.5 Kg	19 Kg	28.94	800	3675	2875	4.59	650	2850	2200	4.38
NARI Programme														
Kitchen Garden	Nutrition Management	100	100 Nos. (100 sqm each)	122Kg	85 Kg	43.52	800	2440	1640	3.05	700	1700	1000	2.42
TOTAL		**204**												

(D) Climate Resilient Agriculture (CRA) Programme: -

a) Kharif 2023

Crop	Variety	Intervention	Demo Area (Acre)	Beneficiaries	Grain yield (q/ha)		Cost of Cultivation		Net Return (Rs.)		B:C Ratio	
					Demo	Check	Demo	Check	Demo	Check	Demo	Check
Rice	Sabour Sampanna	Direct Seeded Rice	295	319	48.5	43.6	37840	46430	73605	53708	2.94	2.15
Rice	Sabour Sampanna	Drum Seeder	5		46.3	43.6	39120	46430	67232	53708	2.71	2.15
Rice	Sabour Sampanna	Alternate wetting/drying	85	87	47.2	43.6	42980	46430	65457	53708	2.52	2.15
Rice	Rajendra Sweta	Water Harvesting and Field Bunding	40	40	44.5	43.6	49645	46430	52232	53708	2.05	2.15
Rice	Sabour Sampanna	Green Seeker based Nutrient Management	150	162	46.2	43.6	42630	46430	63474	53708	2.48	2.15
Pearl millet	HHB 67	Pearl Millet	11	23	19	17.3	23375	21980	25925	22670	2.11	2.03
Finger Millet	Bhairavi	Finger Millet	18	22	8.75	7.4	17890	17650	15962	10910	1.89	1.62
TOTAL			**604**	**653**								

6. On-Farm Trials

OFT – 1 (Home Science)

Sl.	Particulars	Description
1	**Title of On Farm Trial**	**Assessment of preparation methods of Potato flakes for more self-life and enhancement of income.**
2	Problem Diagnose	Local people consume fresh potatoes as such as vegetables.
3	Details of Technologies selected for assessment/refinement	**Farmers' practice –** Local people consume fresh potatos as such as vegetables. **T.O. I –** Preparation of potato flakes – Sliced potatoes (3-5 mm) – 5 Kg, Salt 50 g, water 7.5 litre, KMS 6.0 g **T.O. II –**Preparation of potato flakes – Sliced potatoes (3-5 mm) – 5 Kg, Salt 50 g, water 7.5 litre, KMS 6.0 g, Acetic acid 50.0 ml.
4	Source of Technology	Central Potato Research Centre, Shimla
5	Replication	10
6	Production System & Thematic Area	Farm instead, Income generation through Value addition
7	Performance of Technology with performance indicator	1) Sensory analysis (fried in edible refined oil) Taste, Texture (crispness), Colour, Flavour, Overall acceptability 2) Packaging material – Metalized polyester 200 gauge 3) Self-life (0,15,30,45,60,75 days at ambient condition)

Table -1

Sensory Evaluation

Sr.no	T.O.	No of trials	Taste	Texture (crispness)	Colour	Flavour	Overall acceptability	Self-life
Control	Local people consume fresh potatos as such as vegetables.	10	6.8	6.2	6.1	6.9	6.5	Best before 1 days
T.O.1	Preparation of potato flakes – Sliced potatoes (3-5 mm) – 5 Kg, Salt 50 g, water 7.5 litre, KMS 6.0g		7.1	6.9	6.7	7.3	7.0	60 days
T.O.2	Preparation of potato flakes – Sliced potatoes (3-5 mm) – 5 Kg, Salt 50 g, water 7.5 litre, KMS 6.0 g, Acetic acid 50.0 ml.		7.2	7.1	7.5	7.8	7.4	75 days

Table-2

Sr.no	T.O	No of trials	Gross cost (Rs)	Gross return (Rs)	Net return for (Rs)	B:C ratio
control	Local people consume fresh potatos as such as vegetables.	10	55	90	35	1.63
T.O.1	Preparation of potato flakes – Sliced potatoes (3-5 mm) – 5 Kg, Salt 50 g, water 7.5 litre, KMS 6.0 g		61	129	68	2.11
T.O.2	Preparation of potato flakes – Sliced		72	157	85	2.18

	potatoes (3-5 mm) – 5 Kg, Salt 50 g, water 7.5 litre, KMS 6.0 g, Acetic acid 50.0 ml.					

T.O.2 option tested, highest shelf life, colour, texture, taste and maximum gross return with a B:C ratio 2.18 in comparison to Farmers' Practice (1.63) and T.O. 1 (2.11).

OFT – 2 (Home Science)

Sl.	Particulars	Description
1	**Title of On Farm Trial**	**Assessment of preparation methods of ripe Mango fruits Papad/Bar.**
2	**Problem Diagnose**	Local people consume fresh ripe mango as such as fruits.
3	**Details of Technologies selected for assessment/ refinement**	**Farmers' practice –** Local people consume ripe many fruits as such as ripe. **T.O. I –** Preparation of mango papad from ripe mango *Formulation – Ingredients* Mango Pulp – 1Kg, Sugar – 100gm, Citric acid – 5.0g, Potassium Metabisulfite – 1.0 gm, candaman flavour – 5 pc **T.O. II –**Preparation of mango papad from ripe mango with ginger extract (5gm) and black salt (5 gm) ***Formulation – Ingredients –*** Ripe mango pulp – 1 Kg, Sugar – 100 gm, Citric acid – 5 gm, Potassium Metabisulfite - 1.0 gm + Ginger extract – 5gm + Black Salt – 5gm
4	**Source of Technology**	Directorate of Research on women in Agriculture, Bhubaneshwar, Odisha
5	**Replication**	10
6	**Production System & Thematic Area**	Farm instead, Value addition
7	**Performance of Technology with performance indicator**	Sensory analysis (Taste, Texture, Colour, Flavour, Overall acceptability), Self-life (15,30,45,60,75 days at ambient condition/refrigerated condition)

Table-2

Sr.no	T.O.	No of trials	Gross cost (Rs)	Gross return (Rs)	Net return for (Rs)	B:C ratio
control	Local people consume ripe many fruits as such as ripe.	10	50	60	10	1.20
T.O.1	Preparation of mango papad from ripe mango *Formulation – Ingredients* Mango Pulp – 1Kg, Sugar – 100gm, Citric acid – 5.0g, Potassium Metabisulfite – 1.0 gm, candaman flavour – 5 pc		60	75	15	1.25
T.O.2	Preparation of mango papad from ripe mango with ginger extract (5gm) and black salt (5 gm) ***Formulation – Ingredients –*** Ripe mango pulp – 1 Kg, Sugar – 100 gm, Citric acid – 5 gm, Potassium Metabisulfite - 1.0 gm + Ginger extract – 5gm + Black Salt – 5gm		60	76	16	1.27

T.O. 2 option tested, highest shelf life,colour,texture,taste and maximum gross return with a B:C ratio 1.27 was observed in comparison to Farmers' practice (1.20) and T.O.1 (1.25).

OFT – 3 (Vet. Science & A.H.)

Sl.	Particulars	Description
1	**Title of the OFT**	**Effect of supplementation of Shatavari (*Asparagusracemosus*) on production performance of lactating bovines.**
2	Problem diagnosed	Low milk production
3	Treatments	**Control -Farmers' practice: Normal** feeding with available resource **T.O. I –**50 gm mineral mixture per day for 60 days **T.O. II –** 50 gm mineral mixture + 50 gm Shatavari per day for 60 days
4	Source of Technology	Guru Angad Dev Veterinary and Animal Sciences University, Ludhiāna, Punjab, India
5	No of Replications	8
6	Production system & Thematic Area	Farm stead, Dairy Management
7	Monitoring Indicator	Milk Production & Economics

OFT – 4 (Vet. Science & A.H.)

Sl.	Particulars	Description
1.	**Title of On farm Trial (OFT)**	**Assessment of deworming and chelated mineral mixture supplementation during pre-partum period on performance of goat.**
2.	Problem diagnosed	Low body weight and higher mortality of kids.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Control - Farmers' practice:** No deworming and mineral mixture supplementation. **T.O. I –** Deworming with Fenbendazole 7.5 mg/Kg body weight. **T.O. II –** Deworming with Fenbendazole 7.5 mg/Kg body weight + Chelated mineral mixture (10g/day/goat) 30 days prior to parturition.
4.	Source of Technology	ICAR
5.	Replication	8
6.	Production system and thematic area	Farm stead, Goatry
7.	Performance of the Technology with performance indicators	Birth weight of kids, weight of kids in two months & economics.
8.	Final recommendation for micro level situation	Improvement in birth weight of kids and milk production by Does.
9.	Constraints identified and feedback for research	Lack of knowledge.
10.	Process of farmers participation and their reaction	Trainings, field visits and farmers perspective.

Result:

Thematic area	Technology options with detailed	Nos (in livestock)	Birth weight	Avg. body	Cost of cultivation	Gross return	Net return	BC ratio

	treatments	Proposed	Actual	of Kids (Kg)	weight (Kg@ 2 Months)	(Rs./kid)	(Rs/ kid)	(Rs./ kid)	
Goatry	**Control - Farmers' practice:** No deworming and mineral mixture supplementation.	8	8	0.98	1.50	275.0	500.0	125.0	1.81
	T.O. I – Deworming with Fenbendazole 7.5 mg/Kg body weight.	8	8	1.05	1.75	290.0	580.0	190.0	2.0
	T.O. II – Deworming with Fenbendazole 7.5 mg/Kg body weight + Chelated mineral mixture (10g/day/goat) 30 days prior to parturition.	8	8	1.20	2.15	305.0	650.0	240.0	2.13

The data represent that T.O. II, i.e., Pregnant Does fed Chelated Mineral Mixture (10g/day/goat) 30 days prior to parturition along with deworming produce kids of higher body weight. The growth of the kids were higher among T.O. II group of kids, it may be due to taking of optimum milk by the kids from their lactating Does and so more immunity and growth rate. At 2 months of age, average body weight Control, T.O. I and T.O. II group of kids were 1.50 Kg, 1.75 Kg and 2.15 Kg respectively. The increase body weight of T.O. II was more remunerative with the higher B:C ratio against rest of technology.

OFT – 5 (Horticulture)

1.	**Title of On farm Trial (OFT)**	**Crop regulation in Guava (Allahabad Safeda)**
2.	Problem diagnosed	Low yield of winter guava
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Control – Farmers Practice** (Harvesting rainy season crops) **T.O. I –** Single spray of 10% urea in bloom stage (In May) **T.O. II –** Two spray of urea 10% in bloom stage at 10 days interval (In April-May) **T.O. III –** Pruning of 50% length of current season shoot (In May)
4.	Source of Technology	ICAR research complex for Palandu, Ranchi
5.	Replication	08
6.	Production system and thematic area	Guava and vegetable, Small production system
7.	Performance of the Technology with performance indicators	1) Fruit weight (g), 2) Total yield (q / year) 3) Net return 4) B:C ratio
8.	Final recommendation for micro level situation	Pruning of 50% length of current season shoot (In May) shows economical yield
9.	Constraints identified and feedback for research	-
10.	Process of farmers participation and their reaction	Farmers participated actively and motivated for pruning for their fruit quality and profitability.

Result:

Thematic area	Technology options with detailed treatments	Fruit weight (gm)	Yield per Plant (Kg/plant)	Yield (Kg/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
SPS	**Control – Farmers Practice** (Harvesting rainy season crops)	144.90	46.36	7233.72	95314.82	405088.32	309774.00	4.25
	T.O. I – Single spray of 10% urea in bloom stage (In May)	183.28	58.65	9149.40	97512.50	512366.40	414853.90	5.20
	T.O. II – Two spray of urea 10% in bloom stage at 10 days interval (In April-May)	169.90	54.37	8481.72	99015.00	474976.32	375931.32	4.79
	T.O. III – Pruning of 50% length of current season shoot (In May)	201.93	64.62	10080.72	101512.00	564520.32	463008.32	5.56

OFT – 6 (Horticulture)

1.	Title of On farm Trial (OFT)	**Assessment of fruit bagging in Guava for quality improvement.**
2.	Problem diagnosed	Farmer cultivates guava for better price from a unit area and sale in distinct market for higher price. Farmer fetch inferior quality and lower marketability which is due to insect infestation and spots.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Control – Farmers Practice:** No bagging **T.O. I –** Cellophane bag cover **T.O. II –** Paper bagging
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	BAU, Sabour
5.	Replication	10
6.	Production system and thematic area	Guava, IPM
7.	Performance of the Technology with performance indicators	1) Fruit fly damage (%), 2) Disease incidence, 3) Physical damage, 4) Fruit weight loss (%), 5) Yield (Kg/acre) and 9) Economics (Rs./ha.)
8.	Final recommendation for micro level situation	Cellophane bagging may be helping in improving fruit quality and better return to the farmer.
9.	Constraints identified and feedback for research	-
10.	Process of farmers participation and their reaction	Farmers participated actively and motivated for Cellophane bag cover for their fruit quality and profitability.

OFT – 7 (Plant Pathology)

1.	**Title of On-farm Trial (OFT)**	**Assessment of efficacy of various fungicides in management of Sheath blight of Rice.**
2.	Problem diagnosed	Heavy loss in yield of Rice due to sheath blight incidence.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Farmers' Practice –** No fungicide spray **T.O. I –** Two sprays of validamycin 3% L@ 2 lit./ha. **T.O. II –** Two sprays of Propiconazole 25EC @500ml/ha **T.O. III –** Two sprays of Propiconazole 13.9% + Difenoconazole 13.9% EC @500ml/ha
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	RAU, Pusa
5.	Replication	07
6.	Production system and thematic area	Rice-Wheat/Chickpea, IDM

7.	Performance of the Technology with performance indicators	1) Disease intensity percent, 2) Yield, 3) Net return, 4) B:C ratio
8.	Final recommendation for micro level situation	T.O.III (Two sprays of Propiconazole 13.9% + Difenoconazole 13.9% EC @500ml/ha)
9.	Constraints identified and feedback for research	Lack of knowledge in disease & fungicides
10.	Process of farmers participation and their reaction	Farmers prospectives

Result with table and Photographs:

Technology option	No. of trials	Yield component			Disease severity (%)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		No. of effective tillers/hill	No. of grain per panicle	Test wt. (1000 grain wt.)						
Farmers' Practice	7	33.74	243.70	19.37	62.43	47.35	63480	106679	43199	1.680
T.O. I		37.50	258.10	23.20	17.21	54.37	66370	129254	62884	1.947
T.O. II		36.48	254.80	22.15	19.5	55.72	66105	125537	59432	1.899
T.O. III		40.96	261.20	24.35	14.39	62.66	68270	141172	72933	2.068

Data presented in table revealed that the minimum disease severity (14.39%), maximum yield (62.66 q/ha) and maximum B:C ratio (2.068) were found in plot with two sprays of Propiconazole 13.9% + Difenoconazole 13.9% EC @500ml/ha followed by plot spraying of Validamycin 3% L@ 2 lit./ha and maximum disease severity (62.43%), minimum yield (47.35 q/ha) and minimum B:C ratio (1.680) were found in Farmers' practoices plot which was no spray of fungicide.

OFT – 8 (Plant Pathology)

1.	**Title of On farm Trial (OFT)**	**Ecofriendly management of fruit borer (*Helicoverpa armigera*) in tomato**
2.	Problem diagnosed	Heavy loss in yield of tomato due to fruit borer infestation.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Control - Farmers' Practice –** Use of Propanophos 50EC **T.O. I:** Installation of pheromone trap @10 trap/ha. **T.O. II:** Installation of pheromone trap @10 trap/ha. + Spraying of Azadirachtin 1500 PPM@5ml/Lit. **T.O. III:** Installation of pheromone trap @10 trap/ha. + Spraying of NPV @250 LE/ha in 500 lit. of water
4.	Source of Technology	G. B. P. U. of A. & T., Pantnagar
5.	Replication	
6.	Production system and thematic area	Rice-lentil-vegetable, IPM
7.	Performance of the Technology with performance indicators	1) Fruit damage percent, 2) Yield, 3) Net return, 4) B:C ratio
8.	Final recommendation for micro level situation	Installation of pheromone trap@10 trap/ha. + Spraying of NPV @250 LE/ha in 500 lit. of water gave good management of fruit borer in tomato.
9.	Constraints identified and feedback for research	NPV and Pheromone trap is not available in local market.
10.	Process of farmers participation and their reaction	Training and field visits.

Result with table and Photographs:

Them-atic area	Technology options with detailed treatments	Area (in ha)		Insect incidence (%)	Yield (q/ha)	Cost of cultivation (Rs./day)	Gross return (Rs/day)	Net return (Rs./day)	BC ratio
		Proposed	Actual						

IPM	**Control - Farmers' Practice –** Use of Propanophos 50EC	0.25	0.25	18.76	181.40	97790	272100	174310	2.78
	T.O. I: Installation of pheromone trap @10 trap/ha.	0.25	0.25	15.12	212.80	99820	319200	219380	3.19
	T.O. II: Installation of pheromone trap @10 trap/ha. + Spraying of Azadirachtin 1500 PPM@5ml/Lit.	0.25	0.25	8.90	238.60	103265	357900	254635	3.46
	T.O. III: Installation of pheromone trap @10 trap/ha. + Spraying of NPV @250 LE/ha in 500 lit. of water	0.25	0.25	4.10	275.90	103920	413850	309930	3.98

Result: Data pertaining in the table shows that T.O. III (Installation of pheromone trap @10 trap/ha. + Spraying of NPV @250 LE/ha in 500 lit. of water) were found minimum insect incidence (4.10%) and maximum yield (255.90 q/ha) with B:C ratio (4.10).

OFT – 9 (Agronomy)

1.	**Title of On farm Trial (OFT)**	**Improvement of Nitrogen use efficiency in wheat.**
2.	Problem diagnosed	Reduction in soil organic carbon status of soil leading to adverse effect on soil health and ultimately unsustainable wheat yield.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Control – Farmers' practice –** RDF (150:60:40: :N:P2O5:K2O Kg/ha) **T.O. I –** 50% RDN + 100% P2O5 & K2O each + 1 Spray of Nano Urea (4ml/L water) at 35DAS **T.O. II –** 50% RDN + 100% P2O5 & K2O each + 2 Sprays of Nano urea (4ml/L water) at tillering (35DAS) and before flowering (55DAS)
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	ICAR-RCER, Patna (2021)
5.	Replication	8
6.	Production system and thematic area	SPS, Complex Diversified & Risk Prone Agriculture (CDR), NRM
7.	Performance of the Technology with performance indicators	No. of effective tillers/m2, No. of filled grains/panicle, Panicle weight, Test weight, Grain yield, Straw yield, Economics and B:C ratio.
8.	Final recommendation for micro level situation	Nano-urea can be a suitable alternative to replace prilled urea.
9.	Constraints identified and feedback for research	High cost of Nano-urea liquid coupled with cost of labour in spraying on Paddy crop.
10.	Process of farmers participation and their reaction	Participatory approach. Farmers were enthusiastic due to good performance of Nano-urea.

Season: Rabi 2023-24, Wheat variety: HD-2967

Result:

Thematic area	**Technology options with detailed treatments**	**Area (in ha)**		**No. of effective tillers/m^2**	**No. of filled grains/ear head**
		Proposed	**Actual**		
ICM	**Control – Farmers' practice**	0.6	0.6	332	42.4

	T.O. I –	0.6	0.6	302	34.7
	T.O. II –	0.6	0.6	329	42.1

Thematic area	**Technology options with detailed treatments**	**Test weight (1000 grain wt.)**	**Grain Yield (q/ha)**	**Straw yield (q/ha)**	**Cost of cultivation (Rs/ha)**	**Gross return (Rs/ha)**	**Net return (Rs/ha)**	**BC ratio**
ICM	**Control – Farmers' practice**	35.2	44.3	62.5	42990	105995	63005	2.47
	T.O. I –	34.1	38.5	56.8	43154	94670	51516	2.19
	T.O. II –	35.5	43.9	58.7	44625	109792	65167	2.46

The result revealed that Farmers' practice (RDF (150:60:40: :N:P2O5:K2O Kg/ha)) gave the maximum number (332) of effective tillers/m^2, field grains/ear head (42.4) except test weight (35.2g) which was the maximum (35.5g) in case of T.O.II. Farmers' practice outperformed (44.3 q/ha) in terms of grain yield and B:C ratio i.e. 2.47.

8. Farm Activities: -

Seed Production Programme at KVK Arwal Farm

Crop	**Variety**	**Season**	**Area (ha)**	**Production (q)**
Paddy	Sabour Sampanna	Kharif 2023	4.0	148.00
Paddy	R. Sweta	Kharif 2023	1.0	37.50
Wheat	HD-2967	Rabi 2023-24	3.0	34.20
Wheat	HI-1563	Rabi 2023-24	1.0	8.98
Lentil	HUL-57	Rabi 2023-24	1.0	4.00
Moong	Shikha	Summer 2024	2.0	Crop standing
TOTAL			**12.0**	**232.68**

9. Other Extension Activities: -

Activities	**No. of Activities**	**Participants**
Kisan Mela (Organized)	01	1197
Kisan Mela (Participation)	05	3425
Kisan Goshthi	02	66
Field Days	04	76
Agricultural Exhibition (Organized)	01	1197
Agricultural Exhibition (Participation)	02	1385
Exposure visits	09	666
Diagnostic Visit	33	280
Scientist visit to farmers field	109	1696
Farmers visit to KVK	5678	5678
Farmers advisory service	2824	2824
Lecture delivered as Resource Person	60	24132
Special day celebration	06	1370
Hon'ble PM/AM Live-telecast	07	239
Special Programmes (Including Swachhta Campaign)	16	443
TOTAL	**8757**	**44674**

Proposed Action Plan
(June 2024 to September 2024)

1. Training Programme

(A) Practicing Farmers/Farm Women

Thematic Area	Title of Training	No.	Dur.	Venue On /Off	No. of Participants								
					Others		SC		ST		Total		
					M	F	M	F	M	F	M	F	T
Crop Production													
Integrated Crop Management	Scientific cultivation of summer moong.	1	1	Off	20	2	2	1	0	0	22	3	25
Water management	Soil sampling techniques	1	1	ON	20	2	2	1	0	0	22	3	25
Resource Conservation Technologies	Scientific cultivation of dry sown Rice.	1	2	ON	20	2	2	1	0	0	22	3	25
Nursery management	Management of Paddy nursery	1	1	Off	20	2	2	1	0	0	22	3	25
Others, if any	INM in transplanted Rice crops	1	1	Off	20	2	2	1	0	0	22	3	25
Weed Management	Integrated weed management in Paddy	1	1	ON	20	2	2	1	0	0	22	3	25
Others, if any	Nutrient management in Rice-wheat cropping system	1	1	Off	20	2	2	1	0	0	22	3	25
Water management	Water management in Paddy.	1	1	ON	20	2	2	1	0	0	22	3	25
Integrated Crop Management	Nitrogen management of Paddy crop	1	1	Off	20	2	2	1	0	0	22	3	25
Integrated Crop Management	Components of Natural farming	1	1	ON	20	2	2	1	0	0	22	3	25
Production of organic inputs	Organic Farming of Paddy	1	1	Off	20	2	2	1	0	0	22	3	25
Plant Protection													
Integrated Pest Management	IPM in Green gram	1	1	Off	20	2	2	1	0	0	22	3	25
Integrated Pest Management	IPM and IDM in Bitter gourd	1	1	Off	20	2	2	1	0	0	22	3	25
Integrated Pest Management	Scientific and safe storage of cereal and pulses	1	1	Off	20	2	2	1	0	0	22	3	25
Integrated Disease Management	Integrated Pest and Disease Management in Orchard	1	1	ON	20	2	2	1	0	0	22	3	25
Integrated Pest Management	Integrated Pest Management in summer cucurbitaceous vegetables	1	1	Off	20	2	2	1	0	0	22	3	25
Integrated Disease Management	Technique and importance of seed treatment in Rice	1	1	ON	20	2	2	1	0	0	22	3	25
Integrated Disease Management	Integrated Disease Management in summer cucurbitaceous vegetables	1	1	Off	20	2	2	1	0	0	22	3	25
Integrated Disease Management	IDM in Rice	1	2	ON	20	2	2	1	0	0	22	3	25
Integrated Pest Management	IPM in Rice	1	2	ON	20	2	2	1	0	0	22	3	25
Bio-control of pests and diseases	Management of Rice pest and diseases through	1	1	Off	20	2	2	1	0	0	22	3	25

	Bio-agents												
Integrated Disease Management	Disease management in Pigeon pea.	1	1	Off	20	2	2	1	0	0	22	3	25
Integrated Pest Management	Integrated Pest and Disease Management in Orchard	1	1	Off	20	2	2	1	0	0	22	3	25
Integrated Pest Management	Management of important insect pest in Brinjal.	1	1	Off	20	2	2	1	0	0	22	3	25
Horticulture													
Yield increment	Vegetable crop management in summer season	1	2	ON	2	20	1	2	0	0	3	22	25
Management of young plants/orchards	Orchard management of fruit crop	1	2	ON	2	20	1	2	0	0	3	22	25
Layout and Management of Orchards	Establishment of new orchard	1	1	Off	2	20	1	2	0	0	3	22	25
Cultivation of Fruit	Canopy management of Horticultural crops (Mango & Guava)	1	1	ON	2	20	1	2	0	0	3	22	25
Others, if any	Modern technology for Kharif season's vegetable	1	1	Off	2	20	1	2	0	0	3	22	25
Nursery raising	Technique for nursery management raising for Rabi season's veg.	1	1	ON	2	20	1	2	0	0	3	22	25
Home Science													
Enterprise development	Cultivation of paddy straw mushroom.	1	2	ON	2	20	1	2	0	0	3	22	25
Enterprise development	Cultivation of milky white mushroom	1	2	ON/OFF	2	20	1	2	0	0	3	22	25
Value addition	Value addition in millets by making millet recepies for good health.	1	2	ON	2	20	1	2	0	0	3	22	25
Household food security by kitchen gardening and nutrition gardening	Development of kitchen garden for Kharif season for food security	1	1	OFF	2	20	1	2	0	0	3	22	25
Women and Child care	Preparation of supplementary food for 6-18 months old children through wheat and ragi	1	1	OFF	2	20	1	2	0	0	3	22	25
Women and Child care	Awareness about daily requirement of nutrients	1	1	OFF	2	20	1	2	0	0	3	22	25
Household food security by kitchen gardening and nutrition gardening	Food security by nutritional garden for good health.	1	1	ON	2	20	1	2	0	0	3	22	25
Women and child care	Preparation of mixed dalia for infant and pre-school going children	1	2	ON/OFF	2	20	1	2	0	0	3	22	25
Women and child care	Preparation of food for pregnant women through wheat. chana and ragi	1	1	OFF	2	20	1	2	0	0	3	22	25
Household food security by kitchen gardening and nutrition gardening	House hold food security by kitchen gardening.	1	1	OFF	2	20	1	2	0	0	3	22	25
Women and child care	Child care and their development.	1	1	OFF	2	20	1	2	0	0	3	22	25
Vet. Sc. & A.H.													
Disease Management	Cause of infertility and their management in dairy animals.	1	1	OFF	20	2	2	1	0	0	22	3	25
Dairy Management	Clean milk production	1	1	ON	20	2	2	1	0	0	22	3	25
Disease Management	Prevention and cure of worm infestation.	1	1	OFF	20	2	2	1	0	0	22	3	25

Dairy Management	Management of Dairy animals in summer season.	1	1	OFF	20	2	2	1	0	0	22	3	25
Disease Management	Management of common diseases of dairy animals in rainy season	1	1	OFF	20	2	2	1	0	0	22	3	25
Production of quality animal products	Different types of milk products.	1	1	ON	20	2	2	1	0	0	22	3	25
Disease Management	Management in mastitis.	1	1	OFF	20	2	2	1	0	0	22	3	25
Disease Management	Schedule and method of vaccination of cattle.	1	1	OFF	20	2	2	1	0	0	22	3	25
TOTAL		**49**	**58**	**-**	**674**	**404**	**81**	**66**	**0**	**0**	**755**	**470**	**1225**

(B) Rural Youth

Thematic Area	**Title**	**No.**	**Dur.**	**Venue On/Off**	**No. of Participants**								
					Others		**SC**		**ST**		**Total**		
					M	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**T**
Crop Production													
Seed production	Seed Production of Paddy	1	4	ON	20	2	2	1	0	0	22	3	25
Plant Protection													
Bee-keeping	Bee-keeping	1	5	ON	20	2	2	1	0	0	22	3	25
Horticulture													
Planting material production	Techniques of propagation of fruit crops.	1	3	ON	2	20	1	2	0	0	3	22	25
Commercial fruit production	Techniques and importance of high-density plantation.	1	5	ON	2	20	1	2	0	0	3	22	25
Home Science													
Design and development of low-cost diet	Awareness about daily requirement of nutrients	1	1	Off	2	20	1	2	0	0	3	22	25
Value Addition	Preparation of rice papad with the help of value addition in rice	1	2	ON	2	20	1	2	0	0	3	22	25
Value addition	Preparation of different types of Jam and jellies from locally available summer fruits and veg.	1	5	ON	2	20	1	2	0	0	3	22	25
House hold food security by kitchen gardening	House hold food security by kitchen gardening	1	1	ON	2	20	1	2	0	0	3	22	25
Income generation	Income generation by Pickles and squash preparation	1	4	ON	2	20	1	2	0	0	3	22	25

Vet. Sc. & A.H.													
Sheep and goat rearing	Goat farming	1	5	ON	20	2	2	1	0	0	22	3	25
Dairying	Scientific dairy farming.	1	5	ON	20	2	2	1	0	0	22	3	25
TOTAL		**11**	**40**	**-**	**94**	**148**	**15**	**18**	**0**	**0**	**109**	**166**	**275**

(C) Extension Functionaries

Thematic Area	Title	No.	Dur.	Value On/Off	Tentative Date	No. of Participants								
						Others		SC		ST		Total		
						M	F	M	F	M	F	M	F	T
Crop Production														
Productivity enhancement in field crops	Productivity enhancement of Kharif crops	1	2	ON	Q-II	20	2	2	1	0	0	22	3	25
Plant Protection														
Integrated Pest Management	Integrated pest and disease Management in Kharif crops	1	2	ON	Q-III	20	2	2	1	0	0	22	3	25
Horticulture														
Rejuvenation of old orchards	Technique and management of Senile orchard	1	3	ON	Q-II	2	20	1	2	0	0	3	22	25
Integrated Nutrient Management	INM for Nursery Management	1	2	ON	Q-III	2	20	1	2	0	0	3	22	25
Home Science														
Women and Child care	Food preparation from locally available material for infant and pregnant lady	1	2	ON	Q-III	2	20	1	2	0	0	3	22	25
Vet. Sc. & A.H.														
Management in farm animals	Economic dairy farming.	1	2	ON	Q-III	20	2	2	1	0	0	22	3	25
TOTAL		**6**	**13**	**-**	**-**	**66**	**66**	**9**	**9**	**0**	**0**	**75**	**75**	**150**

2. On-Farm Trials to be conducted

S. N.	Thematic Area	Title	Treatments	No of farmers
1.	**Integrated Weed Management**	**Weedy Rice is causing serious loss in yield and quality of rice, which ultimately leads to low income of rice farmers**	**Control - Farmers' Practice:** No measures to manage Weedy Rice **T.O.I:** Spray of Pretilachlor @0.75 kg ai/ha at 1 day after transplanting **T.O. II:** Spray of Cyhalofop-butyl @100-120 g ai/ha at 15 days after transplanting **T.O.III:** Spray of Penoxsulam @20-25 g ai/ha at 15 days after transplanting	10
2.	**NRM**	**Assessment of efficacy of Nano DAP on Rice**	**Control - Farmers' Practice:** RDF (120 : 60 : 40 : N : P2O5 : K2O) kg/ha **T.O.I:** R.D. of P2O5 + 100% N & K2O + Single spray of Nano DAP 4ml/l water at 35 DAT/P of rice **T.O. II:** R.D. of P2O5 + 100% N & K2O + Two sprays of Nano DAP 4ml/l water at 35 & 65 DAT/P of rice	10
3.	**IPM**	**Assessment of fruit bagging in Guava for quality improvement.**	**Farmers' Practice:** No bagging **T.O. I –** Cellophane bag cover **T.O. II –** Paper bagging	08
4.	**Goatry**	**Assessment of deworming and chelated mineral mixture supplementation during pre-partum period on performance of goat.**	**Control -Farmers' practice:** No deworming and mineral mixture supplementation. **T.O. I –** Deworming with Fenbendazole 7.5 mg/Kg body weight. **T.O. II –** Deworming with Fenbendazole 7.5 mg/Kg body weight + Chelated mineral mixture (10g/day/goat) 30 days prior to parturition.	10
5.	**Value addition**	**Assessment of preparation methods of ripe Mango fruits Papad/Bar.**	**Farmers' practice –** Local people consume only ripe mango. **T.O. I –** Preparation of mango papad from ripe mango *Formulation – Ingredients* Mango Pulp – 1Kg, Sugar – 100gm, Citric acid – 5.0g, Potassium Metabisulfite – 1.0 gm, cardamom flavour – 5 pc **T.O. II –**Preparation of mango papad from ripe mango with ginger extract (5gm) and black salt (5 gm) ***Formulation – Ingredients –*** Ripe mango pulp – 1 Kg, Sugar – 100 gm, Citric acid – 5 gm, Potassium Metabisulfite - 1.0 gm + Ginger extract – 5gm + Black Salt – 5gm	10

3. Frontline Demonstration to be conducted

S. N.	Crop	Item/Variety	No of demonstration	Area (ha)
1.	Paddy (Fungicide)	Propiconazole + Difenoconazole	10	4.0
2.	Bitter gourd	Improved Variety	20	1.0
3.	Mushroom	Milky	50 (2 Kg each)	50 unit
4.	Fodder (Sorghum)	UPMC-503	40	2.0
5.	Poultry	Chicks	20	350 chicks
SC-SP				
6.	Mushroom	Milky	50 (2 Kg each)	50 unit
7.	Poultry	Chicks	100	1000 chicks

4. CRA Programme in 5 selected villages in Kharif 2024

Sl. No	Crop	Variety	Intervention	Area (Acre)
1	Paddy	S. Sampanna	DSR	**110**
2		S. Sampanna	Drum Seeder	**35**
3		S. Sampanna	INM	**80**
4	Maize	P-3378	RBP	**180**
5	Pigeonpea	IPA-203	Line Sowing	**60**
6	Sesamum	Krishna	INM	**30**
7	Finger Millet	RAU-8	Line Sowing	**30**
8	Pearl Millet	HHB-67	Line Sowing	**30**
9	Sorghum	CSV-15	Line Sowing	**20**
Total				**575**

5. Seed Production on KVK farm in Kharif 2024: -

Sl.	Crop	Variety	Season	Area (ha)
1.	Paddy	R. Sweta	Kharif 2024	4.0
2.	Paddy	Sab. Sampanna	Kharif 2024	1.0
Total				**5.0**

6. CFLD (Oilseed) Rabi 2024 - 25: -

Sl.	Crop	Area (ha)
1.	Mustard	310
2.	Linseed	10
Total		**320**

7. Other Extension Activities: -

Activities	No.	Participants
Kisan Goshthi	05	250
Field days	05	150
Kisan Mela	01	500
Exhibition	01	250
Exposure visit	05	250
Diagnostic Survey	25	125
Scientist visit to farmers field	75	500
Farmers visit to KVK	2000	2000
Farmers advisory service	1000	1000
Special day celebration	04	100
TV Talk	02	Mass
Radio Talk	02	Mass
News Paper coverage	20	Mass
SAC meeting	01	25
TOTAL	**2146**	**-**

KRISHI VIGYAN KENDRA, AURANGABAD

Report of 26th Extension Education Council Meeting (From October 2023 to May 2024)

Achievement of Training Programme :-

A. Training Programme for Practicing Farmers/Farm women :-

Sl. No.	Discipline	Duration (days)	Course No.	No. of Beneficiaries					
				Others		SC/ST		Total	
				M	F	M	F	M	F
(i)	Crop Production (Agronomy)	1-2	19	477	48	165	45	642	93
(ii)	Home Science	1-2	9	29	39	34	297	63	336
(iii)	Horticulture	1-2	5	142	17	2	0	144	17
(iv)	Agril. Engg.	1-2	3	59	6	6	0	65	6
(v)	PB & G	1-2	4	95	3	6	0	101	3
(vi)	Agromet	1-2	9	189	103	45	22	234	125
	Total		**49**	**991**	**216**	**258**	**364**	**1249**	**580**

B. Training Programme for Rural Youth:-

Sl. No.	Discipline	Duration (days)	Course No.	No. of Beneficiaries					
				Others		SC/ST		Total	
				M	F	M	F	M	F
(i)	Crop Production (Agronomy)	1-3	7	146	1	33	0	179	1
(ii)	Home Science	1-3	3	8	0	44	60	52	60
(iii)	Horticulture	1-3	4	82	33	3	0	85	33
	Total		**14**	**236**	**34**	**80**	**60**	**316**	**94**

C. Training Programme for Extension Functionaries:-

Sl. No.	Discipline	Duration (days)	Course No.	No. of Beneficiaries					
				Others		SC/ST		Total	
				M	F	M	F	M	F
(i)	Home Science	1	1	0	24	0	10	0	34
	Total		**1**	**0**	**24**	**0**	**10**	**0**	**34**

D. Vocational Training programme:-

Crop / Enterprise	Training title	Duration (days)	No. of Participants		
			M	F	T
Mushroom Production	Technical knowledge of Oyster/Button mushroom production	5	24	1	25
Mushroom Production	Technical knowledge of Oyster/Button mushroom production	5	10	43	53

F. Viksit Bharat Sanklap Yatra (LLB and ULB)

Sl.	No. of events attended	No. of Gram Panchayat covered	Total no. of farmer participated	No. of Lecture Delivered on Soil Health/ Natural Farming
1	150	150	42367	150

Vikshit Bharat Sankalp Yatra details:-

Training cum awareness programme given by KVK mainly on Natural Farming, Soil Health & Agri Drone Application in Agriculture

Sl. No.	Date	Panchayat	Scientist Involved	No. of participants		
				Male	Female	Total
1	02/12/2023	Jaihind Tendua, Rajpur	Dr. Binay Kumar Mandal, Dr. Anup Kumar Choubey	100	40	140
2	03/12/2023	Thengo, Neur	Sri Hare Ram	69	31	100
3	04/12/2023	Pipra, Majhiwon	Dr. Anup Kumar Choubey, Sri Hare Ram	83	26	109
4	05/12/2023	Charkwa, Gordiha	Dr. Anup Kumar Choubey	102	49	151
5	06/12/2023	Lohra, Chew	Dr. Anup Kumar Choubey	72	35	107
6	07/12/2023	Basdiha, Tendua	Dr. Anuradha Sinha	47	22	69
7	08/12/2023	Dugul, Khajuri, Pandu, Baghora	Sri Pankaj Kumar Sinha, Dr. Anuradha Sinha	93	49	142
8	09/12/2023	Chaubara, Tole, Dihuri, Chandragadh	Dr. Anuradha Sinha, Sri Hare Ram	153	46	299
9	10/12/2023	Kutumba, Rampur	Sri Dinesh Kumar	62	17	79
10	11/12/2023	Chapuk, Malhad	Sri Dinesh Kumar	214	150	364
11	12/12/2023	Bazar verma, Berka	Sri Hare Ram	61	41	102
12	13/12/2023	Vairav, Gheura	Dr. Anup Kumar Choubey, Sri Dinesh Kumar	320	170	490
13	14/12/2023	Faag, Devhara	Dr. Anup Kumar Choubey, Dr. Anuradha Sinha	168	72	240
14	15/12/2023	Suhi, Dadhpi, Jagdishpur, Mirpur	Dr. Anup Kumar Choubey, Dr. Anuradha Sinha	337	441	778
15	16/12/2023	Bhurkhunda Verma, Teyap, Pipra	Dr. Anup Kumar Choubey, Dr. Anuradha Sinha	1046	699	1745
16	17/12/2023	Maharajganj, Amari, Matapa, Hasampur	Dr. Anup Kumar Choubey, Dr. Anuradha Sinha	271	464	735
17	18/12/2023	Uphara, Bantara, Sanda, Padta	Dr. Binay Kumar Mandal, Dr. Sunita Kumari	319	510	829
18	19/12/2023	Dumri, Hatheara, Baliya, Dindir	Dr. Anuradha Sinha, Sri Dinesh Kumar	646	689	1335
19	20/12/2023	Karma Basatpur, Dumra, Malhara, Isror	Dr. Binay Kumar Mandal, Dr. Anup Kumar Choubey	575	407	982
20	21/12/2023	Baranda Rampur, Jaitpur, Bhaluahi, Ushri	Sri Pankaj Kumar Sinha, Dr. Sunita Kumari	337	578	915
21	22/12/2023	Banaura, Koelwar, Sareheta, Erouna	Dr. Binay Kumar Mandal, Sri Hare Ram	506	622	1128
22	23/12/2023	Ahiyapur, Purvi Ketaki, Iwan, Paschmi Ketaki	Dr. Binay Kumar Mandal, Dr. Anup Kumar Choubey, Dr. Sunita Kumari	419	702	1121
23	24/12/2023	Sargwama, Taal, Haspura, Bedhna	Dr. Sunita Kumari, Sri Dinesh Kumar	562	490	1052
24	25/12/2023	Pawai, Amjher Shareef, Purhare	Dr. Anuradha Sinha, Sri Dinesh Kumar	864	609	1473
25	26/12/2023	Piru, Basdiha, Hasauli, Chauri	Dr. Binay Kumar Mandal, Dr. Sunita Kumari	483	445	928
26	27/12/2023	Bedhani, Arai, Shamshernagar, Bhawanipur	Dr. Anup Kumar Choubey, Dr. Anuradha Sinha	598	748	1346
27	28/12/2023	War, Akona, Pipraura, Mahaver	Dr. Anup Kumar Choubey, Dr. Anuradha Sinha	536	482	1018
28	29/12/2023	Gordiha, Kanap, Arki Kala, Dadhpi	Sri Pankaj Kumar Sinha, Dr. Sunita Kumari	752	1085	1837
29	30/12/2023	Sansa, Sinduar, Manika, Ghordehri	Dr. Anup Kumar Choubey, Dr. Anuradha Sinha	517	675	1092

30	31/12/2023	Nimaazan, Manar, Ghatrain, Tarari	Dr. Sunita Kumari, Dr. Anup Kumar Choubey	555	868	1423
31	04/01/2024	Khairwa, Babhandiha, Obra, Beri	Sri Pankaj Kumar Sinha, Sri Dinesh Kumar	1036	1107	2143
32	05/01/2024	Kara, Sonhuli, Uttari Umga, Dakshni Umga	Dr. Sunita Kumari, Dr. Anuradha Sinha	680	910	1590
33	06/01/2024	Ratanpur, Madanpur, Bariyama, Tejpura	Sri Pankaj Kumar Sinha, Dr. Anup Kumar Choubey	495	811	1306
34	07/01/2024	Aura, Mahuaav, Poiwan, Malwa	Sri Dinesh Kumar, Sri Hare Ram	825	806	1631
35	08/01/2024	Navgadh, Manjhar, Bel, Karsav	Dr. Sunita Kumari, Dr. Anup Kumar Choubey	882	868	1750
36	09/01/2024	Parasdih, Ub, Pokhrahi, Dehri	Sri Pankaj Kumar Sinha, Dr. Anuradha Sinha	607	852	1459
37	10/01/2024	Geari, Ibrahimpur, Bharuv, Fesar	Dr. Anup Kumar Choubey, Sri Dinesh Kumar	704	870	1579
38	11/01/2024	Bela, Chanda, Khudwa, Bhagwan Karma	Dr. Sunita Kumari, Dr. Anuradha Sinha	752	1086	1836
39	12/01/2024	Karma, Kachanpur, Jamhaur, Dihra	Dr. Binay Kumar Mandal, Dr. Anuradha Sinha	445	900	1345
40	13/01/2024	Padarwan, Khaira bind	Dr. Sunita Kumari	211	950	1161
41	14/01/2024	Baddi Khurd, Dhamni	Dr. Sunita Kumari	135	265	400
42	15/01/2024	Pauthu, Riur, Kaji chak, Meh	Dr. Anup Kumar Choubey, Dr. Anuradha Sinha	631	879	1510
43	16/01/2024	Jankop, Khaira, Dudhar, Tengra	Dr. Binay Kumar Mandal, Dr. Anup Kumar Choubey	621	944	1565
44	19/01/2024	Vetaniyan, Poga	Dr. Anup Kumar Choubey	218	247	465
45	20/01/2024	Kajpa, Kotwara	Dr. Anup Kumar Choubey	294	204	498
			Total	**19403**	**22961**	**42367**

F. Sponsored Training programme:-

SN	Title	Thematic area	Duration (days)	Client PF/ RY/ EF	No. of courses	No. of Participants				Sponsoring Agency
						O	SC	ST	Total	
1	Scientific Crop Production of Rabi season	Crop Production	1	EF	1	35	5	0	40	DAO Aurangabad
2	Scientific Crop Production of Rabi season (Rabi Mahotsav)	Crop Production	1	PF	12	2066	374	0	2440	ATMA, Aurangabad
3	Oyster mushroom cultivation	Mushroom cultivation	4	RY	1	145	55	0	200	ATMA, Aurangabad
4	Need and use for mechanization in agriculture	Farm machinery	1	PF	3	779	230	24	1033	DAO Aurangabad
5	Scientific Crop Production of Rabi season	Crop Production	1	PF	1	41	11	0	52	ATMA, Aurangabad
6	Pulses & Oilseed production	Crop Production	1	PF	2	55	11	2	68	DAO Aurangabad
7	Skill Development of women empowerment	Women empowerment	1	PF	1	225	75	0	300	IIFL, Aurangabad
				Total	**21**	**3346**	**761**	**26**	**4133**	

2. Front Line Demonstration:-

Details of FLDs conducted during the year 2023-24

Cereals

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs. /ha)				*Economics of check (Rs. /ha)			
					Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Paddy	ICM	Rajendra Sweta Introduced mid duration variety	12	5.0	43	39	9.40	26400	85800	59400	3.2	33400	82370	48970	2.4

Wheat	ICM	Prithvi-031 (Bio-fortified seed and Seed treatment)	28	8.0	34.48	26.80	22.27	27600	71202	43602	2.57	31825	59728	27903	1.88
		Total	**40**	**13.0**											

Pulses

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Green gram	ICM	Improved Variety Virat	25	10	10.95	8.2	33.5	17800	41400	23600	2.3	17665	30306	12641	1.71
		Total	**25**	**10**											

Front Line Demonstration under Different Projects:-

Details of FLDs conducted during the year 2023-24

Sl. No.	Crop	Thematic area	Technology Demonstrated with detailed treatments	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
				Proposed	Actual	SC/ST	Others	Total	
CRA Project									
1	Wheat	RCT	Zero tillage Wheat	130	130	40	362	402	
2	Wheat	RCT	Raised Bed Wheat	2	2	2	8	10	
3	Wheat	INM	INM Wheat	10	10	5	25	30	
4	Wheat	RCT	Happy Seeder	10	10	11	84	95	
5	Lentil	RCT	Zero tillage Lentil	28	28	14	79	93	
6	Chickpea	RCT	Zero tillage Chickpea	28	28	9	73	82	
7	Mustard	RCT	Raised Bed/ Zero tillage Mustard	20	20	9	26	35	
8	Green Gram	RCT	Zero tillage green gram	104	104	38	252	290	
9	Maize	RCT	Raised Bed	20	20	15	85	100	
10	Oyster Mushroom	Mushroom Production	Spawn, Insecticide, Fungicide, PP bag and thread	100 Unit	100 Unit	20	80	100	
11	Paddy	RCT	DSR & Line sowing unpuddled rice	120	120	48	264	312	

12	Paddy	RCT	Alternate wetting and drying method	24	24	5	68	73	
13	Paddy	RCT	Water harvesting and field bunding	16	16	4	36	40	
14	Paddy	INM	Nutrient management/ Green Seeker	50	50	21	119	140	
15	Pigeon Pea	RCT	Zero tillage/ Raised bed pigeon pea	16	16	12	39	51	
CFLD									
1	Lentil	RCT	IPL 203 seed @ 40 kg/ha, carbendazim @ 2.5 g / kg seed, chloropyrifos @ 8 ml/kg seed, pendimethalin @ 3.3 l/ha, imazethapyr @ 400 ml / ha sulphur, PSB 20 g/kg seed, hilpunch 625g, imidacloprid 250 ml/ha, hexaconazol 500 ml	20.00	20.00	11	41	52	
2	Mustard	RCT	RH 725, Sulphur 40 kg/ha carbendazim @ 2.5 g/kg seed, chloropyrifos @ 8 ml/kg seed, imidacloprid 250 ml/ha,	40.00	40.00	15	87	102	
SCSP									
1	Oyster Mushroom	Mushroom Production	Spawn, Insecticide, Fungicide, PP Bag and Thread	110 Unit	110 Unit	110	0	110	
2.	Goatry	Goat Farming	Goat	18 Unit	18 Unit	18	0	18	
ARYA									
1	Oyster Mushroom	Mushroom Production	Spawn, Insecticide, Fungicide, PP Bag and Thread	120 Unit	120 Unit	45	75	120	

4. Details of On Farm Trial (OFT):

OFT – 1 (Agronomy)

Thematic area **:** Integrated Nutrient management

Problem definition/Name of OFT **:** Excessive use of chemical fertilizer and spiraling price of urea leads to increase in cost of cultivation

1.	Title of On farm Trial (OFT)	Improvement of nitrogen use efficiency in wheat
2.	Problem diagnosed	Excessive use of chemical fertilizer and spiraling price of urea leads to increase in cost of cultivation
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	FP : RDF (100:40:20) Kg/ha TO_1: 50% RDN and 100% PK+ nano urea @ 4ml/lit. water (single spray at 35 DAS)

		TO_2: 50% RDN and 100% PK+2 spray of nano urea @ 4ml/lit. water (single spray at 35 & 60 -65 DAS)
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	BAU, Sabour
5.	Production system and thematic area	Rice – wheat, Nutrient management
6.	Performance of the Technology with performance indicators	pH, EC, OC, NPK, Yield data, no. of effective tillers/m^2, 1000 grain weight, panicle wt., straw yield and economics
7.	Final recommendation for micro level situation	50% RDN and 100% PK+2 spray of nano urea @4ml/lit. water (single spray at 35 & 60 -65 DAS)
8.	Constraints identified and feedback for research	Estimation of recommended dose of nano urea is required in wheat crop for Improvement of nitrogen use efficiency
9.	Process of farmers participation and their reaction	Field visit and interest of farmers.

Table:

Treatments	Replication	pH	EC	OC	N:P:K	Test wt. (1000 grain wt.)	Straw yield (q/ha)
FP: RDF (100:40:20) Kg/ha	7	7.9	0.10	0.75	234:28:137	32.1	45.6
TO_1 : 50% RDN and 100% PK+ nano urea @4ml/lit. water (single spray at 35 DAS)		8.9	0.07	0.73	232:28:134	34.8	46.9
TO_2 : 50% RDN and 100% PK+2 spray of nano urea @4ml/lit. water (single spray at 35 & 60 -65 DAS)		8.8	0.07	0.72	233:28:134	36.3	48.8

Treatments	Yield (q/ha)	Cost of cultivation (Rs)	Gross Income (Rs)	Net Income (Rs)	B:C
FP	29.9	31900	62790	30890	1.96
TO_1	32.6	32700	68460	35760	2.09
TO_2	36.4	33200	76440	43240	2.30

Result: Table reveled that maximum yield (36.4 q/ha), net return (Rs. 43240.00/ha) and B:C ratio (2.30) was recorded with TO_2

OFT – 2 (Agronomy)

Thematic area **:** Integrated Nutrient management

Problem definition/Name of OFT **:** Injudicious use of chemical fertilizer

1.	Title of On farm Trial (OFT)	Integration of fertilizer in different form on yield of lentil
2.	Problem diagnosed	Injudicious use of chemical fertilizer
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	FP: Seed treatment + RDF TO_1: 50% of RDF + WS 18:18:18 @ 5g/lit. water (single spray at pre flowering stage) TO_2: Seed treatment with PSB + Rhizobium, 50% RDF + WS 18:18:18 @ 5g/lit. water (single spray at pre flowering stage)
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	BAU, Sabour
5.	Production system and thematic area	Rice – wheat, Nutrient management
6.	Performance of the Technology with performance indicators	pH, EC, OC, NPK, Yield data, no. plant/m^2, 1000 grain weight, no. of pod/plant, straw yield and economics
7.	Final recommendation for micro level situation	Maximum yield was recorded with (11.20 q/ha) with TO_2 treatment. Maximum net return and BC ratio recorded with TO_2 treatment.
8.	Constraints identified and feedback for research	In addition to WS NPK 18:18:18, incorporation of sulphur and iron is required for enhancement of lentil production
9.	Process of farmers participation and their reaction	Field visit and interest of farmers

Table:

Treatments	Replication	pH	EC	OC	N:P:K	Test wt. (1000 grain wt.)	Straw yield (q/ha)
FP: Seed treatment + RDF	7	8.05	0.07	0.80	205:28:131	21.1	12.2
TO_1: 50% of RDF + WS 18:18:18 @ 5g/lit. water (single spray at pre flowering stage)		8.03	0.06	0.80	208:28:134	22.2	13.7
TO_2: Seed treatment with PSB + Rhizobium, 50% RDF + WS 18:18:18 @ 5g/lit. water (single spray at pre flowering stage)		8.02	0.05	0.80	210:28:136	23.2	14.2

Treatments	Yield (q/ha)	Cost of cultivation (Rs)	Gross Income (Rs)	Net Income (Rs)	B:C
FP: Seed treatment + RDF	8.42	21190	47152	25962	2.22
TO_1: 50% of RDF + WS 18:18:18 @ 5g/lit. water (single spray at pre flowering stage)	10.57	22450	59192	36742	2.63

TO_2: Seed treatment with PSB + Rhizobium, 50% RDF + WS 18:18:18 @ 5g/lit. water (single spray at pre flowering stage)	11.89	23150	66584	43434	2.87

Result: Table reveled that maximum yield (11.89 q/ha.), Net return (Rs. 43434/ha) and B:C ratio 2.87 was recorded with TO_2

OFT – 3 (Agronomy)

Thematic area **:** Integrated Nutrient management
Problem definition/Name of OFT **:** Imbalanced use of chemical fertilizer

1.	Title of On farm Trial (OFT)	Evaluating the effect of soil application of rice straw biochar on soil conditions and crop productivity in rice wheat cropping system
2.	Problem diagnosed	Imbalanced use of chemical fertilizer
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	FP: Absolute control TO1 : RDF in rice and wheat TO2 : RDF in rice and wheat + RS biochar @ 2.5 ton/ha in both rice and wheat TO3 : RDF in rice and wheat + RS biochar @ 2.5 ton/ha in rice only TO4 : RDF in rice and wheat + RS biochar @ 5 ton/ha in both rice and wheat TO5 : RDF in rice and wheat + RS biochar @ 5 ton/ha in rice only TO6 : RDF in rice and wheat + RS biochar @ 10 ton/ha in both rice and wheat TO7 : RDF in rice and wheat + RS biochar @ 10 ton/ha in rice only
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	BAU, Sabour
5.	Production system and thematic area	Rice – wheat, Nutrient management
6.	Performance of the Technology with performance indicators	Plant height, tillering and bio-mass (dry matter accumulation) at critical growth stage, yield attributing and economics
7.	Final recommendation for micro level situation	RS biochar @ 10 ton/ha in both rice and wheat give maximum Yield
8.	Constraints identified and feedback for research	-
9.	Process of farmers participation and their reaction	Field visit and interest of farmers

Table:

Treatments	Yield (q/ha)	Cost of cultivation (Rs)	Gross Income (Rs)	Net Income (Rs)	B:C
FP: Absolute control	27.31	26500	58103	31603	2.19
TO_1 : RDF in rice and wheat	31.55	24900	63241	38341	2.54
TO_2 : RDF in rice and wheat + RS biochar @ 2.5 ton/ha in both rice and wheat	31.90	31200	66510	35310	2.13
TO_3 : RDF in rice and wheat + RS biochar @ 2.5 ton/ha in rice only	32.62	24800	63507	38707	2.56

TO_4 : RDF in rice and wheat + RS biochar @ 5 ton/ha in both rice and wheat	34.21	36400	68720	32320	1.89
TO_5 : RDF in rice and wheat + RS biochar @ 5 ton/ha in rice only	31.34	23900	63290	39390	2.65
TO_6 : RDF in rice and wheat + RS biochar @ 10 ton/ha in both rice and wheat	34.97	45940	70581	24641	1.54
TO_7 : RDF in rice and wheat + RS biochar @ 10 ton/ha in rice only	31.55	26100	64014	37914	2.45

Result: Table reveled that maximum yield was recorded with TO_6 (34.97 q/ha) but the BC ratio is maximum in TO_5 (2.65).

OFT – 4 (Home Science)

Thematic area **:** Women Empowerment

Problem definition/Name of OFT **:** Low efficiency of farm women during harvesting paddy due to more drudgery

1.	Title of On farm Trial (OFT)	Evaluation of improved Sickles for harvesting of paddy to minimize drudgery of farm women
2.	Problem diagnosed	Low efficiency of farm women during harvesting paddy due to more drudgery
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmers Practice (FP) – Traditional Sickle TO_1 – To be assessed Naveen Sickle TO_2 – To be assessed Modified Traditional Sickle
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	CIAE Bhopal
5.	Production system and thematic area	Medium upland to lowland, Women Empowerment
6.	Performance of the Technology with performance indicators	Different type of sickle, labour required, labour reduction %, time saving %, time consumed, increase in work efficiency (%)
7.	Final recommendation for micro level situation	Modified traditional sickle was found best during harvesting in field to reduce the drudgery of farm women
8.	Constraints identified and feedback for research	-
9.	Process of farmers participation and their reaction	Field visit and interest of farmers and Farm women

Table:

Technology option	Area covered per Katha/day/women	Increase in work efficiency (%)	Time Consumed (Total hr./Day)	Time Saving %	Labour Required (Women/day/ha)	Labour reduction %
FP - Traditional Sickle	2.83	-	7.84	-	40	-
TO_1 – Naveen Sickle	3.14	10.95	6.50	17.09	27	32.5
TO_2 – Modified Traditional Sickle	3.94	39.20	5.95	24.10	20	50.0

Result: Technology option TO_2 is better than TO_1 regarding 50% time saving and labour reduction as compared with farmer practice.

5. Seed material produced at KVK, farm :

Crop	Variety	Quantity of seed (q)	Value (Rs)	Provided to number of farmers
Paddy	R. Sweta	189.57	-	In Stock
Paddy	Sabour Sona	13.16	-	In Stock
Paddy	Non-seed	6.61	-	In Stock
Wheat	DBW 187 (F/S)	65.00		In Stock
Chickpea	RVG 203 (C/S)	0.03	-	In Stock
Lentil	IPL 316 (C/S)	0.23	-	In Stock
Mustard	RH 725 (C/S)	0.26	-	In Stock
Finger Millet	RAU-8	0.20	-	In Stock

6. Performance of Instruction Farm :

Sl. No.	Crop	Season	Variety	Yield (Qt./ha)
1	Paddy	Kharif	R. Sweta	31.5
			Sabour Sona	32.9
2	Wheat	Rabi	DBW 187 (F/S)	16.24
3	Livestock	Poultry	Sonali & Kadaknath	6142 Chicks

7. Performance of demonstration units (other than instructional farm)

Sl. No.	Name of demo Unit	Year of estd.	Area	Details of production			Amount (Rs.)	
				Variety/Breed	Produce	Qty.	Cost of inputs	Gross income
1.	Dairy	2023	500 Sq ft	Sahiwal	Milk	263.5 lit	67800	10540
					Paneer	1.15 Kg	-	345
2.	Goat	2022	300 Sq ft	Barbari	Kid	18 (no.)	72000	87300
3.	Poultry	2022	700 Sq ft	Kadaknath	Chicks Eggs	25 (no.) 107 (no.)	85000	2400 1545
			650 Sq ft	Sonali	Chicks Eggs	117 (no.) 1460 (no.)		7000 10760
4.	Hatchery	2022	600 Sq ft	Sonali & Kadaknath	Hatching	6000 (no.)	182000	240000

8. List of special programmes undertaken by the KVK, which have been financed by ATMA/ Central Govt/ State Govt./NHM /NFDB/RKVY (Kisan Salahkar) Other Agencies

Name of the programme/scheme	Purpose of programme	Date/ Month of initiation
Farmer's Interaction with Hon'ble Agriculture Minister, Govt. of Bihar	Awareness and training programme	13-10-2023
Live telecast program of Hon'ble PM for Release of 15th Installment of PM-KISAN Samman Nidhi	Awareness and training programme	15-11-2023
Live telecast program of Hon'ble PM	Awareness and training programme	09-12-2023

9. Other Extension Activities :

Activities & Sub – activities	No.	No. of Beneficiaries
Kisan Ghosthi/Kisan Mela	3	1943
Film Show	9	308
Farmers Seminar / Exhibition	3	667
Workshop	5	99
Group meetings	32	201
Lectures delivered as resource persons	3	74
Advisory Services	44	20774
Scientific visit to farmers field	12	184
Farmers visit to KVK	8	310
Diagnostic visits	14	148
Exposure visits	8	660
Animal Health Camp	1	64
Soil health Camp	1	57
Self Help Group Conveners meetings	6	105
Celebration of important days / live telecast	25	2420
Total	**174**	**28014**

KRISHI VIGYAN KENDRA, BANKA

Report of 26th Extension Education Council Meeting (From October 2023 to May 2024)

1. Achievement of Training Programme:

A. Training Programme for Practicing Farmers/Farmwomen:

Sl. No	Date	Topic	Venue	Beneficiaries						Grand Total
				SC		ST		Other		
				M	F	M	F	M	F	
Soil Science										
1	08.10.2023	Organic Farming	OFF	0	0	0	0	47	0	47
2	26.10.2023	Integrated nutrient management in rice	ON	0	0	29	6	0	0	35
3	19.12.2023	Organic farming	OFF	25	0	0	0	10	0	35
4	20.12.2023	Organic farming	OFF	20	0	0	0	5	0	25
5	02.04.2024	Awareness programme of Malnutrition	OFF	0	0	15	20	0	0	35
6	03.04.2024	Natural Farming	OFF	0	0	10	18	0	0	28
7	04.05.2024	Importance of soil test	OFF	0	0	0	0	40	5	45
8	09.05.2024	Malnutrition	OFF	0	0	10	15	0	0	25
9	21.05.2024	Natural Farming	OFF	0	0	25	15	0	0	40
10	07-08.05.2024	Bee keeping	ON	0	0	25	12	0	0	40
Total				**45**	**0**	**114**	**86**	**102**	**5**	**355**
Agril. Engg.										
11	26.10.2023	Use of farm implements for sowing in Rabi crops	OFF	12	12	0	0	8	5	37
12	09.11.2023	Sowing of lentil through zero tillage	OFF	0	0	3	13	0	0	16
13	16.11.2023	Operation and maintenance of zero tillage machine	ON	0	0	5	0	14	0	19
14	22.11.2023	Modern implements for paddy harvesting	OFF	0	0	4	18	0	0	22
15	29.11.2023	Sowing of rabi crops	ON	0	0	8	32	0	0	40
16	11.12.2023	Use & advantage of sprinkler irrigation in rabi crops	ON	8	0	4	2	15	0	29
17	04.01.2024	Use & advantage of different types of spray machine	ON	0	0	4	6	7	0	17
18	10.01.2024	Use of sprinkler in wheat crops	OFF	0	0	6	26	0	0	32
19	03.02.2024	Use of sprinkler in wheat crops	OFF	3	0	3	7	9	0	22

20	21.02.2024	Care & maintenance of zero tillage machine	OFF	2	0	5	12	4	0	23
21	07.03.2024	Use & advantage of different types of harvesting machine for rabi crop	OFF	6	0	5	4	11	0	26
22	21.03.2024	Use and advantage of multi crop thresher for rabi crop	OFF	5	2	6	7	8	0	28
23	06.04.2024	Sowing of green gram through zero tillage machine	OFF	4	0	6	6	9	0	25
24	18.04.2024	Use & advantage of implements for summer ploughing	OFF	7	0	4	7	6	0	24
25	29.04.2024	Use & advantage of drip irrigation	OFF	5	1	5	4	9	0	24
26	13.05.2024	Use of different types of tillage implements	OFF	21	12	0	0	38	28	99
27	14.05.2024	Use & advantage of zero tillage machine	OFF	21	11	0	0	33	19	84
28	15.05.2024	Care & management of farm implements	OFF	17	9	0	0	38	21	85
		Total		**111**	**47**	**68**	**144**	**209**	**73**	**652**
Horticulture										
29	21.02.2024	Disease management of vegetable crop	ON	3	0	2	0	19	2	26
30	27.02.2024	Nutrient management of vegetable crop	ON	6	0	4	1	12	6	29
31	10.04.2024	Scientific cultivation of cucurbits	OFF	0	0	0	28	2	0	30
32	19.04.2024	Pest management of fruit crops	ON	3	6	0	0	21	0	30
33	09.05.2024	Growing of kitchen garden	OFF	0	0	4	33	0	0	37
34	30.05.2024	Scientific cultivation of cucurbits	OFF	3	0	0	0	1	21	35
		Total		**15**	**6**	**10**	**62**	**55**	**29**	**187**
Extension Education										
35	07.02.2024	Enhancing income through weed management in winter season crop	ON	8	3	4	0	5	8	28

36	13.02.2024	Importance & management of crops under crop diversification for more income	ON	7	2	5	1	6	4	25
37	05.03.2024	Promoting digital platform for entrepreneur ventures	ON	2	0	1	0	22	0	25
38	24.04.2024	Role of dairy in uplifting security of dairy farmers	OFF	4	1	3	3	15	4	30
39	29.04.2024	Means of income generation for rural youth using local resources	OFF	11	5	1	0	6	7	30
40	14.05.2024	Formation & management of SHGs	OFF	0	10	0	0	6	9	25
		Total		**32**	**21**	**14**	**4**	**60**	**32**	**163**
Veterinary Science										
41	12.03.2024	Vermicompost Production	ON	4	0	7	1	14	4	30
42	03-04.04.2024	Management of animal in summer season	OFF	3	4	1	2	11	9	30
43	18-19.04.2024	Management of animal in summer season	OFF	5	11	0	1	6	7	30
44	08.05.2024	Management of dairy cow in summer season	OFF	0	0	0	0	19	8	27
45	18.05.2024	Management of dairy cow in summer season	OFF	0	0	12	15	0	0	27
Total				**12**	**15**	**20**	**19**	**50**	**28**	**144**

B. Training Programme for Rural Youth: -

Sl.No.	**Date**	**Topic**	**Venue**	**Beneficiaries**						**Grand Total**
				SC		**ST**		**Other**		
				M	**F**	**M**	**F**	**M**	**F**	
1	04-10.10.2023	Scientific cultivation of button mushroom	ON	4	1	0	0	18	4	27
2	17-22.10.2023	Scientific cultivation of button mushroom	ON	27	0	0	0	4	3	34
3	28.02.2024 to 13.03.2024	Vermicompost Production through RPL (BSDM)	ON	0	0	8	0	18	4	30
4	13.03.2024 to 25.03.2024	Tropical- Subtropical Fruit Grower through RPL (BSDM)	ON	0	0	1	0	21	8	30
5	20-	Goat rearing by scientific	ON	0	0	12	11	07	01	31

	24.05.2024	method								
Total				**31**	**1**	**21**	**11**	**68**	**20**	**152**

C. Extension Functionaries: -

Sl.No.	Date	Topic	Venue	Beneficiaries						Grand Total
				SC		ST		Other		
				M	F	M	F	M	F	
1	28.12.2023	Control of chemical fertilizer and insecticide	OFF	8	0	0	0	10	0	18
2	16.01.2024	Layout of nutri garden	ON	0	7	0	0	0	24	31
3	16.01.2024	Natural Farming	ON	0	0	0	0	0	45	45
4	18.01.2024	Irrigation management in nutri garden	ON	0	7	0	4	0	28	39
5	18.01.2024	Poshan Vatika	ON	0	0	0	0	0	42	42
6	20.01.2024	Poshan Vatika	ON	0	0	0	0	0	45	45
7	22.01.2024	Layout and design of poshan vatika	ON	0	6	0	2	0	13	21
8	23.01.2024	Poshan Vatika	ON	0	0	0	0	0	35	35
9	24.01.2024	Layout and design of poshan vatika	ON	0	5	0	5	0	14	24
10	25.01.2024	Establishment & use of micro irrigation in nutri garden	ON	0	9	0	0	0	15	24
11	29.01.2024	Layout & management of kitchen garden	ON	0	14	0	0	0	47	61
12	28.02.2024	Sowing & irrigation practices in pulse crop	OFF	4	0	0	0	27	2	33
Total				**12**	**48**	**0**	**11**	**37**	**310**	**418**

D. Sponsored Training:-

Sl.No.	Date	Topic	Venue	Beneficiaries						Grand Total
				SC		ST		Other		
				M	F	M	F	M	F	
1	15.10.2023	Crop Production in Rabi (Rabi Mahotsav)	OFF	0	0	0	0	350	0	350
2	19.10.2023		OFF	0	0	0	0	125	27	152
3	27.10.2023		OFF	0	0	35	17	137	16	205
4	28.10.2023		OFF	0	0	0	0	250	0	250
5	29.10.2023		OFF	25	5	0	0	110	10	150
6	30.10.2023		OFF	15	7	0	0	252	26	300
7	10.11.2023	Mahua Processing	ON	9	0	0	0	50	0	59
8	24.01.2024	Natural Farming	OFF	0	0	0	0	75	0	75
9	25.01.2024	Importance of zero tillage technique	OFF	0	0	0	0	65	0	65
Total				**49**	**12**	**35**	**17**	**1414**	**79**	**1606**

E. Other Extension Activities

Sl.No.	Date	Topic	Venue	Beneficiaries						Grand Total
				SC		ST		Other		
				M	F	M	F	M	F	
1	01.11.2023	Sabal Jawab Prayogshala se Khet Tak	ON	0	0	0	0	23	0	23
2	15.11.2023	PM Kisan Samman Nidhi	ON	25	10	15	5	32	13	106
3	05.12.2023	World soil day	OFF	0	0	0	0	500	0	500
4	02.12.23 to 16.01.24	Viksit Bharat Sankalp Yatra	OFF	0	0	0	0	52300	20570	72870
5	24.01.2024	Farmer Awareness Programme	OFF	12	5	32	55	5	0	98
6	05.02.2024	Farmer Awareness Programme	OFF	47	6	14	0	18	12	97
Total				**84**	**21**	**61**	**60**	**52878**	**20595**	**73694**

2. Achievements of Frontline Demonstrations

Details of FLDs implemented during 2023-24

Sl. No	Crop	Variety	Area (ha)/ No.	No. of farmers		
				SC/ST	Others	Total
	Cereals					
1	Wheat	BHU-31	15	13	46	59
	Oilseed					
2	Mustard	RH-725	8	14	29	43
	Pulses					
3	Lentil	IPL-316	15	22	42	64
4	Pigeon pea	IPA-203	2	4	7	11
5	Green Gram	Shikha	27	95	0	95
	Total		**44**	**121**	**49**	**170**
	Vegetable					
6	Vegetable seedling	Hybrid	100000	185	59	244
7	Lac	Rangeeni	50 Plants	10	0	10
	Livestock					
8	Chicks	Sonali, Kadaknath, Vanraja	3520	101	0	101

4. ON FARM TRIAL:

OFT-1 (Soil Science)

1	**Title:**	**Assessment of efficacy of Nano urea in wheat**
2	Problem diagnosis	Excessive use of chemical fertilizer and spiralling price of urea leads to increase in cost of cultivation
3	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Technology Option: -** **Farmers Practices**: - RDF (100:40:20) kg/ha **TO_1**: - 50% of RDN and 100% PK + Nano urea @4ml/lit. water (single spray at pre flowering stage) **TO_2:** - 50% of RDN and 100% PK + 2 sprays of Nano urea at (25 to 30 days) and (60-65 days) @ 4 ml/lit. water

4	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	BAU, Sabour
5	Replication	7
6	Production system and Thematic Area	Soil Fertility Management
7	Performance of the Technology with performance indicators	Soil:- 1. pH, EC, OC (Before & After). 2. Av. N, P, K (Before & After). No. of effective tillers/$m^{2,}$ 1000 grain wt, Panicle wt. Grain and straw yield and Economics
8	Final recommendation for micro level situation	The grain yield 38.90 q/ha of wheat was recorded more in Farmer Practices (RDF (100:40:20) kg/ha)
9	Process of farmers participation and their reaction	Interaction with famers by training and field visit.

Table 1: Assessment of efficacy of Nano urea in wheat on yield attributes, yield, economics and B: C ratio

Technology options	Plant height (cm)	No of effective tillers /m2	1000 grain wt(g)	Panicle wt(g)	Panicle length (cm)
Farmer Practice	87.20	347	40.95	3.08	9.29
TO_1	81.11	326	39.21	2.95	8.85
TO_2	83.67	331	39.75	2.99	8.94

Technology options	Grain yield (q/ha)	Straw yield (q/ha)	Cost of cultivation (Rs)	Gross return (Rs)	Net return (Rs)	B:C ratio
Farmer Practice	38.90	48.63	40800.00	93361.00	582561.00	2.28
TO_1	32.81	41.01	39950.00	78744.00	38794.00	1.97
TO_2	34.50	43.12	40225.00	82800.00	42575.00	2.06

OFT-2 (Agril. Engg.)

1.	Title of On farm Trial	**Assessment of Multi crop planter for sowing of pulses in different field condition**
2.	Problem diagnosed	In higher moisture condition field preparation for cultivation of Chick pea takes more time after harvesting of paddy
3.	Details of technologies selected for assessment/refinement	FP: Broadcasting in tilled condition TO_1: Sowing with Zero tillage Multi crop planter (No till condition) TO_2 : Sowing with Multi Crop planter (Tilled condition)
4.	No. of Replication	07 famers
5.	Source of Technology	CIMMYT
6.	Production system and thematic area	Rice – wheat, Recourse conservation technology.
7.	Performance of the Technology with performance indicators	Yield and economics
8.	Final recommendation for micro level situation	Sowing with Multi Crop planter (Tilled condition) and Multi Crop planter (Tilled condition) both are beneficial for farmers..
9.	Process of farmers participation	Field visit and interest of farmers.

	and their reaction	

Treatments	Replication	No. of pods/plant	No of branch/plant	1000 grain wt. (gm)	Yield (Q/ha)	Cost of cultivation (Rs/ha)	Gross return (Rs/ha)	Net return (Rs/ha)	B:C ratio
Farmers Practice - Broad casting in tilled condition	7	39.10	7.62	288.37	8.12	25800.00	43320.00	17520.00	1.67
TO_1 – Sowing with Zero tillage Multi crop planter (No till condition)		47.95	9.11	302.72	10.76	23400.00	57404.00	34004.00	2.45
TO_2 – Sowing with Multi Crop planter (Tilled condition)		52.25	9.89	308.22	11.12	25200.00	59325.00	34125.00	2.35

Result: Table reveled that maximum no. of pods/plant, no. of branch/plant and yield recorded with TO_2 treatment.

5. Seed material produced at KVK, farm:

A. Seed production programme at KVK, Banka

Crop	Variety	Quantity of seed (q)
Paddy	R. Sweta	157.0
Paddy	R. Mahsuri	57.0
Paddy	S. Harshit	3.99
Wheat	Sabour Nirjal	51.0
Chickpea	Sabour Chana-1	7.0
Moong	Shikha	10.0 (Standing Crop)
Total		**285.99**

B. Planting Material Developed

Crop	Variety	Quantity (No.)
Flower Plants	Different Variety	500
Vegetable Seedling	Different Variety	50000
Total		**55000**

C. Production of Bio-Products

- Vermicompost- 18q

6. Special programmes

Sl. No.	Date	Name of programme	Venue	Beneficiaries						Grand Total
				SC		ST		Other		
				M	F	M	F	M	F	
01	15.11.2023	PM Kisan Samman Nidhi	KVK, Banka	12	5	0	0	18	11	46

02	05.12.2023	World Soil Day	DAO Office	0	0	0	0	425	75	500
03	06.12.2023	BREDA Programme	KVK, Banka	12	5	7	0	27	9	60
04	09.12.2023	PM Programme	KVK, Banka	11	3	3	0	20	6	43
Total				**35**	**13**	**10**	**0**	**490**	**101**	**649**

Interaction/Live telecast programme of Hon'ble PM/Hon'ble AM

Sl.No.	Date of event	Name of Event/Programme	Interaction of Hon'ble PM/AM	Participants			
				Farmers	Staffs	VIP/ Others	Total
01	15.11.2023	PM Kisan Samman Nidhi	Prime Minister, Govt. of India	46	14	0	60
02	09.12.2023	PM Programme	Prime Minister, Govt. of India	43	12	0	55
Total				**89**	**26**	**0**	**115**

7. Soil samples analysed:

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Sample	1018	822	42	35630.00

8. Other Extension Activities:

Sl. No.	Nature of Extension Activity	No. of activities	Farmer's attend	Extension Officials attend	Total
1	Kisan Gyan Vahan	4	766	14	780
2	Field Day	2	104	03	107
3	Kisan Choupal/Kisan Ghosthi	3	125	0	125
4	Film Show	2	115	0	115
5	Group meetings	2	55	0	55
6	Advisory Services	14	3250	50	3330
7	Farmers visit to KVK	345	345	0	345
8	Diagnostic visits	18	90	0	90
9	Exposure visits	4	42	0	42
10	Live Telecast of Flagship programmes	2	153	0	153
11	Any Other (Specify)	2	130	0	130
Total		**426**	**8051**	**52**	**8103**

Proposed Action Plan
(June 2024 to September 2024)

1. Details of Training Programme:

Sl. No.	Type	No. of Course	No. of beneficiaries
1.	Farmers/Farm Women	60	1800
2.	Rural Youth	30	900
3.	Extension Personnel	2	100
4.	Skill Development Training	2	60
5.	Sponsored Training	2	60
	Total	**96**	**2920**

2. On Farm Trial to be conduct

OFT 1 (Agril. Engg.)

1.	**Title of On Farm Trial**	**Influence of nozzle type and spray volume on herbicide efficacy in paddy weed ecosystem**
2.	Problem diagnosed	Farmers generally use cone nozzle for spraying weedicide which is not efficient in eradication of weeds as proper amount of weedicide does not reach the target site due to low water discharge efficiency per unit time.
3.	Details of technologies selected for assessment/refinement (Assessed)	**Farmers Practices**: - Spray of weedicide using cone type nozzle with spray volume 500 l/ha **TO_1** – Spray of weedicide using flat fan nozzle with spray volume 500 l/ha **TO_2** – Spray of weedicide using flood jet nozzle with spray volume 500 l/ha
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	IIPFT, Gurgaon
5.	Replication	7
6.	Production system and thematic area	Rice-Wheat/Pulse, Weed management
7.	Performance of the Technology with performance indicators	Weed/sq.m, Yield attributes, Yield, Economics
8.	Final recommendation for micro level situation	-
9.	Constraints identified and feedback for research	Further research also made for next year
10.	Process of farmers participation and their reaction	Field visit and interest of farmers.

OFT 2 (Soil Science)

1	**Title of On Farm Trial**	**Assessment of efficacy of Nano urea in rice**
2	Problem diagnosis	Excessive use of chemical fertilizer and spiraling price of urea leads to increase in cost of cultivation

3	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Technology Option: -** **Farmers Practices**: - RDF (100:40:20) kg/ha **TO_1**: - 50% of RDN and 100% PK + Nano urea @4ml/lt. water (single spray at 35 DAS) **TO_2:** - 50% of RDN and 100% PK + 2 sprays of Nano urea at (35 DAS) and (60-65 days) @ 4 ml/lt water
4	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	ICAR ATARI, Patna (2022)
5	Replication	7
6	Production system and Thematic Area	Soil Fertility Management
7	Performance of the Technology with performance indicators	Soil:- 1. pH, EC, OC (Before & After). 2. Av. N, P, K (Before & After). No. of effective tillers/$m^{2,}$ 1000 grain wt, Panicle wt. Grain and straw yield and Economics
8	Final recommendation for micro level situation	-
9	Constraints identified and feedback for research	-
10	Process of farmers participation and their reaction	Interaction with famers by training and field visit.

OFT 3 (Veterinary Science)

1.	**Title of On farm Trial**	**Effect of supplementation of Lime stone powder and Di-Calcium Phosphate on milk production of Straw based fed indigenous dairy animal.**
2.	Problem diagnose	Paddy straw is main roughage of diary animals. Paddy straw having Oxalate which chelate Calcium and increase the requirement of Calcium and in absence of calcium it also inhibit carbohydrate metabolism.
3.	Details of technologies selected for assessment	All animals were dewormed before starting trial. **Farmers practices:** Grains+ Straw. **TO_1:** Farmers practice + 30 g Lime stone powder/day **TO_2:** Farmers practice + 30 g DCP/day
4.	Source of Technology	NDRI, Karnal
5.	Replication	18 (6x3)
6	Production system and Thematic Area	Feed management
7	Performance of the Technology with performance indicators	✓ Milk Yield & Fat%, SNF ✓ Days of Postpartum heat ✓ Cost of milk production ✓ Net return (Rs/kg milk production), BC Ratio ✓ Farmers Reaction

8	Final recommendation for micro level situation	-
9	Constraints identified and feedback for research	-
10	Process of farmers participation and their reaction	Interaction with famers by training and field visit.

OFT 4 (Horticulture)

1.	**Title of On farm Trial**	**Management of shoot and fruit borer in Okra**
2.	Problem diagnose	Heavy yield loss due to high infestation of okra shoot and fruit borer
3.	Details of technologies selected for assessment	**Farmers Practices:** Use of Malathion **TO_1:** Emamectin benzoate 5% SG @ 1/2 g/Liter (3 times) **TO_2:** Cypermethrin 25% EC @ 0.5 ml/Liter (3 times)
4.	Source of Technology	CSKHPKV, Palampur, Himachal Pradesh (2023)
5.	Replication	10
6	Production system and Thematic Area	Pest Management
7	Performance of the Technology with performance indicators	• Number of Fruits/plant (no.) • Fruits Damaged (%) • Yield (q/ha) • Gross Return (Rs./ha) • Net Return (Rs./ha) • B:C Ratio (ratio)
8	Final recommendation for micro level situation	-
9	Constraints identified and feedback for research	-
10	Process of farmers participation and their reaction	Interaction with famers by training and field visit.

OFT 5 (Extension Education)

1	**Title:**	**Study on awareness and perception of farmers about Soil Health Card**
2	Problem diagnosis	Excessive use of Chemical fertilizer
3	Thematic area	Capacity Building
3	**Technology Option: -**	**TO_1**: -Farmers not having Soil Health Card **TO_2:** - Farmers having Soil Health Card but not following the recommendations **TO_3**: - Farmers having Soil Health Card and follow the recommendations
4	Source of Technology (ICAR/ AICRP/SAU/other, please	BAU, Sabour

	specify)	
5	No. of Respondents	30
6	Performance of the Technology with performance indicators	✓ Awareness about SHC ✓ Change in productivity ✓ Constraints faced by the farmers ✓ Change in fertilizer amount used
7	Constraints identified and feedback for research	-
8	Process of farmers participation and their reaction	Group Discussion and structured interview schedule

3. Front Line Demonstration:

ICAR:

Agril. Engg.

Season	Crop	Variety	No. of area (ha)
Rabi	Zero tillage wheat	BHI-31(Biofortified)	05
Kharif	Raised Bed Arhar	IPA-2023	05
	Millet (Line sowing)	RAU-08	15
	Bio fortified Paddy	DRR Dhan-67 (Biofortified)	10
Zaid	Green gram (Zero Tillage)	HUM-16	05
		Total	**40**

Horticulture:

Season	Crop	Variety	No. of area (ha) / no.
Rabi, Kharif & Zaid	Vegetables	Hybrid	50 Farmers
Kharif/Rabi	Cauliflower	Sabour Agrim	1 ha
Rabi	Potato	Kufri Pukhraj/ Lalima	1 ha

Soil Science

Season	Technology	Crop	No. of area (ha)
Rabi	Rhizobium + PSB	Chickpea	75
	Rhizobium + PSB	Lentil	75
	Azotobacter +PSB	Wheat	100

Vet. Science

Technology	Species	No. of Demonstration (Farmers)	No. of Animal
Deworming	Goat	50	300
Liver Tonic	Goat	20	100
	Total	**70**	**400**

4. Soil and water testing

Description	No. of samples to be analyzed
Soil	1000

Plant sample preparation:

Sl. No	Plant	Quantity (No.)
1	Guava/Mango	1000
2	Papaya	1000
3	Flower	5000
4	Vegetable Seedling	100000

5. Extension Activities

Activities	No.	Participants
Kisan gosthi	3	150
Field Day	2	155
Kisan Mela	1	500
Diagnostic survey	10	85
Scientist visit to farmers field	24	120
Farmers advisory service	48	6725
Technical bulletin	10	10000

KRISHI VIGYAN KENDRA, BHAGALPUR

Report of 26th Extension Education Council Meeting
(From October 2023 to May 2024)

1. **Training Programme Organized**

a. Practicing Farmer & Farm Women

Sl. No.	Discipline	No. of Courses	Duration days	Participants						Grand Total		
				Others		SC		ST				
				M	F	M	F	M	F	M	F	Total
1.	Agricultural Engineering	9	2	192	31	35	11	3	0	230	42	272
2.	Agronomy	5	2	85	53	0	0	0	0	85	53	138
3.	Animal Science	11	2	267	29	46	11	0	0	313	47	760
4.	Entomology	4	2	73	19	5	0	0	0	78	79	97
5.	Horticulture	17	2	464	107	61	38	5	0	530	145	675
Total		**46**		**1081**	**239**	**147**	**60**	**8**	**0**	**1236**	**366**	**1942**

b. Rural Youth

Sl. No.	Discipline	No. of Courses	Duration (days)	Participants						Grand Total		
				Others		SC		ST				
				M	F	M	F	M	F	M	F	Total
1.	Agril. Eng.	1	4	28	0	2	0	0	0	30	0	30
2.	Agronomy	1	1	23	7	0	0	0	0	23	7	30
3.	Animal Science	7	4	150	12	43	7	0	0	193	19	213
4.	Horticulture	1	4	11	5	1	0	4	0	16	5	21
Total		**16**		**221**	**79**	**21**	**9**	**1**	**0**	**241**	**88**	**329**

c. Extension Functionaries

Sl. No.	Discipline	No. of Courses	Duration (Days)	Participants						Grand Total		
				Others		SC		ST				
				M	F	M	F	M	F	M	F	Total
1.	Agril. Eng.	1	1	20	4	0	3	0	0	20	7	27
2.	Animal Science	1	1	27	0	5	0	0	0	32	0	32
3.	Horticulture	1	1	19	1	9	1	0	0	29	2	31
Total		**3**		**66**	**5**	**14**	**4**	**0**	**0**	**81**	**9**	**90**

d. BSDM Training programme (Domain/RPL) organized

Sl. No.	Title of Training	Duration	Batch Start Date	No. of Participants
01.	Agriculture Extension Service Provider	420 hrs	18.03.-06.04.2024	30

02.	Vermicompost Producer	460 hrs	29.03. - 12.04.2024	30
			Total	**60**

e. Sponsored Training programme

Sl. No.	Title	Organisation	Date	No. of Participants
01.	Repair of farm machineries for self employee generation	HRDP, RGVN, Daudnagar, Aurangabad	03.01.2024 - 01.02.2024	25
			Total	**25**

3. Front Line Demonstration Conducted

Sl. No	Crop	Tech. Demo. with detailed treatments	No. / Area (ha.)	No. of Farmers	Yield(q/ha)		% Increase
					Demo	Check	
1.	Mango	Spraying of Chlorpyriphos & Cypermethrin in Mango to control RBC (Red Banded Caterpillar)	10	32	5 % attack	40% attack	5 % attack
2.	Wheat	Happy Seeder (Sabour Nirjal Late Sown)	2	10	35.15	31.54	11.45
Cluster Frontline Demonstration							
3.	Mustard, RH-725	Seed replacement + Package and Practices	60	149	10.39	14.92	43.60

Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of units
Sheep and goat	Disease management	ET Vaccine	50	200
Sheep and goat	Disease management	PPR Vaccine	125	500
Total			**175**	**700**

Women empowerment

Category	Name of Technology	No. of Demo.	Observations		Remarks
			Demo.	Check	
Nutrigarden	Nutrigarden	25	New Introduction	2.8 kg/day (Vegetable)	
Button mushroom	Production Technology	25			

4. ON FARM TRIAL CONDUCTED

OFT (1) (Horticulture)

- **Thematic area:** Integrated Disease Management

- **Problem definition/Name of OFT: Assessment of different Bio-agents against Panamawilt in Banana**

1.	Title of On farm Trial (OFT)	**Assessment of different Bio-agents against Panamawilt in Banana**
2.	Problem diagnosed	Banana plants are dying at the fruiting stage
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmer's Practice: Farmers are using indiscriminate use of chemicals TO_1: ICAR Fusicont at the time of planting and different stages of growth. TO_2: Sabour Trichoderma – 1 at the time of planting and different stages of growth.
4.	Source of Technology (ICAR/ AICRP/SAU/other)	CISH, Lucknow
5.	Production system and thematic area	IDM, Integrated Disease Management in Banana
6.	Performance of the Technology with performance indicators	ICAR Fusicont has performed better than Sabour Trichoderma – 1.
7.	Final recommendation for micro level situation	This is first year result after second year it may be recommended.
8.	Constraints identified and feedback for research	ICAR Fusicont is not available in the market
9.	Process of farmers participation and their reaction	Active and cooperative

B. Results with Table and good quality photographs in jpg.

Thematic area	**Technology options with detailed treatments**	**Area (ha in crop & Fodder)/ Nos (in livestock)**		**Yield (tones/ha)**	**Cost of cultivation (Rs./ha)**	**Gross return (Rs/ha)**	**Net return (Rs./ha)**	**BC ratio**
		Proposed	**Actual**					
IDM	Farmers Practice	0.2 ha	0.2 ha	65.5	225000	335000	100000	1:1.48
IDM	TO_1	0.2 ha	0.2 ha	77.6	225000	475000	250000	1:2.11
IDM	TO_2	0.2 ha	0.2 ha	68.5	225000	395000	170000	1:1.75

Result: This is first year result after second year it may be recommended.

OFT 2 (Horticulture)

- **Thematic area:** Management of orchard.
- **Problem definition/Name of OFT:** Assessment of different bio mulch in mango

1.	Title of On farm Trial (OFT)	Assessment of different bio mulch in mango
2.	Problem diagnosed	Lack of organic carbon in soil .farmers are not adding bio degradable mulch

3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	➢ **Farmers' Practices : only intercrop turmeric** ➢ **TO_1**: Taphrosia 1kg dry biomass/ m^2 canopy ➢ **TO_2**: Grass/paddy straw/ Any local available mulching 15 cm thick (plant spread) +Greece band 30 cm from GL
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	RCER, Ranchi, Plandu
5.	Production system and thematic area	Management of orchard

Title: **Assessment of Biomass Mulching In Mango**

TABLE: 1: yield and yield attributing characters

Technology option	**Panicle/ plant**	**Panicle length (cm)**	**No of pedicel/ panicle**	**Fruit weight (g)**	**Fruit Diameter (cm)**	**Weed count per meter/sq**			**Fruit yield / plant (Kg)**	**Yield (q/ha)**
						1st	**2nd**	**3rd**		
FP-	2-3	12.5	3-4	175	5-6	23	28	32	40	40
T1-	3-4	11.5	4.5	187	7.1	20	22	25	43	43
T2-	3.3	12.0	3.9	182	6.7	21	23	27	41	41

TABLE 2: SOIL PARAMETER

Treatment	**Soil moisture %**		pH		OC%		N Kg/ha		P_2O_5 Kg/ha		K_2O Kg/ha	
	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After
FP	15-20	15-20	7.8	7.5	0.4	0.4	191.3	191.3	19.5	18.7	287.5	287.5
T1	20	22		7.2		0.54		199.5		21.2		298.7
T2	20	21	7.8 7.8	7.3	0.4 0.4	0.49	191.3 191.3	195.8	19.5 19.5	20.8	287.5 287.5	290.2

TABLE 3: ECONOMICS

Technology option	**Cost of cultivation (Rs./ha)**	**Gross return (Rs/ha)**	**Net return (Rs./ha)**	**BC ratio**
FP	25000	45000	20000	1.8
T1	20000	44000	24000	2.2
T2	20000	41000	22000	2.05

Remarks : trials conducted on 10 years old Jardalu mango

OFT-3 (Home Science)

1.	**Title of On Farm Trial**	Assessment of preparation methods of Carrot jam for more shelf life, enhancement of nutrition & income.
2.	**Problem Diagnosed**	Lack of knowledge of value addition technology for carrot.
3.	**Details of Technologies**	**Farmers practice:** Local people consume fresh carrot as such as

	Selected for Assessment	vegetables or juice. **Technology option – I :** Preparation of Carrot Jam (Formulation - Ingredients are Carrot- 1.0kg, Sugar-1.0kg, Water-100ml, Citric acid - 6.0g, Pectin powder-10g, Sodium Benzoate- 1.0g) **Technology option – II :** Preparation of Carrot Jam with essence (Formulation - Ingredients are Carrot- 1.0kg, Sugar-1.0kg, Water-200ml, Citric acid -6.0g, Pectin powder-10g, Lemon essence-5ml, Sodium Benzoate- 1.0g)
4.	**Source of Technology**	DRPCA U (centrally designed by ATARI, Patna
5.	**Production System and Thematic Area**	Value addition
6.	**Performance of the Technology with Performance Indicators**	➢ Sensory Analysis: Taste, Colour, Flavour, Texture and Overall Acceptability ➢ Packaging Material: (Glass jar 500g) ➢ Shelf life (0, 15, 30, 45, 60 and 75 days at Ambient/ Refrigerated condition.
7.	**Final recommendation for micro level situation**	Under observation
8.	**Constraints identified & feedback for research**	Under observation
9.	**Process of Farmers Participation and their Reaction**	Farmer participated willingly and reaction was good. However pectin is not available in local market

Thematic area: Value addition

Problem definition: Lack of knowledge of value addition technology for carrot.

Sensory characteristics	**Taste**		**Colour**		**Flavour**		**Texture**		**Overall acceptability**	
Storage interval (Day)	**T.O-1**	**T.O-2**	**T.O-1**	**T.O-2**	**T.O-1**	**T.O-2**	**T.O-1**	**T.O-2**	**T.O-1**	**T.O-2**
0	4.5	4.6	4.4	4.6	3.2	4.3	3.0	3.0	3.76	4.13
15	4.3	4.3	4.3	4.3	3.2	4.2	3.0	3.0	3.70	3.95
30	4.3	4.3	4.2	4.2	3.0	4.3	2.9	3.0	3.6	3.95
45	4.1	4.1	3.8	3.8	3.0	4.0	2.5	2.6	3.35	3.63
60	3.5	3.5	3.0	3.0	3.5	3.6	2.6	2.5	2.9	3.15
75	3.3	3.4	2.7	2.7	2.1	3.4	2.6	2.6	2.68	3.03
mean score	4.0	4.03	3.73	3.76	2.83	3.96	2.76	2.78	3.33	3.63
* Respondents feedback (5 point Hedonic scale)										

Results: Carrot Jam was evaluated for sensory characteristics at different time interval up to 75 days. From the data in the table it apparent that overall acceptability score of T.O-II is more than that of T.O- I at different time internal i.e. at 0 day as well as over the period of 15, 30, 45, 60 and 75 days of storage. Further it is also visible from mean score that overall acceptability of T.O- II formulation is more

accepted with acceptability due to flavour and this flavour superiority may have potential for marketing of produce and ultimately to enhance income of farming community.

OFT - 4 (Agriculture Engineering)

1.	Title of On Farm Trial	Assessment of ridger & weeder machine for weeding of rabi maize crop
2.	Problem	Higher weeding & ridging operational cost, r irrigation cost, water use efficiency and Crop lodging
3.	Details of technologies selected for assessment/refinement	**Farmers practice:** Manual weeding & ridging by spade **Technology option – I :** Only weeding operation by weeder machine **Technology option – II :** Sowing with Multi crop planter(Tilled condition)
4.	Source of technology	PAU, Ludhiana
5.	Production system and Thematic area:	Rice- Maize production system and Farm mechanization & RCT
6.	Performance of the technology with performance indicators	Yield, Yield attributes, economics and machine effective field capacity & efficiency
7.	Final recommendation for micro level situation	Technology option-II recommended as it has low cost of cultivation and net return is highest among three technology
8.	Constraints identified and feedback for research	There is lack of awareness about the machine and technology
9.	Process of farmers participation and their reaction	After training and demonstration farmer get to no about the advance technique & curious to adopt that

Technology option	No. of trials	Area (ha in crop & Fodder)/ Nos (in livestock) Proposed	Area (ha in crop & Fodder)/ Nos (in livestock) Proposed	Yield component					
				No. of plant / m^2	No. of cob per plant	Length of cob (cm)	Girth of cob (cm)	No. of grain per cob	Test wt.
Farmers practice	11	0.2 ha	0.2 ha	10	01	21	16	686	154
Technology option– I	11	0.2 ha	0.2 ha	10	01	22	17	689	155
Technology option– II	11	0.2 ha	0.2 ha	10	01	24	18	768	160

Technology option	No. of trials	Yield (q/ha.)	Cost of cultivation (Rs./ha)	Net return (Rs./ha.	BC ratio
Farmers practice	11	85.2	45000	127800	2.84

Technology option– I	11	85.9	40800	128850	3.15
Technology option– II	11	90.4	41500	135600	3.26

Technology option	Actual Field Capacity (ha/h.)		Weeding Efficiency (%)		Field Efficiency (%)	
	Weeder (4.5 hp)	Ridger (4.5 hp)	Weeder (4.5 hp)	Ridger (4.5)	Weeder (4.5 hp)	Ridger (4.5 hp)
Farmers practice	-	-	-	-	-	-
Technology option– I	0.0496	-	78.6	-	82.25	-
Technology option– II	0.0496	0.05	78.6	80.1	82.25	84.21

Result: Table revealed that among three technologies. Technology option-II recorded maximum yield of 90.4 q/ha. along with maximum net return Rs. 135600.00/ha. and maximum BC ratio 3.26 with low cost of cultivation

OFT-5 (Animal Science)

1.	**Title of On farm Trial**	**Assessment of performance of sorted and non-sorted semen straw after AI in Heifer under field conditions.**
2.	**Problem diagnosed**	Less used of Male calf and high demand of female calf
3.	**Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)**	**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
4.	**Source of Technology**	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*
5.	**Production system and thematic area**	Desired sex (male or female Calf) and Milk production.
6.	**Performance of the Technology with performance indicators**	Conception rate, Desired sex (male or female Calf), Milk production and B:C ratio
7.	**Final recommendation for micro level situation**	Balance feeding along with mineral mixture for proper production of reproductive hormones
8.	**Constraints identified and feedback for research**	Mineral deficiency and sorted semen straw for production of female calf
9.	**Process of farmers participation and their reaction**	On farmers field and well

Table: Assessment of performance of sorted and non-sorted semen straw after AI in Heifer under field conditions

Technology option	No. of trials	Yield component post A.I						Gross cost of production	Gross return	Net return	B.C Ratio
		Age of Heifer (month)	Heat period (hrs.)	A.I (Natural/ Artificial)	conceived	Sex (M/F)	Milk production (ltr.)				
Farmer practice	10	14 to 20	18-25	A.I	5	Female & 2	6-0	62250	105400	43150	1-6

						Male& 3					
Tech. option I	10	14 to 20	18-25	A.I	8	Male & 8	6-5	72250	174600	102350	2-4
Tech. option II	10	14 to 20	18-25	A.I	7	Female & 4 Male & 3	6-1	62550	116240	53690	1-8

Results: TO : I (Artificial insemination using frozen female sex sorted semen) treatment is better than of other groups due to more occurrences conception rate of sorted semen (80%) and female calf (7).

5. Achievements of projects/ programmes

i. Attracting and Retaining Rural Youth in Agriculture (ARYA)

Sl. No.	Name of the Component	No. of Training	No. of Beneficiaries	No. of Group/FPO Formed
1	Nursery Raising	06	200	7 Groups/ 02 FPO
2	Fish Cultivation	05	170	5 Groups/ 02 FPO
3	Poultry Farming	06	170	6 Groups/ 01 FPO

Inputs given to Youths under ARYA Project

Enterprises	Units Established	Operational Units	Avg. Income Generated
Nursery Raising	33	29	280000
Fish Cultivation	55	47	125000
Poultry Farming	45	41	182500

Details of FPO Formed

Sl. No.	Name of the FPO	No. of Member	Working Area
1	Jardalu Mango	100	Nursery raising of horticultural crops
2	Kohal Farm Producer's Company, Kairiya, Kahalgaon	250	Marketing of Fish, Fish seed, Horti & Poultry Products
3	Herb Farmer Producer's Company, Tarcha-Damuchak, Goradih	125	Marketing of Fish, Fish seed, Horti & Poultry Products
4	Agro Point Farmer Producer's Company, Meharpur, Pirpainti	155	Marketing of Fish, Fish seed, Horti & Poultry Products

ii. Natural farming

Sl. No.	Name of Activity	Venue	No. of programme	Beneficiaries
1.	Training	OFF/ON	06	247
2.	Awareness programme	OFF	07	937

3.	Demonstration	-	12	24

Details of Natural Farming Demonstration program during Rabi and Summer season

Farmer's Name, Address and Mobile Number	Crop and Variety	Area (ha)	Date of Sowing	Date of Harvesting	Yield (q)	Remarks
Sushil Kumar Raipura, Goradih 8521547956	Mustard (RH-725)	0.25	03.11.2023	31.03.2024	17.12 q/ha	-
Sipahi Yadav Raipura, Goradih	Maize (Local)	0.20	30.11.2023	30.04.2024	85.5 q/ha	-
Photo Yadav Raipura, Goradih 7479500266	Mustard (RH-725)	0.50	05.11.2023	01.04.2024	16.09 q/ha	-
Arvind Kumar Raipura, Goradih 9661832954	Nutrition Garden	0.10	30.09.2023		1.5 kg/day	-

iii. SCSP Programme

S. No.	Particular	Intervention	Breed	Achievement (No.)
1.	Backyard Poultry	Backyard Poultry	Kadaknath, Vanraja	400
2.	Sewing Machine	Sewing Machine	-	6
3.	Sprayer	Sprayer	-	30
4.	Mineral Mixture	Mineral Mixture	-	20
5.	Poultry Feed	Feed	-	10

iv. NICRA

Crop Management

Farming System Typology	Area (ha)	No. of Demo.	Crop Yield obtained (q)
Flood prone with animal and crop (Zero tillage wheat with FIRE &CRA variety Sabour Sambridhi)	5	7	40.38
Flood prone without animal and crop (Zero tillage wheat with FIRE &CRA variety Sabour Sambridhi)	5	7	
Flood prone with animal and crop (CRA high yielding Mustard variety RH-725)	3	4	17.20
Flood prone without animal and crop (CRA high yielding Mustard variety RH-725)	2	3	
Flood prone with animal and crop ((Lentil) HYV IPL-316)	3	4	10.61
Flood prone without animal and crop ((Lentil) HYV IPL-316)	3	4	
Flood prone with animal and crop (Vegetable cultivation with mulch)	0.25	5	18.00
Flood prone with animal and crop (High Density guava)	13	8	Crop standing
Flood prone without animal and crop (High Density guava)	13	7	
Flood prone with animal and crop (Inter cropping in orchard)	0.5	11	Crop

			standing
Flood prone with animal and crop (CRA variety Green gram MH-1142)	10	10	Crop standing
Flood prone without animal and crop (CRA variety Green gram MH-1142)	10	11	

Livestock and fisheries

Farming System Typology	Number of Animals Covered	No. of Unit	Total Number Obtained
Flood prone with animal and crop (Multicut fodder demonstration)	7	4	Crop Standing
Flood prone without animal and crop (Multicut fodder demonstration)	7	4	
Flood prone with animal and crop (Silage bag)	24	12	
Flood prone without animal and crop (Silage bag)	24	11	

Capacity building

Theme	No. of training programmes	Number of beneficiaries		
		Male	Female	Total
Vegetable cultivation through mulching	1	15	6	21
DSR of paddy	2	41	8	49
Scientific cultivation of raagi	1	23	-	23
Management of orchard	1	21	3	24
Weed management in rice	1	23	2	25

Extension activities

Name of programme	Participants
Crop cutting and field day	96
Diagnostic visit	42
Field visit	89

v. Climate Resilient Agriculture (CRA)

Summer - 2024

Crop	Variety	Intervention	Demonstration (Acre)	No of Beneficiaries
Green gram	Shikha IPM 410	ZT Green gram	**260**	**307**

Rabi: 2023 - 24

Sr. No.	Proposed Intervention	Cost/Area	Area	No. of Beneficiaries	Yield (q/ha)
1	Zero tillage of wheat	3500	270	275	42.94
2	Raised bed planting wheat	3500	20	27	43.78
3	Zero tillage lentil	3500	40	62	13.00
4	ZT/RB/Line sowing chickpea	3500	40	66	14.10
5	Maize+Potato Intercropping	3500	10	44	124.49

					158.00
6	RB Maize	3500	128	129	123.23
7	ZT/RB/Line sowing Mustard	3000	25	41	13.85
8	Green Seeker/INM/Nutrient Expert (Wheat)	3000	50	66	44.24
9	RB Potato	30000	10	60	267.70
10	Happy Seeder Wheat/Climate	3500	20	28	45.46
11	Wheat + Mustard Intercropping	3500	10	21	39.40
					6.68
	Total		**623**	**819**	

6. Extension Activity

Nature of Extension Activity	**No. of Activities**	**Farmer's attend**	**Extension Officials attend**	**Total**
Field Day	12	360	05	365
Lectures delivered as resource persons	22	1378	25	1385
Advisory Services	125	3750	0	3750
Scientific visit to farmers field	10	266	06	272
Farmers visit to KVK	1545	1545	0	1545
Diagnostic visits	05	78	0	78
Exposure visits	05	287	5	292
Ex-trainees Sammelan	01	231	06	237
Soil health Camp	01	123	03	126
Animal Health Camp	01	0	0	184
Total	**1727**	**8018**	**50**	**8234**

7. Special Programmes

Celebration of Important Days	**No. of activities**	**Farmers**			**Extension Officials**			**Total**		
		M	**F**	**Total**	**M**	**F**	**Total**	**M**	**F**	**Total**
Republic day (26th Jan.)	1	22	9	31	0	0	0	22	9	31
International Women's Day (8th Mar.)	1	7	53	60	0	5	5	7	58	65
World Water Day (22nd Mar.)	1	93	9	102	3	1	4	96	10	106
World Health Day (07th Apr.)	1	35	4	39	0	0	0	35	4	39
World Bee Day (20th May)	1	16	2	18	6	2	0	22	4	26
World Milk Day (01st Jun.)	1	16	2	18	6	2	0	22	4	26
World Environment Day (5th Jun.)	1	16	2	18	6	2	0	22	4	26

8. Major Achievements of KVK Farm

Type of seed produced	Variety	Quantity of seed (q)	Value (Rs)
Cereals			
Paddy	Bhagalpur Katarni	10.20	76500
Paddy	Sabour Harshit	51.60	206400
Wheat	HD – 2967	24.20 (CS)	108900
Oil seed			
Mustard	RH – 725	7.50	90000
Pulses			
Chickpea	Sabour – 1	1.20	12600
Lentil	IPL – 316	1.12	12320
Vegetables			
Potato	Kufri Ashoka	26.00	83200
Potato	Kufri Lalit	33.00	105600
Potato	Kufri Lovkar	59.50	190400
Potato	UC Map	11.00	35200

Production of planting materials by the KVKs

Crop	Variety	No. of planting materials	Value (Rs)
Vegetable seedlings			
Tomato	Arka Rakshak	2500	2500
Fruits seedlings			
Mango	Zadalo, Malda, Bobay, Amarpali, Gulabkhas etc.	15000	1200000
Guava	Allahabad Safeda, L-49	10000	400000
Lime	Purbi Kagzi	5000	200000
Papaya	Ranchi Local	500	7500
Ornamental plants			
Nerium, Exora, Taggar, Guldavdi, China Rose	Nerium, Exora, Taggar, Guldavdi, China Rose	500	12500

9. RAWE Programm

Type of attachment	No of student trained	No of days stayed
RAWE	41	90 days

Proposed Action Plan
(June 2024 to September 2024)

1. Training programme to be organized (September, 2023 to December, 2023)

a. Practicing Farmer & Farm Women

Sl. No.	Discipline	No. of Courses	Duration days	Participants						Grand Total		
				Others		SC		ST				
				M	F	M	F	M	F	M	F	Total
1.	Agricultural Engineering	8	2	160	24	32	8	8	8	200	40	240
2.	Animal Science	8	2	160	24	32	8	8	8	200	40	240
3.	Agronomy	8	2	160	24	32	8	8	8	200	40	240
4.	Entomology	8	2	160	24	32	8	8	8	200	40	240
5.	Horticulture	8	2	160	24	32	8	8	8	200	40	240
Total		**40**	**10**	**800**	**120**	**160**	**40**	**40**	**40**	**1000**	**200**	**1200**

b. Rural Youth

Sl. No.	Discipline	No. of Courses	Duration (days)	Participants						Grand Total		
				Others		SC		ST				
				M	F	M	F	M	F	M	F	Total
1.	Agril. Eng.	6	4	120	18	24	6	6	6	150	30	90
2.	Animal Science	6	4	120	18	24	6	6	6	150	30	90
3.	Agronomy	6	4	120	18	24	6	6	6	150	30	90
4.	Entomology	6	4	120	18	24	6	6	6	150	30	90
5.	Horticulture	6	4	120	18	24	6	6	6	150	30	90
Total		**30**		**600**	**90**	**120**	**30**	**30**	**30**	**750**	**150**	**450**

c. Extension Functionaries

Sl. No.	Discipline	No. of Courses	Duration (Days)	Participants						Grand Total		
				Others		SC		ST				
				M	F	M	F	M	F	M	F	Total
1.	Agril. Eng.	3	4	60	9	12	3	3	3	75	15	90
2.	Animal Science	3	4	60	9	12	3	3	3	75	15	90
3.	Agronomy	3	4	60	9	12	3	3	3	75	15	90
4.	Entomology	3	4	60	9	12	3	3	3	75	15	90
5.	Horticulture	3	**4**	60	9	12	3	3	3	75	15	90
Total		**15**		**300**	**45**	**60**	**15**	**15**	**15**	**375**	**75**	**450**

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
	Total	**12**	**01**	**02**	**01**	**21**	**25**

Action Plan of ARYA Programme

A. Nursery raising

Name of the Course	Duration (Days)	Others		SC		ST		Total
		Male	Female	Male	Female	Male	Female	
Nursery Development of horticultural crops	07	15	10	03	01	01	0	30
Management of potted plants and nursery development	07	20	05	02	01	02	0	30
Nursery development of vegetables	07	20	05	02	01	02	0	30
Total	**21**	**55**	**20**	**07**	**03**	**05**	**0**	**90**

a. Establishment/develop 15 more units in distant villages

B. Poultry farming

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	**17**	**55**	**20**	**07**	**03**	**05**	**0**	**90**

C. Fish Farming

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	**17**	**55**	**20**	**07**	**03**	**05**	**0**	**90**

2. Frontline demonstration to be conducted*

Sl. No	Discipline	Crop/ Enterprise	Technology	Area in ha.	No. of Demonstration
1	Entomology	Brinjal	Emamectin Benzoate 5 SG for management of Fruit and Shoot borer @ 200 g /ha	4.0	20
2	Entomology	Mustard	Imidacloprid 17.8 SL for the management of aphid @300ml/ha	4.0	10

3	Agril. Engg.	Paddy	Weed Management	2.0	10
4	Agril. Engg.	Wheat	Resource Conservation Technology	2.0	10
5	Horticulture	Rajnigandh a cultivation	Pranjal variety of bausabour	0.40	10
6	Animal Science	Cattle	Immunization	500 (No.)	300
7	Animal Science	Buck	Breed improvement	06 (No.)	06
8	Agronomy	wheat	RCT	2.0	10
9	Agronomy	Maize	Integrated crop management	2.0	10

2. Extension and Training activities under FLD

Activity	Title of Activity	No.	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	5	ON/OFF	5	2	10	3	175	5	200	10	210
Field day	Field day-cum-crop cutting	5	OFF	5	2	10	3	175	5	200	10	210
	Total	**10**		**10**	**4**	**20**	**6**	**350**	**10**	**400**	**20**	**420**

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

3. On Farm Trials to be finalized by ICAR

Sl. No.	Discipline	Title
1	Animal Science	Assessment of performance of sorted and non-sorted semen straw after AI in Heifer under field conditions.
2	Animal Science	Assessment of different management practices in preventing bovine mastitis
3	Horticulture	Assessment of bio-control agent for management of panama wilt in banana.
4	Agril. Engg.	Assessment of Multi crop planter for sowing of pulses in different field condition.
5	Agril. Engg.	Assessment of Happy Seeder Machine for wheat sowing under crop residue management
6	Entomology	Analysis of chemical and bio-fungicide for management of false smut in paddy
7	Entomology	Management of fall army worm (*Spodoptera frugiperda*) in maize.
8	Agronomy	Assessment of effect of different crop establishment methods of DSR on yield and economic
9	Agronomy	Weed management in rabi maize

KRISHI VIGYAN KENDRA, BHOJPUR

Report of 26th Extension Education Council Meeting
(From October 2023 to May 2024)

1. Achievement of Training Programme: -

A. Training Programme for Practicing Farmers/Farm women: -

Sl. No.	Discipline	Duration (days)	Course No.	No. of Beneficiaries					
				Others		SC/ST		Total	
				M	F	M	F	M	F
(i)	Crop Production	1-2	16	571	77	54	54	625	131
(ii)	PBG	1-2	24	611	28	25	78	636	106
(iii)	Home Science	1-2	24	87	221	10	683	97	904
(iv)	Plant Protection	1-2	43	1144	46	183	141	1327	187
(v)	Extension Education	1-2	29	783	76	53	65	836	151
(vi)	Agronomy	1-2	3	61	0	0	82	61	82
		Total	**139**	**3257**	**448**	**325**	**1103**	**3582**	**1561**

B. Training Programme for Rural Youth: -

Sl. No.	Discipline	Duration (days)	Course No.	No. of Beneficiaries					
				Others		SC/ST		Total	
				M	F	M	F	M	F
(i)	Crop Production	1-3	2	0	24	0	31	0	55
(ii)	PBG	1-3	1	25	0	0	0	25	0
(iii)	Home Science	1-3	3	6	44	2	33	8	77
(iv)	Plant Protection	1-3	3	54	12	17	2	71	14
(v)	Extension Education	1-3	1	25	0	0	0	25	0
(vi)	Agronomy	1-3	0	0	0	0	0	0	0
		Total	**10**	**110**	**80**	**19**	**66**	**129**	**146**

C. Training Programme for Extension Functionaries: -

Sl. No.	Discipline	Duration (days)	Course No.	No. of Beneficiaries					
				Others		SC/ST		Total	
				M	F	M	F	M	F
(i)	Crop Production	1	18	578	39	9	7	587	46
(ii)	PBG	1	0	0	0	0	0	0	0
(iii)	Home Science	1	0	0	0	0	0	0	0
(iv)	Plant Protection	1	0	0	0	0	0	0	0
(v)	Extension Education	1	0	0	0	0	0	0	0
(vi)	Agronomy	1	0	0	0	0	0	0	0
		Total	**18**	**578**	**39**	**9**	**7**	**587**	**46**

D. Vocational Training programme: - Yet to Start

E. Skill Development Training programme: - Yet to Start

2. Achievements on technologies assessed and refined

OFT -1 - **(Agronomy 2023-24)**

1.	Title of On Farm Trials	Assessment of Improvement of Nitrogen Use Efficiency in Wheat.
2.	Problem Diagnose	Wheat (102318 ha) sowing is comparatively late activity in Bhojpur leading to reduction in yield Even their is increase in fertilizer prices, excessive use of chemical fertilizer and Spiraling prices of urea leads to increase in cost of cultivation.
3.	Details of technologies selected for assessment/ refinement	**Technology option** Farmers practice – RDF (100:40:20) Technical option 1 = 50% RDN & 100% PK + Nano Urea @ 4ml /lt. water (Single spray at 35 DAS) Technical option 2 = 50% RDN & 100% PK + 2 sprays of Nano Urea at (35 DAS) & (60-65 DAS) @ 4 ml /lt water.
4.	Source of technology	BAU Bhagalpur
5	Replication	07
6.	Production system & Thematic Area	Irrigated Cropping system
7.	Performance of technology with performance indicator	Wheat cultivar "HD 2967 "showed minor decrease in yield i.e. 49.25 Q/ha compare to other technology under the trial.
8.	Constraints identified and feedback	The Combination having 50 % RDF was not appreciated by farmers
9.	Process of farmers participation and their reaction	Farmers participated actively and their reaction was not encouraging

Technology option	no of trials	No. of effective tillers	No. of grains/ panicle	Panicle length	Grain yield (Q/ha)	Cost of cultivation (Rs. /ha	Grass return	Net return	B:C Ratio
F.P.	07	187	38.26	31.25	38.65	36400.00	77300.00	40900.00	2.12
T.O. I	07	176	36.15	30.42	36.90	34200.00	73800.00	39600.00	2.15
T.O. II	07	181	38.23	30.56	37.85	35200.00	75700.00	40500.00	2.15

Result- The result (2023-24) indicated that among different production technology of Wheat, Farmers Practice gave highest yield 38.65 Q/ha
with B: C ratio of (2.12:1) followed by TO. II produced 37.85 Q/ha with B:C ratio (2.15:1) and TO. I gave yield 36.90 Q/ha with B:C ratio (2.12:1).
On the basis of above data, it can be concluded that even Two Spray of Nano Urea with 50% RDF in Wheat HD 2967 has not improved the yield.

OFT – 2 - (Agronomy 2023-24)

1.	Title of On Farm Trials	Assessment of Integration of fertilizer in different form on yield of lentil.
2.	Problem Diagnose	Lentil is major pulses crop during Rabi season having cultivable area more than 85000 ha. Use of improper nitrogen leads to crop lodging and yield loss ranging from 8 to 10%.

3.	Details of technologies selected for assessment/ refinement	**Technology option** Farmers practice - Seed Treatment + RDF(20:40:0::N:P:K Kg/ha) Technical option 1 - 50% of RDF +WS 18:18:18 @5 gm./liter water (Single spray at pre flowering stage) Technical option 2 - Seed treatment with PSB + Rhizobium, 50% of RDF + WS 18:18:18 @ 5 gm./ lit water (Single spray at pre flowering stage)
4.	Source of technology	BAU Sabour
5.	Replication	7
6.	Production system & Thematic Area	Cropping system
7.	Performance of technology with performance indicator	Lentil cultivar "IPL 220"showed higher yield 12.01 Q/ha with Seed treatment with PSB + Rhizobium, 50% of RDF + WS 18:18:18 @ 5 gm./ lit water compares to other treatment under the trial.
8.	Constraints identified and feedback	No any constraints identified
9.	Process of farmers participation and their reaction	Farmers participated actively and their reaction was positive.

Technology option	No of trials	Number of branches/ plant	Number of pod /plant	Grain yield (Q/ha)	Cost of cultivation (Rs. /ha)	Grass return (Rs. /ha)	Net return (Rs. /ha)	B:C Ratio
F.P.	07	5.3	48.1	8.15	28350.00	48900.00	20550.00	1.72
T.O. I	07	6.1	57.9	9.51	26040.00	57060.00	31020.00	2.19
T.O. II	07	6.4	65.2	10.55	26740.00	63300.00	36560.00	2.37

Result- The result (2023-24) indicated that among different production technology of Lentil, TO-II, has highest yield 10.55 Q/ha with B: C ratio of (2.37:1) followed by TO -I produced 9.51 Q/ha with B:C ratio (2.19:1) and farmers practice gave yield 8.15 Q/ha with lowest B:C ratio (1.72:1). On the basis of above it can be concluded that for best yield of Lentil Seed treatment with PSB + Rhizobium, 50% of RDF + WS 18:18:18 @5 gm./ lt water.

OFT – 3 – **(Ag. Extension 2023-24)**

1.	Title of On Farm Trials	Assessing the Extension Education Methods for Awareness and Use of Soil Health Card
2.	Problem Diagnose	Imbalance uses of Fertilizer due to lack of Knowledge
3.	Details of technologies selected for assessment/ refinement	**Technology option** Farmers practice – Without extension education method Technical option -1 Farmers having SHC with training literature Technical option - 2 – Farmers having SHC with Customized Social media Advisory Technical option - 3 – Farmers having SHC with Training Literature and Customized Social Media Advisory
4.	Source of technology	BAU Sabour
5.	Production system & Thematic Area	Soil Health & Fertilizer

6.	Performance of technology with performance indicator	Farmers having SHC with training literature and customized social media advisory is more effective than others.
7.	Final recommendation for micro level situation	On the basis of Interview it may be concluded that farmers having SHC Should be exposed to both training literature and customized social media to have better use of SHC
8.	Constraints identified and feedback	No any constraints identified
9.	Process of farmers participation and their reaction	Farmers participated actively and their reaction was positive.

Treatments	**No. of Respondents**	**Level of Knowledge**					
		L		**M**		**H**	
		R	**%**	**R**	**%**	**R**	**%**
FP : Without Extension Education methods	15	13	86.67	2	13.33	0	0
TO_1 : Farmers having SHC with training literature	15	4	26.67	9	60	2	13.33
TO_2 : Farmers having SHC with Customized Social Media Advisory	15	2	13.33	10	66.67	3	20
TO_3 : Farmers having SHC with training literature and customized social media advisory	15	2	13.33	3	20	10	66.67

Treatments	**No. of Respondents**	**Extant of Adoption**						**Awareness about SHL**			**Use of SHL**
		L		**M**		**H**		**Full Aware**	**Aware**	**Not Aware**	
		R	**%**	**R**	**%**	**R**	**%**	**%**	**%**	**%**	**%**
FP : Without Extension Education methods	15	13	86.67	2	13.33	0	0	12.25	20.25	67.50	15.5
TO_1 : Farmers having SHC with training literature	15	4	26.67	10	66.67	1	6.66	22.75	39.5	37.75	20.0
TO_2 : Farmers having SHC with Customized Social Media Advisory	15	3	20.00	9	60.00	3	20.00	35.25	42.25	22.5	23.0
TO_3 : Farmers having SHC with training literature and customized social media advisory	15	2	13.33	4	26.67	9	60.00	65.75	29.0	4.75	38.5

Result : The above table reveals that farmers having SHC with training literature and customized social media (TO3) maximum of the respondents (66.67%) and (60%) had high level of knowledge and high

extent of adoption with maximum them (66.75) having fully aware of SHC and 38.5 of them had the idea of use of SHC which was followed by farmer having SHC with customized social media (TO2) with most of them (66.67%) having medium level of knowledge and adoption while maximum of them (42.25%) were aware of SHC and 23 % had use it. Therefore, it could be concluded that farmers having SHC should be exposed to both training literature and customized social media to have better use of SHC

OFT -4 - **(Plant Protection 2023-24)**

1.	Title of On Farm Trials	Assessment of Chemical Fungicide for the management of False Smut Ustiloginodea vireos' (cooke) in Rice
2.	Problem Diagnose	Rice is Major cereal crop during Kharif season having cultivate area more than 100000 Ha. The incidence of False Smut was very causal but new a day it is found in epidemic form and at times loss is up to 20-25 % in terms of grain yield.
3.	Details of technologies selected for assessment/ refinement	**Technology option** Farmer's practice – Seed treatment with Carbendazim 50 WP T.O. $_1$. – Propiconazole 13.9 + Difenoconazole 13.9 @ 0.20 – 0.03 % ai/ha or 0.7-1.0 ml / lit (formulation 500 ml / ha.) T.O. $_2$. – Trifloxystrobin 25 % + Tebuconazole 50 % @ 100 + 50 gr. ai/ha. or 0.7 – 1.0 ml/lt (formulation 500 ml) T.O. $_3$ – Fluopyram 17.7 + Tebuconazole 17.7 sc @ 96.5g ai/ha. (formulation 550 gm/ha)
4.	Source of technology	BAU, Sabour, Bhagalpur
5	Production system & Thematic Area	Integrated Disease Management
6.	Performance of technology with performance indicator	Spray of Trifloxystrobin &Tebuconazole can control effectively False Smut of Paddy
7.	Final recommendation for micro level situation	Trifloxystrobin &Tebuconazole spray is better solution False Smut control in Paddy & boosted the yield
8.	Constraints identified and feedback	No any constraints identified
9.	Process of farmers participation and their reaction	Farmers participated actively and their reaction was positive

Thematic area	**Technology options with detailed treatments**	**Area (ha in crop & Fodder)/ Nos (in livestock)**		**Yield (q/ha)**	**Cost of cultivation (Rs./ha)**	**Gross return (Rs/ha)**	**Net return (Rs./ha)**	**BC ratio**
		Proposed	**Actual**					
INM	Farmers Practice (PF) – Seed treatment with Carbendazim 50 WP Technology option-I (TO-I) :Propiconazole 13.9 +	2.1	2.1	40.7	32620	88848.1	56228.1	2.723
				42.2	32460	92122.6	59662.6	2.8.8

	Difenoconazole 13.9 @ 0.20 – 0.03 % ai/ha or 0.7-1.0 ml / lit (formulation 500 ml / ha.) Technology Option-II(TO-II)– Trifloxystrobin 25 % + Tebuconazole 50 % @ 100 + 50 gr. ai/ha. or 0.7 – 1.0 ml/lt (formulation 500 ml) Technology Option-II(TO-II)–Fluopyram 17.7 + Tebuconazole 17.7 sc @ 96.5g ai/ha. (formulation 550 gm/ha)			44.5	32960	97143.5	641835.5	2.947
				43.8	34060	95615.4	61555.4	2.807

Result-On farm trails was conducted at farmers field in Bhojpur district. During the year 23-24 result indicates that among different productions technology option 2 Trifloxystrobin 25 % + Tebuconazole 50 % recorded maximum yield 44.5 Qt./ha which was 9.33% followed Technical Option 3 (Fluopyram 17.7 + Tebuconazole chemical yield 43.8 Qt./ha. BC Ration 2.94 (7.06) and increase in BC ratio 2.807 and lastly TO 1 having yield 42.2 Qt. (3.68% Higher with BC ratio 2.838.

The result indicates that technology option 2 that is spray of Trifloxystrobin &Tebuconazole boosted the yield of Rice Variety R. Sweta and reduced in the infestation of False Smut 1.33 % as compare to farmers practices followed by 1.42 % with Technical option 3 that spray Fluopyram + Tebuconazole.

OFT -5 - **(Home Science 2023-24)**

1.	Title of On farm Trial (OFT)	Assessment of preparation methods of Carrot Jam for more shelf-life enhancement of nutrition & income.
2.	Problem diagnosed	Volume of raw carrot is underutilized and depression in price is incurring loss to farmers.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmers Practice (PF) – Selling fresh Carrot such as vegetable. Technology option I (TO-I) : Preparation of Carrot Jam Formulation – Ingredients – Carrot 1 kg, Sugar-1 kg, Water-100 ml, Citric Acid- 6.0 gram Pectin Powder–10 gm. Sodium Benzoate– 1.0 gm Technology Option-II (TO-II) – Preparation of Carrot Jam with essence. Formulation – Ingredients – Carrot 1 kg, Sugar -1 kg, Water-100 ml, Citric Acid-6.0 gram Pectin Powder -10 gm, Sodium Benzoate – 1.0 gm, Lemon essence – 5 ml.
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	RAU, , Pusa
5.	Production system and thematic area	Value addition

6.	Performance of the Technology with performance indicators	1. TSS (%) 2. Acidity (%) Economic Indicator – Net return & BC ration 3. Sensory Analysis: i) Test ii)Colour iii) Flavour iv)Texture v)Overall Acceptability 4. Packaging Material : Glass Jar 500 gm 5. Shelf like (0, 15, 30, 45, 60 and 75 days at Ambient/Refrigerated condition.
7.	Final recommendation for micro level situation	This is first year data so no recommendation.
8.	Constraints identified and feedback for research	Availability of Pactine at local level is difficult.
9.	Process of farmers participation and their reaction	Active participation and satisfied with the result.

Thematic area	**Technology options with detailed treatments**	**Area (ha in crop & Fodder)/ Nos (in livestock)**		**Yield (q/ha)**	**Cost of cultivation (Rs./ha)**	**Gross return (Rs/ha)**	**Net return (Rs./ha)**	**BC ratio**
		Proposed	**Actual**					
Value addition	Farmers Practice (PF) – Selling fresh Carrot such as vegetable.	14	14	154	100	154	54	1.54
	Technology option-I (TO-I) : Preparation of Carrot Jam Formulation – Ingredients – Carrot 1 kg, Sugar-1 kg, Water-100 ml, Citric Acid-6.0 Gram Pectin Powder–10 gm. Sodium Benzoate– 1.0 gm			240	145	240	85	1.65
	Technology Option-II(TO-II)– Preparation of Carrot Jam with essence. Formulation – Ingredients – Carrot 1 kg, Sugar -1 kg, Water-100 ml, Citric Acid-6.0 gram Pectin Powder -10 gm, Sodium Benzoate – 1.0 gm, Lemon essence – 5 ml.			389	155	389	234	2.50

Recommendation - Above result (Table-I) was analyzed with the help of 9point hedonic scale based on score card method. In case of overall acceptability of treatment II was 70% followed by treatment 1 (60%) and farmers practice (50%). In case of keeping quality overall acceptability of carrot jam was excellent up to followed by Technology Option-I and farmer's practice.

Therefore, we can say on the basis of all above parameter technology option II may be popularized among beneficiaries.

3 . Details of FLDs conducted during the year 2023-24 / KVK, Bhojpur

Sl. No.	Crop	Season	Farming situation (RF/Irrigated)	Thematic area	Technology Demonstrated with detailed treatments	Soil type	Status of soil (Kg/ha)				Previous crop
							N	P_2O_5	K_2O	OC	
1.	Wheat	Rabi	Irrigated	Crop Production	Biofortified Wheat BHU-31	Sandy Loam	276.9	21.85	296.2	0.50	Rice
2.	Mustard	Rabi	Irrigated	Crop Production	Improved variety RH – 0725	Clay Loam	245.1	22.35	310.2	0.49	Rice
3.	Chickpea	Rabi	Rainfed	Crop Production	Improved variety RVG 202	Clay Loam	236.3	26.10	286.3	0.48	Rice
4.	Proso Millate	Summer	Irrigated	Crop Production	20 % Boron foliar spray	Clay Loam	267.8	25.90	297.5	0.51	Potato

Crop	Thematic Area	Name of the technology demonstrated	No of farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Wheat	NRM	Biofortified Wheat BHU-31	44	8.0	38.21	34.42	11.01	41600	86927	45327	2.09	39950	78305	37400	1.93
Mustard	NRM	Improved variety RH 0725	60	10.0	15.87	12.65	25.45	37560	89665	52105	2.39	35110	73167	38057	2.08
Chickpea	NRM	Improved variety RVG 202	60	4.0	16.42	12.23	34.26	39250	89324	50074	2.27	34900	66531	31631	1.91
Proso Millate	NRM	BR-07	68	10.0	8.36	6.45	29.61	17850	41800	23950	2.23	15260	32250	16990	2.11

Technology Assessed by KVK (Discipline Wise) Under CRA Programme

Sl. No.	Discipline	Thematic Area	No. of the Technologies (Technology Intervention)	No. of trials	No. of Locations
	Rabi 2023-24				
1		Water management	Zero Tillage of wheat	290	5
2		Water management	Zero Tillage line sowing Chickpea	56	5
3		Water management	Raised Bed/Line Sowing/Zero Tillage Mustard	100	5
4		Soil fertility Management	Green seeker/Nutrient expert	50	5
5		Crop Residue Management	Happy Seeder of wheat	50	2
6		Water management	Raised Bed Planting Potato	45	5
7		Cropping System	Vegetable Pea/Coriander	8	5
8		Water management	Raised Bed Planting Potato + Maize	5	1
9		Water management	Zero Tillage Wheat + Mustard	45	5
				619	
	Summer 2024				
1		Water management	Zero Tillage of Summer Green Gram	160	5
2		Water management	Raised bed Maize	100	5
	Kharif 2023			260	
1	Crop production	Resource conservation Technology	DSR -ZT Drill Rice Drum seeded Rice and MTPR	339	5
2		Water management	Raised bed Pearl Millet	50	5
4		Water management	Alternate wetting/drying irrigation in Rice	66	5
5		Water management	Water harvesting and field bunding in Rice	52	5
6		Water management	Raised bed Maize	60	5
7		Soil fertility Management	Nutrient expert/green seeker based nutrient management /INM	48	5
8		Water Management	Raised bed Vegetable	30	1
				645	

3. Performance of Instruction Farm: Raw Seed

Sl. No.	Crop	Season	Variety	Yield (Qt./ha)
1	Wheat	Rabi	DBW 187 (F/S)	30.50
2	Wheat	Rabi	DBW 187 (C/S)	12.15
3	Wheat	Rabi	HD 2967 (F/S)	9.00
4	Wheat	Rabi	HD 2967 (C/S)	9.90
5	Wheat	Rabi	Sabour Shrestha (F/S)	15.30
6	Wheat	Rabi	PBW 373 (T/L)	0.90
6	Lentil	Rabi	IPL 220 (F/S)	9.04
7	Chickpea	Rabi	Sabour Chana 1 (F/S)	1.00
8	Chickpea	Rabi	Sabour Chana 2 (F/S)	0.80
9	Mustard	Rabi	RH -0725 (F/S)	10.80
10	Mustard	Rabi	RH -0725 (C/S)	38.80
11	Potato	Rabi	UC MAP (TL)	32.00

	Potato	Rabi	Potato -7015	13.00
	Potato	Rabi	Potato Big -72	13.45
	Potato	Rabi	K Lalit (F/S)	6.70
	Potato	Rabi	K Kanchan (F/S)	12.40

4. List of special programmes undertaken by the KVK, which have been financed by ATMA/ Central Govt/ Other Agencies

Name of the programme/scheme	Purpose of programme	Date/ Month of initiation	Funding agency
Rabi Mahabhiyan Koelwar	Training cum awareness programme	17.10.2023	ATMA, Bhojpur
Rabi Mahabhiyan Sandesh	Training cum awareness programme	19.10.2023	ATMA, Bhojpur
Rabi Mahabhiyan Barhara	Training cum awareness programme	20.10.2023	ATMA, Bhojpur
Rabi Mahabhiyan Shahpur	Training cum awareness programme	25.10.2023	ATMA, Bhojpur
Rabi Mahabhiyan Bihiya	Training cum awareness programme	26.10.2023	ATMA, Bhojpur
Rabi Mahabhiyan Jagdishpur	Training cum awareness programme	27.10.2023	ATMA, Bhojpur
Rabi Mahabhiyan Tarari	Training cum awareness programme	28.10.2023	ATMA, Bhojpur
Rabi Mahabhiyan Piro	Training cum awareness programme	29.10.2023	ATMA, Bhojpur
Rabi Mahabhiyan Charpokhari	Training cum awareness programme	30.10.2023	ATMA, Bhojpur
Rabi Mahabhiyan Garahani	Training cum awareness programme	31.10.2023	ATMA, Bhojpur
Rabi Mahabhiyan Agiyawn	Training cum awareness programme	01.11.2023	ATMA, Bhojpur
Rabi Mahabhiyan Sahar	Training cum awareness programme	02.11.2023	ATMA, Bhojpur
Rabi Mahabhiyan Udwantnagar	Training cum awareness programme	03.11.2023	ATMA, Bhojpur
Rabi Mahabhiyan Ara Sadar	Training cum awareness programme	04.11.2023	ATMA, Bhojpur

5. Other Extension Activities:

Activities & Sub – activities	No.	No. of Beneficiaries
Kisan Goshthi/Kisan Mela	49	15939
Field Day	6	356
Advisory Services		2394
Live telecast programme (PM and other dignitaries)	5	
Radio talk	2	
TV talk	6	
Total	**68**	**18689**

Proposed Action Plan
(June 2024 to September 2024)

(a) Farmers and farmwomen

Sl. No.	Subject	No. of Training	Number of Participants						
			SC		Others		Total		
			M	F	M	F	M	F	T
1	Agronomy/PBG	12	60		240		300		300
2	Home Science	8		40		160		200	200
3	Plant Protection	17	85		340		425		425
4	Agriculture Extension	10	50		200		250		250
	Total	47	195	40	780	160	975	200	1175

(b) Rural youths

Sl. No.	Subject	No. of Training	Number of Participants						
			SC		Others		Total		
			M	F	M	F	M	F	T
1	Agronomy/PBG	1	5		20		25		25
2	Home Science	2		10		40		50	50
3	Plant Protection	1	5		20		25		25
4	Agriculture Extension	2	10		40		50		50
	Total	6	20	10	80	40	100	50	150

(c) Extension functionaries

Thrust area/ Thematic Area	Title of Training	No. of Training	Number of Participants						
			SC		Other		Total		
			M	F	M	F	M	F	T
Productivity enhancement in field crops	Constraints of Oilseed production	1	5	-	20	-	25	-	25
Integrated Pest Management	New vistas in Rice pest control	1	5	-	20	-	25	-	25
Group Dynamics and farmers organization	Group Dynamics and farmers organization	1	5	-	20	-	25	-	25
Protected cultivation Technique	Use and advantage of poly mulch with drip in Vegetable Cultivation	1	5	-	20	-	25	-	25
	Introduction of short duration rice variety for early potato	1	5	-	20	-	25	-	25
	Total	**5**	**25**	**-**	**100**	**-**	**125**	**-**	**125**
Grand Total A+B+C		**58**	**240**	**50**	**960**	**200**	**1200**	**250**	**1450**

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

Name of the Crop / Enterprise	Variety / Type	Period	Area (ha.)	Type of Produce	Expected Production (quintals)
Paddy	R Kasturi	June-Oct	0.4	F/S	12.00
	R Kasturi	June-Oct	0.4	C/S	10.00
	R. Sweta	June-Nov	0.8	F/S	28.00
	R. Sweta	June-Nov	5.47	C/S	195.00
Total			**7.07**		**245.00**

2. Soil Testing

Sl. No.	Activities/ Sub-activities	No. of Soil samples	Participants
1	CRA	500	500
2	SCSP Programme	200	200

3. Front line Demonstration

Season	Crop	Component / Variety	No./ Area (ha)	No. of Demonstration
Kharif	Biofortified Paddy	DRR DHAN - 69	80.00	200

4. Others Extension Activity

Sl. No.	Activities/ Sub-activities	No. of activities proposed	Participants
1	Field Day	5	110
2	Kishan Mela	1	330
3	Kishan Gosthi	5	340
4	Exhibition	1	
5	Film Show	50	
6	Method Demonstrations	5	120
7	Farmers Seminar	1	55
8	Workshop	2	120
9	Group meetings	1	60
10	Lectures delivered as resource persons	10	260
11	Advisory Services	1	490
12	Important Day celebration	4	110
13	SAC Meeting	1	
14	News Papper coverage	10	
15	DD/ AIR talk	8	
	Total	105	1995

KRISHI VIGYAN KENDRA, MANPUR (GAYA)

Report of 26th Extension Education Council Meeting
(From October 2023 to May 2024)

1. Achievement of Training Programme:

A. Training Programme for Practicing Farmers/Farm women: -

S. N.	Discipline	Duration (days)	Course No.	No. of Beneficiaries						
				Others		SC/ST		Total		
				M	F	M	F	M	F	T
(i)	Crop Production	01	1	18	0	7	1	25	1	26
(ii)	Extension Education	01	33	316	238	216	153	532	391	923
(iii)	Animal Science	01	16	77	7	102	232	179	239	418
(iv)	Horticulture	01	1	0	25	0	0	0	25	25
(v)	Soil science	01	1	0	0	4	16	4	16	20
(vi)	Home science	01	1	0	25	0	0	0	25	25
		Total	**53**	**411**	**295**	**295**	**706**	**740**	**697**	**1437**

B. Vocational training for Rural Youth:

S. N.	Discipline	Duration (days)	Course No.	No. of Beneficiaries						
				Others		SC/ST		Total		
				M	F	M	F	M	F	T
(i)	Extension Education	04	1	13	4	5	2	18	6	24
(ii)	Animal Science	04	6	58	0	99	14	157	14	171
(iii)	Horticulture	04	3	3	47	2	38	5	85	90
(iv)	Soil science	04	1	15	6	1	3	16	9	25
		Total	**11**	**89**	**57**	**107**	**57**	**196**	**114**	**310**

C. Training Programme for Extension Functionaries:

S. N.	Discipline	Duration (days)	Course No.	No. of Beneficiaries						
				Others		SC/ST		Total		
				M	F	M	F	M	F	T
(i)	Animal Science	01	2	23	6	18	6	41	12	53
(ii)	Horticulture	01	3	36	11	26	5	62	16	78
(iii)	Soil science	01	2	28	6	20	6	48	12	60
		Total	**7**	**87**	**23**	**64**	**17**	**151**	**40**	**191**

D. RPL Trainings:

S. N.	Course	Start Date	End Date	No. of Beneficiaries						
				Others		SC/ST		Total		
				M	F	M	F	M	F	T
(i)	Agriculture Extension Service Provider (RPL)	28-02-24	09-03-24	14	3	10	3	24	6	30
(ii)	Agriculture Extension Service Provider (RPL)	25-03-24	09-04-24	11	4	8	1	19	5	24

2. ACHIEVEMENTS OF FRONTLINE DEMONSTRATIONS (FLD) – (October 2023 to May 2024):

Frontline demonstration on Oilseed/Pulses crops

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs. /ha)				*Economics of check (Rs. /ha)			
					Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Sesamum (Til)	ICM	Seed (GT – 6)	26	10	Crop standing										
Pigeon pea	ICM	Seed (IPA – 203)	13	5.0	12.7	11.1	14.4	23335	88700	65565	3.8	21560	77700	56140	3.6

Frontline demonstration on other crops

Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	*Economics of demonstration (Rs. /ha)				*Economics of check (Rs./ha)			
					Demonstration	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Cereals															
Paddy	ICM	Seed (Swarna Purvi)	5	2.0	36.0	32.0	12.50	37120	75175	38055	2.03	36000	61800	25800	1.72
Paddy	ICM	Seed (Swarna Unnat)	5	2.0	32.0	29.0	10.34	36800	74250	37450	2.02	37000	62800	25800	1.70
Wheat	Bio-fortified	Seed (BHU-31)	15	6.0	29.4	22.2	33.0	26240	70528	44288	2.70	24512	53280	28768	2.2
Ragi	ICM	RAU – 8	45	6.0	12.2	9.4	29.79	18890	41199	22309	2.18	20360	31744	11384	1.56
Bajra	ICM	HHB - 67	5	2.0	30.78	28.65	7.43	25150	76950	51800	3.06	27450	71625	44175	2.61
Horticultural crops															
Muskmelon	Fruit Production	Seed (Pusa Madhuras)	56	1.0	Crop standing										
Other enterprises															
Mushroom	Mushroom production	Button mushroom	56	250	2.0	1.5	33.33	111	295	184	2.7	82	108	25	1.3

Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
					Demonstration	Demonstration		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Dairy	Dairy management	Chelated mineral mixture	15	80	7.90	7.20	9.90	-	-	7430	18977	11547	2.55	7170	17263	10093	2.41
Poultry	Backyard poultry	Sonali	50	500	708 g	645 g	9.8	-	-	776	1062	286	1.37	828	968	140	1.17

3. Cluster Front Line Demonstration (CFLD):

Sl. No.	Crop demonstrated	Name of Variety + Technology demonstrated	Number of farmers	Area (in ha)	Yield obtained (q/ha)		% increase	Farmer's Existing plot				Demonstration plot			
					Demo	Check		Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C ratio	Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C ratio
1.	Mustard	HYV Seed (Var.-Pant Sweta) @ 5 kg/ha + PSB + Azotobacter	58	20	14.88	8.49	76.0	24884	47986	23103	1.93	31281	84058	52778	2.69
2.	Lentil	Seed (Var.-IPL – 316) + Rhizobium culture @ 1.25 l/ha + PSB @ 1.25 l/ha	50	20	11.7	9.8	19.4	21910	62965	41055	2.87	23240	74890	51650	3.22

4. ACHIEVEMENTS OF ON FARM TRAIAL (OFT)

Details of On Farm Trial (OFT):

OFT	Title of On farm Trial	Technology Option	Result/Status
1	Improvement of Nitrogen use efficiency in rice.	Farmer Practice - RDF (100:40:20) Kg/ha TO_1 – 50% of RDN & 100% PK + nano urea @4ml/lit. water (Single spray at pre flowering stage). TO_2 – 50% of RDN & 100% PK + 2 sprays of Nano Urea at (25 to 30 days) and (60-65 days) @ 4 ml/lit water.	Conducted OFT at 7 locations on nitrogen use efficiency in rice results of the trial indicates that (TO_2) 50% RDN and 100% PK + 2 spray of Nano urea at (25-30 days) and (60-65 days) @ 4ml/lit. water higher yield 41.90 q/ha followed by FP RDF (100:40:20 kg/ha) which yield 39.40 q/ha and TO_1 50% of RDN and 100% PK + Nano-Urea @ 4 ml/lit. water. Single spray at pre-flowering stage.
2	Assessing the Extension Education methods for awareness and use of soil health card	Farmers Practice: Without Extension Education methods TO_1: Farmers having SHC with Training Literature TO_2: Farmers having SHC with Customized social media advisory TO_3: Farmers having SHC with Training Literature and Customized social media advisory	Soil health card is an important tool to manage soil fertility status in order to fetch optimum yield of crops. Farmers are applying imbalanced dose of fertilizers especially nitrogenous fertilizer in access resulting in making soil infertile. KVK, Manpur, Gaya has conducted On Farm Trial to assess the different Extension Education methods for awareness and use of Soil Health Card. In this regard, Farmers having SHC with training literature and customized social media were assessed. Result of assessment shows that the level of knowledge and extent of adoption increased from low to high by 75% and 70% respectively as compared to farmers practice (Without Extension education methods). Awareness about SHC also increased from not aware to fully aware significantly (64.25%). Similarly, use of SHC increased from 16.5% to 37% as compared to farmer's practice.
3	Effect of feeding and local application of herbal medicine on clinical and subclinical mastitis	All animals are dewormed before starting trial. Farmer Practice (FP) -Hot fomentation TO_1: Herbal gel (lacto mastigel) application 5 times for 5 days TO_2: Herbal gel application 5 times for 5 days and + Oral herbal (lacto mastfree) 80 ml orally 3 days (Herbal gel –Aloe vera Paste 250g +Lemon Juice (6	Result shows that use of Herbal gel (lacto mastigel) application + Oral herbal (lacto mastfree) is more beneficial in treatment of subclinical mastitis.

		no.) +Neem Leaf 50g+Garlic paste 50g +Turmeric powder 50g Oral herbal -Aloe vera Pulp 250g +Lemon Juice 2no +Moringa Leaves 50g +Satavari 50g + Jivanti 20g)	
4	Study on production and comparative nutritive value evaluation of hydroponic wheat and maize fodder	Farmer's Practice: No idea of producing hydroponic fodder TO_1: Capacity building on hydroponic maize fodder production TO_2: Capacity building on hydroponic wheat fodder production	Use of hydroponic wheat fodder is more beneficial in terms of milk yield and net return than hydroponic maize fodder.
5	Integration of fertilizer in different form on yield of lentil	Farmer's Practice: Seed treatment + RDF (20:40:0 NPK kg/ha) TO_1: 50% of RDF + WSF (18:18:18 @5g/l water) at pre-flowering stage TO_2: Seed treatment with PSB + Rhizobium, 50% of RDF + WSF (18:18:18 @5g/l water) at pre-flowering stage	Maximum grain yield (11.53 q/ha), gross return (Rs. 69180/ha), Net return (Rs. 44310/ha) and B:C ratio (2.78) was recorded with TO_2 Seed treatment with PSB + Rhizobium, 50% of RDF + WSF (18:18:18 @5g/l water) at pre-flowering stage.
6	Improvement of Nitrogen use efficiency in wheat	Farmer's Practice: RDF (100:40:20) Kg/ha TO_1: 50% of RDN & 100% PK + nano urea @4ml/lt. water (Single spray at 35 DAS) TO_2: 50% of RDN & 100% PK + 2 sprays of Nano Urea at (35 DAS) and (60-65DAS) @ 4 ml/lt water	Maximum grain yield (44.4 q/ha), gross return (Rs. 84575.00/ha), Net return (Rs. 50475.00/ha) and B:C ratio (2.48) obtained from TO_2 (50% of RDN & 100% PK + 2 sprays of Nano Urea at (35 DAS) and (60-65DAS) @ 4 ml/lt water).

5. SCHEDULED CASTE SUB – PLAN (SCSP)

Sl.	Activities	No. of Programmes	No. of beneficiaries
1)	Trainings	9	263
2)	FLD	12	299
3)	Mobile agro- advisory to farmers	48 Nos.	19680

Demonstrations:

Crop	Name of the technology demonstrated	Area (ha)	No. of Farmers		
			M	F	T
General Head					
Paddy	R. Sweta	10	8	17	25
	Sabour Sampann	25	32	28	60
Pigeon pea	IPA – 203	10	18	22	40
Vegetables	Seedlings	4895 Nos.	6	36	42
Lentil	IPL – 316	10	18	32	40
Chickpea	Sabour Chana – 1	10	33	33	66
Wheat	HD - 2967	5	22	3	25
Poultry	Vanraja	500 chicks	0	50	50
Capital Head					
Goat	Black Bengal	7 Nos.	0	7	7
Manual Paddy thresher	-	9 Nos.	38	7	45
Power sprayer	-	2 Nos.	1	9	10

6. NARI Programme:

a) Nutri garden established:

Village	Block	No. of Poshan Vatika	No. of Beneficiaries	
			Target	Achievement
Sondhi, Lakhanpur, Sadipur, Bhare	Manpur	93	100	111
Naili, Takeya, Bithosharif, Bilo, Rahimbigha, Kandi	Nagar	18		

7. Eradication of Malnutrition:

Selected Village	Block	No. of Beneficiaries		No. of Awareness Programme	No of Participants
		Poshan Vatika	Hb & BMI test		
Sondhi	Manpur	41	62	5	121

8. Natural Farming:

Season	Crop	Variety	Area (Acre)	Yield (q/ha)	
				Demo	Local Check
Kharif	Paddy	R. Sweta	0.5	42.9	34.6
Rabi	Wheat	DBW – 187	0.5	14.40	34.8

Awareness Programme:

S.N.	No. of Programes	No. of Participants
1.	6	309

9. Millet Promotion Activities:

Demonstration in Village:

S.N.	Crop	Variety	Area (Acre)	Yield (qtl/ha)
01	Ragi	RAU-08	15.0	12.2
02	Bajra	HHB – 67	5.0	5.0

Capacity Building/Awareness Programme:

S.N.	No. of Programmes	No. of Participants
1.	13	**1082**

10. CLIMATE RESILENT AGRICULTURE PROGRAMME (CRAP)

Results (Rabi-2023-24)

S.N.	Name of technology	Variety	Area (In Acre)	Number of farmers	Grain yield (q/ha)		Cost of cultivation (INR/ha)		Gross Return (INR/ha)		Net Return (INR/ha)		B:C Ratio	
					Demo	Local check	Demo	Local check	Demo	Local check	Demo	Local check	Demo	Local check
1	Zero Tillage Wheat	HD-2967	400	401	46.28	40.25	33300	35000	105287	91569	71987	56569	3.16	2.69
2	NE/Green Seeker based Nutrient Management	HD-2967	100	101	44.21	41.13	33300	35000	100578	93571	67278	58572	3.02	2.67
3	Happy Seeder Wheat	DBW - 187	15	15	45.74	41.29	33300	35000	104059	93935	70759	58935	3.12	2.68
4	Zero Tillage Lentil	IPL 220	25	29	11.2	9.15	18300	20400	71960	58789	58020	38389	3.93	2.88
5	Zero Tillage Mustard	DRMR – 150-35	30	31	11.28	10.19	20400	21400	63732	57574	43332	36174	3.12	2.69
6	Zero Tillage Chick pea	GNG - 2299	40	44	14.11	10.27	20600	22300	76758	55869	56158	33569	3.73	2.54
7	Raised bed Maize + Potato	DMRH – 1308 + Kufri Sinduri	10	20	48.17	41.17	25600	28000	109587	93672	83987	65462	4.28	3.32
8	Raised bed Potato Planter	Kufri Sinduri	3	15	316	252	122500	130400	632000	504000	509500	373600	5.16	3.87
		Total	**623**	**656**										

Summer 2024

S.N.	Name of technology	Variety	Area (Acre)	Number of farmers	Results
1	Zero Tillage Green gram	Virat, IPM 2-13, IPM 2-14, Sikha, Samrat	250	251	Crop standing

MUSHROOM DISTRIBUTION

Crop	Name of the technology demonstrated	No. of Kit	No. of Farmers		
			M	F	T
Mushroom	Milky Mushroom	1539	44	52	96

11. Seed material produced at KVK farm: (October 2023 to May 2024)

Type of seed produced	Variety	Area (ha)	Quantity of seed (q)	Value (Rs)
Cereals				
Wheat	DBW-187 (F/S)		48.20	231360
Wheat	HD- 2967 (C/S)		4.91	22095
Pulses				
Gram	Sabour Chana – 1		6.47	74405
Grand Total			**59.58**	**327860**

Production of planting materials and other produce by the KVKs

Crop	No. of planting materials	Value (Rs)
Vegetable seedlings (Tomato, Brinjal, Chili, Broccoli & Cucurbits)	6333	4583

Performance of demonstration units (other than instructional farm):

Sl. No.	Name of demo Unit	Year of estd.	Area (Sq. mt.)	Details of production		
				Variety/Breed	Produce	Qty.
1	Goatry	2015	39	Black Bengal	Goat	16 Nos.
2	Vermi-compost unit	2019	5.6		Compost	15 q.
3	Azolla unit	2019	9.3		Azola	-
4	Biochar unit	2021	125		Biochar	20 q
5	IFS	2023	40	Sahiwal cross	Milk	2105.75 lit
6	Poshan Vatika	2021		Seasonal vegetables	vegetables	30.0 kg

Extension Activities:

Nature of Extension Activity	No. of activities	Farmers				Extension Officials				Total			
		M	F	T	SC	Male	Female	Total	SC	Male	Female	Total	SC
Kisan Mela participated	3	139	61	200	186	0	0	0	0	139	61	200	186
Field Day	1	78	29	107	27	1	0	1	0	79	29	108	27
Workshop	2	528	129	657	112	16	7	23	4	544	136	680	116
Lectures delivered as resource persons	17	949	248	1197	344	19	3	22	4	968	251	1219	348
Advisory Services	1906	1528	352	1880	456	17	9	26	6	1545	361	1906	462
Scientific visit to farmers field	52	326	104	430	129	7	0	7	2	333	104	437	131
Farmers visit to KVK	719	534	185	719	242	18	6	24	7	552	191	743	249
Exposure visits	2	39	61	100	100	0	0	0	0	39	61	100	100
Animal Health Camp	1	52	2	54	10	0	0	0	0	52	2	54	10
Millet Recipe Contest	2												
World Soil Day	1	40	39	79	57	0	0	0	0	40	39	79	57
International Women's Day	1	0	61	61	34	0	0	0	0	0	61	61	34
Swacchata Hi Sewa	16	726	266	992	341	13	2	15	3	739	268	1007	344
Millet Recipe Contest	2	1	58	59	20	0	0	0	0	1	58	59	20
Live Telecast Programme	4	126	169	295	176	0	0	0	0	126	169	295	176

B. Other Extension activities

Nature of Extension Activity	No. of Activities
Newspaper coverage	32
Radio talks	5
Popular articles	1
Extension Literature	0
Other, if any (Monthly Magazine, Krishak Sandesh)	1
Research Paper	1

Proposed Action Plan
(June 2024 - September 2024)

Training Programme to be organized

a) Training Programme for Practicing Farmers/Farm women: -

S. N.	Discipline	Duration (days)	Course No.	No. of Beneficiaries						
				Others		SC/ST		Total		
				M	F	M	F	M	F	T
(i)	Extension Education	01	8	144	16	24	16	168	32	200
(ii)	Animal Science	01	8	144	16	24	16	168	32	200
(iii)	Horticulture	01	7	126	14	21	14	147	28	175
(iv)	Soil science	01	11	192	22	36	25	228	47	275
(v)	Home science	01	7	120	14	24	17	144	31	175
(vi)	Agricultural Engineering	01	2	32	4	8	6	40	10	50
Total			**43**	**758**	**86**	**137**	**94**	**895**	**180**	**1075**

b) Vocational training for Rural Youth:

S. N.	Discipline	Duration (days)	Course No.	No. of Beneficiaries						
				Others		SC/ST		Total		
				M	F	M	F	M	F	T
(i)	Extension Education	06	1	20	5	3	2	23	7	30
(ii)	Animal Science	05	1	20	5	3	2	23	7	30
(iii)	Horticulture	04	5	60	15	9	6	69	21	90
(iv)	Soil science	06	2	40	10	6	4	46	14	60
(v)	Home science	04	2	40	10	6	4	46	14	60
Total			**11**	**180**	**45**	**27**	**18**	**207**	**63**	**270**

c) Training Programme for Extension Functionaries:

S. N.	Discipline	Duration (days)	Course No.	No. of Beneficiaries						
				Others		SC/ST		Total		
				M	F	M	F	M	F	T
(i)	Extension Education	02	1	18	2	3	2	21	4	25
(ii)	Animal Science	02	0	0	0	0	0	0	0	0
(iii)	Horticulture	02	2	10	14	6	10	16	24	40
(iv)	Soil science	02	3	45	3	24	3	69	6	75
(v)	Home science	02	1	18	2	3	2	21	4	25
(vi)	Agricultural Engineering	02	1	18	2	3	2	21	4	25
Total			**8**	**109**	**23**	**39**	**19**	**148**	**42**	**190**

1. Action plan of FLD/CFLD for the year 2024-25 (June 2024 – Sept. 2024)

A. FLD Programme:

i) Other crops

Sl. No.	Crop	Thematic area	Technology Demonstrated with detailed treatments	Area (ha)	No. of farmers/ demonstration
Cereals					
1.	Millet	Value Addition	Demonstration of Millet based product	20 Nos.	20
2.	Ragi	ICM	Seed	5.0	25
Horticulture Crops					
1.	Cucurbits	IPM	Pheromone trap	10.0	25
2.	Cauliflower (cv. Sabour Agrim)	ICM	Seed	2.0	20
3.	Papaya (Red Lady)	ICM	Plant	1.0	10
Other enterprises					
1.	Milk Product	Value Addition	Demonstration of extension of shelf life of paneer using herbs and spice	20 Nos.	20

ii) Livestock

Sl. No.	Crop	Thematic area	Technology Demonstrated with detailed treatments	Qty. (kg)	No. of farmers/ demonstration
1.	Livestock	Feed Management	Chelated Mineral Mixture	80	20
2.	Livestock	Fodder Management	Hydroponic fodder (Wheat)	200	10

B. CFLD Programme: Oilseeds

Sl. No.	Crop	Thematic area	Technology Demonstrated with detailed treatments	Area (ha)	No. of farmers/ demonstration
1.	Groundnut	ICM	Seed & Biofertilizer	20.0	50

2. ON FARM TRIAL 2024-25 (June 2024 – Sep. 2024)

S.N.	Title of On farm Trial	Technology Option
1.	Analysis of effectiveness of different Extension Education methods used for dissemination of commercial vegetable production technologies.	Farmers Practice: Vegetable growers without exposure to any Extension Education methods. TO_1: Vegetable growers where Individual contact methods employed (Farm & Home visit). TO_2: Vegetable growers where Group contact methods employed (Demonstration, Lecture, Participatory discussion/training). TO_3: Vegetable growers where Mass contact methods employed (Leaflet, mobile advisory, A/V film).
2.	Assessment of Glactagouge supplementation on milk production in cow reared under semi-intensive system.	Farmer Practice (FP) – No use of Glactagouge TO_1: Mineral mixture 50 gm/day TO_2: Mineral mixture 50 gm/day + Glactagouge (Satavari + Jivanti) 4 bolus daily for 10 days
3.	Bio-fertilizer application for improvement in fruit set and	Farmer Practice: No use of Bio- fertilizer TO_1: Vermicompost (50 kg/tree) + Azospirillum culture (250

	fruit Yield in mango.	g/ tree) + PSB (50 g/tree) TO_2: Vermicompost (50 kg/tree) + Azospirillum culture (250 g/ tree) + PSB (50 g/tree) + Vermiwash
4.	Response of bitter gourd to foliar spray of micronutrients (Hybrid)	Farmer's Practice: No use of micronutrients TO_1: Zn @ 100ppm thrice at 10 days interval after 30 days of planting TO_2: B @ 100ppm thrice at 10 days interval after 30 days of planting

4. SCHEDULED CASTE SUB – PLAN (SCSP)

S.N.	Crop	Variety	Area (ha)/No.	No. of farmers
1.	Paddy	R. Sweta	25.0	50
2.	Vegetables (Kharif) (Chilli, Bottle gourd, Brinjal, Bitter gourd)	Hybrid	5800	30

5. NARI PROGRAMME

Target (No. of Farmers)	Input Material
50	Veg. Seed Kits & Fruit plants

6. NATURAL FARMING

S.N.	Season	Crop	Variety	Area (Acre)
1.	Kharif	Paddy	R. Sweta	0.5

7. Mal Nutrition Eradication Programme

Name of Programme	No. of Programme	No. of Participants
Human Health Camp	1	60
Training and awareness programme	12	360
Demonstration of Nutri-garden	50	50

8. Saplings production:

S.N.	Crop	Nos.
1.	Fruit & Vegetables Saplings	5750

9. Soil samples to be analyzed: 400

10. Extension Activities 2024-25 (April 2024– September 2024)

Sl. No.	Activities/ Sub-activities	No. of activities proposed	Farmers				Extension Officials			Total		
			Male	Female	Total	SC/ ST (% of total)	Male	Female	Total	Male	Female	Total
1.	Field Day	3	75	25	100	13	1	3	4	76	28	104
2.	Kisan Ghosthi	10	200	50	250	15	5	3	8	205	53	258
3.	Exhibition organized	1	50	20	70	20	5	2	7	55	22	77
4.	Participation in exhibition	1	50	0	50	20	0	0	0	50	0	50
5.	Method Demonstrations	1	20	5	25	12	1	1	2	21	6	27
6.	Farmers Seminar	2	40	10	50	15	3	2	5	43	12	55
7.	Workshop	1	200	50	250	15	5	2	7	205	52	257
8.	Lectures delivered as resource persons	15	350	25	375	15	10	5	15	360	30	390
9.	Advisory Services	700	500	185	685	18	10	5	15	510	190	700
10.	Scientific visit to farmers field	50	350	150	500	20	7	2	9	357	152	509
11.	Farmers visit to KVK	800	500	275	775	15	20	5	25	520	280	800
12.	Diagnostic visits	2	15	5	20	10	2	0	2	17	5	22
13.	Exposure visits	1	45	5	50	17	0	0	0	45	5	50
14.	Soil health Camp	1	15	5	20	20	2	0	2	17	5	22
15.	Animal Health Camp	1	25	5	30	15	1	0	1	26	5	31
16.	Soil test campaigns	1	20	5	25	15	1	1	2	21	6	27
17.	Celebration of important days	5	125	25	150	20	5	3	8	130	28	158
	Total	**1595**	**2580**	**845**	**3425**		**78**	**34**	**112**	**2658**	**879**	**3537**

KRISHI VIGYAN KENDRA, AMAS (GAYA)

Report of 26th Extension Education Council Meeting (From October 2023 to May 2024)

1. Staff Position (Only Senior Scientist & Head and S.M.S)

S. N.	Name	Post	Specialization	Date of Joining	Mobile No.
1.	Dr. S. B. Singh	Chief Scientist & In-charge Head	Animal Science	17.03.1991	9431810044
2.	Sri Sunil Kr. Choudhary	S.M.S	Ag. Extension	21.11.2007	9471656718
3.	Dr. Pankaj Kumar Tiwari	S.M.S	Plant Pathology	18.12.2023	9792408000
4.	Sri Prabhat Kumar	S.M.S.	Agronomy	04.03.2024	9006655888

2. Achievement of Training Programme:

A. Training Programme for Practicing Farmers/Farm women:

S. No.	Discipline	Duration (days)	Course No.	No. of Beneficiaries					
				Others		SC/ST		Total	
				M	F	M	F	M	F
(i)	Ag. Extension	2	17	200	58	199	120	399	178
(ii)	Plant Breeding	2	22	220	64	84	100	304	164
(iii)	Plant Pathology	2	04	26	8	13	49	39	57
(iv)	Agronomy	2	01	03	0	4	18	7	18
	Total	**-**	***44***	***449***	***130***	***300***	***287***	***749***	***417***

B. Training Programme for Rural Youth: -

Sl. No.	Discipline	Duration (days)	Course No.	*No. of Beneficiaries*					
				Others		SC/ST		*Total*	
				M	F	M	F	M	F
(i)	Ag. Extension	5	6	100	10	40	18	140	28
(ii)	Plant Breeding	5	7	97	17	43	31	140	48
(iii)	Plant Pathology	3	1	18	4	3	3	21	7
	Total	**-**	***14***	***215***	***31***	***86***	***52***	***301***	***83***

C. Training Programme for Extension Functionaries: -

Sl. No.	Discipline	Duration (days)	Course No.	*No. of Beneficiaries*					
				Others		SC/ST		*Total*	
				M	F	M	F	M	F
(i)	Ag. Extension	2	2	15	2	16	10	31	12
(ii)	Plant Breeding	2	1	3	6	2	9	5	15
	Total		***3***	***18***	***8***	***18***	***19***	***36***	***27***

D. Vocational training for Rural Youth: -

Crop / Enterprise	Training title	Duration (days)	No. of Participants		
			Male	Female	Total
Goat farming	Entrepreneurship development in Goat farming	05	30	0	30
Mushroom Production	Mushroom Production Techniques	03	20	0	20
Goat farming	Entrepreneurship development in Goat farming	05	28	2	30
Dairy farming	Entrepreneurship development in Dairy farming	04	17	13	30
Mushroom Production	Mushroom Production Techniques	03	21	7	28
Dairy farming	Entrepreneurship development in Dairy farming	05	24	6	30
Seed Production	Seed Production techniques of Mustard	02	11	9	20

PF- Practicing Farmer /RY- Rural Youth/EF- Extension Functionaries

E. Special Programme: -

Name of Program	Date	No.	No. of Beneficiaries
Swachhata Awareness Programme	26 & 27.9.2023	02	41
Millets Awareness Programme	30.9.2023	01	210
World Soil Day	05.12.2023	01	211
Animal Health Camp	02 & 04.12.2023	02	200
Viksit Bharat Sankalp Yatra	04.12.2023 to 05.01.2024	32	13813
PM Kisan Live telecast programme	28.02.2024	01	52
Kisan Mela-cum-Exhibition	14-15.03.2024	01	1002

Front Line Demonstration:

Details of FLDs implemented during **April 2023 to August 2023** (Information is to be furnished in the following **three tables** for **each category** i.e. **cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops**.)

Sl. No.	Crop	Variety	Thematic area	Technology Demonstrated	Season and year	Area (ha) Actual	No. of farmers/ Demo.
1.	Wheat	HD 2967	Integrated Crop Management	Seed	Rabi 2023-24	5.0	12
2.	Mushroom	Button	Mushroom production	Spawn	Rabi 2023-24	100 bags	20
3.	Green gram	Sikha	Crop diversification	Seed	Summer 2024	15.4	37
4.	Summer vegetables	Hybrid	Nutritional garden	Seed	Summer 2024	0.5	64

@ Please mention component technology like seed/ fertilizer/ bio-fertilizer/plant protection or full package

Details of farming situation

Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	Area (ha)	Yield (q/ha)		% Change in
					Demonstration	Check	
Pigeon pea	ICM	Seed (vr)	30	5.0	18.6	11.8	57.6
Wheat	ICM	Seed	12	5.0	30.4	18.5	36.7
Mushroom	Mushroom production	Spawn	20	100 bag	2.5	1.6	56.2

*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Retuen	Net Return	BCR
25200	1,11,600	86400	4.4	18700	70800	52100	3.78
29200	57557	28357	1.97	25800	42087	16287	1.63
90	374	284	4.15	89	199	110	2.23

- Low – L & Medium – M

Economic Impact:

- Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

**BCR= GROSS RETURN/GROSS COST

SCSP Project:

Sl. No.	Crop	Variety	Thematic area	Technology Demonstrated	Season and year	Area (ha) Actual	No. of farmers/ Demo.
1.	Potato	K. Keshar	Crop Production	Tuber	Rabi 2023-24	3.0	60
2.	Garlic	-	Vegetable production	Pod	Rabi 2023-24	0.1	10
3.	Wheat	HD 2967	Crop Production	Seed	Rabi 2023-24	7.0	35
4.	Mushroom	Button	Mushroom production	Spawn	Rabi 2023-24	100 bags	20
5.	Onion	-	Vegetable production	Seedling	Summer 2024	0.4	30
6.	Summer Vegetables	Hybrid	Vegetable production	Seed	Summer 2024	1.0	125
7.	Green gram	Sikha	Crop diversification	Seed	Summer 2024	15.0	75
8.	Mineral mixture	-	Feed Supplements	Mineral mixture	Summer 2024	225 kg	75
9.	Knapsack Sprayer	-	Small tools	Knapsack Sprayer	-	50	50

3. CFLD (Oilseeds & Pulses):

Sl. No.	Crop	Season	Technology Demonstrated	Area (ha.)	No. of Demonstration
1.	Lentil	Rabi 2023-24	Seed (Vr- IPL 316)	20.0	50
2.	Mustard	Rabi 2023-24	Seed (Vr- RH 0749)	40.0	100

4. OFT-1:

Intervention	Plant-Breeding
Title of on farm Trial	Evaluation of fungicides for management of false smut disease in Paddy
Problem diagnosed	Poor quality grain produce due to false smut disease of Rice
Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmer Practices- No use of fungicides TO_1 – Two spray of copper oxychloride50%WP @ 2gm/lit. of water. TO_2– Two spray of Propiconazole 25 EC @ 1ml/lit of water
Source of Technology (ICAR/ AICRP/SAU/other, please specify)	DRR, Hyderabad
Replication	10
Production system and thematic area	Rice-Wheat, Disease Management
Performance of the Technology with performance indicators	Disease incidence % yield attributing character, Av. Yield & Economics
Final recommendation for micro level situation	
Constraints identified and feedback for research	
Process of farmers participation and their reaction	Field visit & Training

Table:

Technology option	No. of trials	Yield component			
		Disease incidence %	No.of effective tillers/ hill	No of grains/panicle	1000 grains wt.(gm)
Farmer practice	10	36.21	15.9	241.3	19.8
TO1		12.0	17.0	248.8	20.69
TO2		8.35	24.4	267.3	20.95

Av.Yield/ha. (qt.)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
32.62	27200	71209.4	44009.4	2.61
40.21	32250	87778.4	55528.4	2.72
44.38	33452	96881.5	63429.5	2.89

Result: On the basis of above experiment observation, the TO2 performed better as their disease incidence %, yield attributing character, Av. Yield and B:C ratio has found to be superior than other treatment option.

OFT-2:

Intervention	Plant-Breeding
Title on farm Trial	Assessing the Yield performance of Chickpea varieties
Problem diagnosed	Low yield of Chickpea (Desi variety) is realized in farmer's field
Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmer Practices- Desi channa TO_1 – PG-186 TO_2 – Sabour Channa-1
Source of Technology (ICAR/ AICRP/SAU/other, please specify)	BAU, Sabour
Replication	10
Production system and thematic area	Rice-Wheat/Lentil/Gram, Varietal assessment.
Performance of the Technology with performance indicators	Plant height, No. of branches/plant, No. of grains/pod, Av. Grain yield & Economics.
Final recommendation for micro level situation	
Constraints identified and feedback for research	
Process of farmers participation and their reaction	Field visit & Training

Table:

Technology option	No. of trials	Yield component			Av.Yield/ha. (qt.)	Cost of cultivation (Rs./ha)	Gross cost (Rs/ha)	Net return (Rs./ha)	BC ratio
		No. of pods/plant	No. of seeds/pod	500 grains wt.(gm)					
Farmer practice	10	35	01	75 gm	8.5	11500	46240	34740	4.0
TO1		60	02	100.0	13.6	17500	74000	56500	4.2
TO2		55	01	110.0	15.8	17500	85952	68452	4.9

Result: On the basis of above experiment, the TO2 i.e. Sabour Chana-1 performed better than other treatment because their Net return and B:C ratio recorded highest as compared to other treatments although the treatment TO1 have maximum no. of pods/plant and no. of seeds/pod. But their 500 grain wt, average yield and B:C ratio is comparatively lower than TO2.

OFT-3:

Intervention	Plant-Breeding
Title of On farm Trial	To assess the suitable sowing time of wheat to avoid the terminal heat under the late sown condition.
Problem diagnosed	Low yield of wheat due to early maturity
Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmer Practices- TO_1 – 25 Nov. S. Shersth/S. Nirjal TO_2 – 05 Dec. S. Shersth/S. Nirjal TO_3 – 15 Dec. S. Shersth/S. Nirjal TO_4 – 25 Dec. S. Shersth/S. Nirjal
Source of Technology (ICAR/ AICRP/SAU/other, please specify)	BAU, Sabour

Replication	10
Production system and thematic area	Rice Wheat, ICM
Performance of the Technology with performance indicators	Plant height, No of Tiller/hill, ear length, No. of /ear Av. Yield of B:C ratio.
Final recommendation for micro level situation	
Constraints identified and feedback for research	
Process of farmers participation and their reaction	Field visit & Training

Table:

Technology option	No. of trials	Yield component			
		Plant height (cm)	Ear length	No of grains/ear	1000 grains wt.(gm)
TO1	10	85.2	13.5	41.5	46.2
TO2		79.3	12.2	38.5	44.3
TO3		77.5	10.5	36.2	42.5
TO4		74.1	9.5	32.4	39.5

Av.Yield/ha. (qt.)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
26.1	28200	59377	31177	2.10
25.03	28200	57557	29357	2.04
21.2	28200	48230	20030	1.71
16.8	28200	38220	10020	1.35

Result: KVK, Amas, Gaya has conducted On Farm Testing on different sowing time condition in wheat i.e. from 25 November, 05 December, 15 December and 25 December. On the basis of above experiment observation, the TO1 performed better than any other treatment as their plant height (85.2 cm), Ear length (13.5 cm), no. of grain per ear (41.5), 1000 grains weight (46.2), Average yield (26.1 qt) and B:C ratio is 2.10 had found superior than other treatments. While in farmers practice i.e. 25 December, the yield is only 16.8 qt/ha. By improving in sowing time, farmers get additional return around Rs.21,100 per ha.

OFT-4 :

Title of On Farm Trial	Assessing the Extension Education Methods for Awareness and use of Soil Health Card.
Problem Diagnose	Lack of knowledge to use the recommendation of Soil Health Card
Details of Technologies selected for assessment/refinement	Farmer's practice: - Without Extension Education Methods. Tech. option-1 :- Farmers having SHC with Training Literature. Tech. option-2 :- Farmers having SHC with Customized Social Media Advisory. Tech. option-3 :- Farmers having SHC with Training Literature and Customized Social Media Advisory
Source of Technology	BAU, Sabour
Replication	60 (20 in each tech. option)
Production System & Thematic Area	Rice-Wheat, Assessment Analysis.
Performance of Technology with	1. Knowledge related to SHC 2. Change in Awareness level with respect to use of SHC.

performance indicator	3. Adoption of Recommended Practice in relation to SHC. 4. Data related to Extension Efficiency Parameter.
Constraints identified and feedback for research	Less knowledge of Production technology and use of fertilizers.
Process of farmers participation and their reaction	Group discussion and structured schedule.

Table:

Treatment	Level of Knowledge					
	L		M		H	
	F	%	F	%	F	%
FP: Without Extension education methods	18	90	02	10	0	0
TO_I : Farmers having SHC with training literature	06	30	11	55	03	15
TO_{II} : Farmers having SHC with customized social media	03	15	12	60	05	25
TO_{III} : Farmers having SHC with training literature and customized social media	03	15	03	15	14	70

Treatment	Extent of Adoption						Awareness about SHC			Use of SHC
	L		M		H		Fully aware	Aware	Not aware	
	F	%	F	%	F	%	%	%	%	(%)
FP: Without Extension education methods	17	85	03	15	0	0	5.25	18.5	76.25	12.5
TO_I : Farmers having SHC with training literature	05	25	12	60	03	15	16.25	35.5	45.25	21.25
TO_{II} : Farmers having SHC with customized social media	03	15	13	65	05	25	25.5	48.75	25.75	28.5
TO_{III} : Farmers having SHC with training literature and customized social media	03	15	07	35	11	55	58.75	27.5	13.75	36.5

5. Seed material produced at KVK, farm:

Sl. No.	Crop	Variety	Class	Quantity of seed (q)	Value (Rs)	Number of farmers provided
1.	Paddy	R. Sweta	C/S	47.0		
2.	Mustard	RH 0749	T/L	2.80		
3.	Wheat	HD 2967	C/S	23.0		
4.	Green gram	IPM 2-3	C/S	-		

6. Performance of Instruction Farm:

Sl. No.	Crop	Season	Area(ha)/No	Yield (Qtl.)
1.	Mustard	Rabi 2023-24	2.0	2.80
2.	Wheat	Rabi 2023-24	3.0	23.0
3.	Green gram	Summer 2024	1.0	Standing crop
4.	Paddy	Kharif-2024	3.0	

7. Other Extension Activities:

Activities & Sub- activities	No.	No. of Beneficiaries
Field day	01	31
Kisan Mela	01	1002
Exposure visit	01	50
Kisan Choupal/Kisan Gosthi	11	989
Scientist Visit to farmer's field	157	157
Farmer's Visit to KVK	722	722
News paper coverage	06	-
Radio /Television Talk	03	-
Extension Literature Published	07	15000
Advisory Services/Helpline service	1233	1233
Swachchta Abhiyan	05	124
PM Live Telecast Programme	01	52

8. Any new initiative taken by KVK

1) Revolving fund created by Seed Sell.
2) Mother Orchard of Mango, Guava, Lemon, Aonla & Bel has planted.
3) Demonstration of Natural Farming has started at KVK Farm in 1.0 acre.
4) Demonstration unit of vermicompost, kitchen garden established at KVK farm.
5) Construction of Administrative Building has started.

Proposed Action Plan
(June 2024 to September 2024)

1. Proposed Training Programmes:

a. Training for Practicing Farmers/Farm women: -

Sl. No.	Discipline	Duration (days)	Course No.	*No. of Beneficiaries*					
				Others		**SC/ST**		***Total***	
				M	**F**	**M**	**F**	**M**	**F**
(i)	Agronomy	2	10	100	50	50	50	150	100
(ii)	Plant Protection	2	10	100	50	50	50	150	100
(iii)	Ag. Extension	2	08	80	40	40	40	120	80
	Total	**-**	***28***	***280***	***140***	***140***	***140***	***420***	***280***

b. Rural Youths

Sl. No.	Discipline	Duration (days)	Course No.	*No. of Beneficiaries*					
				Others		**SC/ST**		***Total***	
				M	**F**	**M**	**F**	**M**	**F**
(i)	Agronomy	5	03	40	10	20	20	60	30
(ii)	Plant Protection	5	02	30	10	10	10	40	20
(iii)	Ag. Extension	5	03	40	10	20	20	60	30
	Total	**-**	***08***	***110***	***30***	***50***	***50***	***160***	***80***

c. Extension functionaries

Sl. No.	Discipline	Duration (days)	Course No.	*No. of Beneficiaries*					
				Others		**SC/ST**		***Total***	
				M	**F**	**M**	**F**	**M**	**F**
(i)	Agronomy	2	02	10	5	10	15	20	20
(ii)	Plant Protection	2	02	10	5	10	15	20	20
(iii)	Ag. Extension	2	02	10	5	10	15	20	20
	Total	**-**	***06***	***30***	***15***	***30***	***45***	***60***	***60***

2. On Farm Trial to be conduct: (Each SMS and P.C. has to conduct 2 OFT and 1 OFT respectively

S. No.	Title of OFT	Technology Option
1.	Impact Study of KVK Training on production and productivity enhancement of major crops.	**FP**: Traditional farming with no any technical support **TO-I**: Knowledge through social media. **TO-II**: Knowledge through KVK training
2.	Effect of different herbicides to control the weeds in paddy	**T1**-Traditional practices **T2** - Bispyriback sodium 10% SC @ 200 ml/ha + Almix @ 20g/ha **T3** - Cyhalofop +Penoxsulam @ 2500ml/ha

3.	Integration of fertilizer in different form on yield of lentil	**T1**- Seed treatment + RDF (20:40:0 NPK kg/ha) **T2** - 50% of RDF + WSF (18:18:18 @5g/l water) at pre flowering stage **T3** - Seed treatment with PSB + Rhizobium, 50% of RDF + WSF (18:18:18 @5g/l water) at pre-flowering stage
4.	Assessment of different fungicides for management of spot blotch disease in wheat	**T1**- (Bavistin @ 2.5gm/lit at the time of disease appearance) **T2** - Seed treatment with Vitavax 200 WS @ 2.5g/kg Seed +Foliar Spray of Propiconazole @ 1ml/litre water first at boot leaf stage and second spray 20 days after first spray. **T3** - Seed Treatment with Trichoderma viride @ 5g/kg Seed +Foliar Spray of Hexaconazole @ 1ml/lit water first at boot leaf stage and and second spray 20 days after first spray.
5.	Assessment of fungicides for the management of Sheath blight of Rice	**T1**- (Spray of hexaconazole 5 EC @800ml/ha) **T2**- Spray of Propiconazole 13.9% + Difenoconazole 13.9% EC @500ml/ha. **T3**- Spray of Thifluzamide 24 SC @ 1ml /liter of water (45 days after transplanting)

3. Front Line Demonstration:

Season	Crop	Variety/technology	Area in (ha)	No. of farmers
Kharif 2024	Finger Millet	RAU-8	5.0	25
	Paddy	R. Sweta	5.0	25

4. SCSP Program:

Season	Crop	Area in (ha)	No. of Demo.
Kharif 2024	Pigeon pea	10.0	50
	Paddy	25.0	100

5. Farm activities:

Sl. No.	Crop	Season	Variety	Area (ha)
1.	Paddy	Kharif 2024	R. Sweta	3.0

6. Extension Activities

Activities	No.	Participants
Kisan Goshthi	04	200
Field days	02	80
Diagnostic visit	10	50
Scientist visit to farmers field	60	60
Farmers visit to KVK	300	300
Farmers advisory service/Help line	300	300
Important day celebration	04	200
Radio /TV Talk	05	-
News Paper coverage	05	-
Extension literature	02	2000

KRISHI VIGYAN KENDRA, JEHANABAD

Report of 26th Extension Education Council Meeting
(From October 2023 to May 2024)

Achievement of Training Programme :

SL. No.	Clientele	No. of training	No. of beneficiaries						Grand Total
			Other		SC		Total		
			M	F	M	F	M	F	
(i)	Training programme of farmers/ Farm women	104	1703	433	555	607	2258	1040	3298
(ii)	Training programme of rural youth	37	570	89	222	211	792	300	1092
(iii)	Training programme of Extension functionaries	3	199	19	26	10	225	29	254
Total		144	2472	541	803	828	3275	1369	4644

2. Front Line Demonstration

Sl. No.	Crop /enterprise	Variety	Technology Demonstrated	Area (ha)/ unit	No. of Farmers
1.	Paddy	R. Sweta	Uniform application of granular fertilizer in field	6.0	15
2	Paddy	R. Sweta	Validamycin 3L @ 200 ml per care to manage sheath blight	8.0	20
3	Wheat	HD2967	Battery operated sprayer	4.0	10
4	Wheat	HD2967	Use of drone in agriculture	13.6	34
5	Poultry	Sonali	Backyard Poultry farming	80 unit	80
6	Oat/Jai	Kent	Fodder production for dairy cattle	2.0	50
7	Mineral Mixture	Bestmin Gold	For control of infertility in dairy cow	20 unit	20
8	Paddy	R. Sweta	Seed production	0.05	13
9	Battery Operated Sprayer	-	Drudgery Reducing	10	10
10	Fertilizer Broadcaster	-	Drudgery Reducing	10	10

3. CFLD

Sl.No.	Crop /enterprise	Variety	Technology Demonstrated	Area (ha)/ unit	No. of Farmers
1	Mustard	RH725	CFLD	20.0	50
2	Lentil	IPL 220	CFLD	20.0	65

FLD Result:

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase
					Demo	Check	
Paddy (var. R. Sweta) Kharif 2023	Small implements	Use of Broadcaster machine for urea application	15	6.0	39.4	37.1	7.28
Paddy	IPM	Management of Sheath blight in paddy (Validamycin 3L @ 200 ml per acre paddy)	20	8.0	40.3	38.1	5.8
Wheat (var. H.D. 2967)Rabi 2023-24)	Small implements	Battery Operated Sprayer	10	4.0	41.4	39.2	5.6
Jai	Fodder management	Green fodder	50	50 unit	11.20	9.62	1.58

4. Details of On Farm Trial (OFT): Report

OFT 1: Agronomy

1	Title of On Farm Trial	Improvement of Nitrogen use efficiency in wheat
2	Problem diagnosed	Excessive use of chemical fertilizer and Spiraling price of urea leads to increase in cost of cultivation
3	Details of technologies selected for assessment/refinement	Farmer Practice: RDF(100:40:20)Kg/ha TO-1:50% of RDN &100 % PK+Nano urea @ 4ml/lt.water (Single spray at 35 DAS). TO-2: 50% of RDN & 100% PK + 2 sprays of Nano Urea at (35 DAS) and (60-65DAS) @ 4 ml/lt water. Under Rice-Wheat croppings ystem.
4	Source of Technology	BAU Sabour, BAU, Sabour
5	Replication	10
6	Production system and thematic area	Rice-Wheat, Nutrient Management
7	Observation to be recorded	Yield data, No. of effective tillers/m^2,1000 grain wt., Panicle wt.,Straw yield and Economics.

Initial data of soil sample tested: pH: 5.5, Ec: 0.65, OC: 0.42, N:390, P:29.5, K:71.5 kg/ha

Technology option	**No. of trials**	**Yield component**			**1000 grain wt. (g) Test wt.**
		Plant height at harvest (cm)	**Effective tillers/ m sq.**	**No. of grains/ spike**	
Farmer Practice: RDF(100:40:20)Kg/ha	8	72.8	382	28	38.6
TO-1:50% of RDN &100 % PK+Nano urea @ 4ml/lt.water (Single spray at 35 DAS).		77.6	418	34	41.6
TO-2: 50% of RDN & 100% PK + 2 sprays of Nano Urea at (35 DAS) and (60-65DAS) @ 4 ml/lt water. Under Rice-Wheat cropping system.		82.2	436	37	40.8

Technology option	**No. of trials**	**Yield (q/ ha)**	**Cost of cultivation (Rs./ha)**	**Gross return (Rs/ha)**	**Net return (Rs./ha)**	**BC ratio**
Farmer Practice: RDF(100:40:20)Kg/ha	8	30.6	39550	87440	47890	2.21:1
TO-1:50% of RDN &100 % PK+Nano urea @ 4ml/lt.water (Single spray at 35 DAS).		33.0	40550	97200	56650	2.39:1
TO-2: 50% of RDN & 100% PK + 2 sprays of Nano Urea at (35 DAS) and (60-65DAS) @ 4 ml/lt water. Under Rice-Wheat cropping system.		35.2	41658	102480	41550	2.46:1

Result: On the basis of conducted OFT topic entitled Improvement of Nitrogen use efficiency in wheat during the Rabi season 2022-23 and 2023-24, the best treatment recommended are TO2 i.e. 50% RDN+ 100% PK+2 sprays of Nano urea performed better, so that this technology should be recommended.

OFT 2: Agronomy

1	Title of On farm Trial	Integration of fertilizer in different form on yield of Lentil
2	Problem diagnosed	Injudicious use of chemical fertilizer
3	Details of technologies selected for assessment/refinement	Farmer Practice: Seed Treatment + RDF(15:45:0, N:P:K) TO1:50% of RDF +WS 18:18:18 @5 gm./ltr water (Single spray at pre-flowering stage) TO2: Seed treatment with PSB + Rhizobium, 50% of RDF + WS 18:18:18 @5 gm. /ltr water (Single spray at pre flowering stage)
4	Source of Technology	BAU, Sabour
5	Replication	10
6	Production system and thematic area	Rice-Lentil-Fallow Nutrient Management
7	Observation to be recorded	Grain Yield, No. of Plant/m^2,1000 grain wt., No of pod /plant, strover yield and Economics

Initial data of soil sample tested: pH:5.8, Ec: 0.54, OC: 0.72, N:472.8 kg/ha, P:36.3 kg/ha, K:73.9 kg/ha

Technology option	**No. of trials**	**Yield component**			**1000 Seed weight (g)**
		Plant height at harvest (cm)	**No. of pods per plant**	**No. of branches/ plant**	
Farmers Practice: seed treatment + RDF	9	31.6	34	5	13.9
TO1: 50% of RDF + WS (Water soluble fertilizers i.e 18:18;18 @ 5gm/water (single spray at pre flowering stage)		34.3	37	6	15.5
TO2: Seed treatment with PSB+ R.culture, 50% of RDF + WS (Water soluble fertilizers i.e 18:18;18 @ 5gm/water (single spray at pre flowering stage)		35.0	40	7	16.5

Technology option	**No. of trials**	**Yield (q/ha)**	**Cost of cultivation (Rs./ha)**	**Gross return (Rs/ha)**	**Net return (Rs./ha)**	**BC ratio**
Farmers Practice: seed treatment + RDF	9	10.4	27960	62700	34740	2.24:1
TO1: 50% of RDF + WS (Water soluble fertilizers i.e 18:18;18 @ 5gm/water (single spray at pre flowering stage)		11.6	27960	70000	42040	2.50:1
TO2: Seed treatment with PSB+ R.culture, 50% of RDF + WS		12.7	28900	77650	40750	2.68:1

(Water soluble fertilizers i.e 18:18;18 @ 5gm/water (single spray at pre flowering stage)						

Result: The maximum yield (12.7 q/ha) and BC ratio (2.68) was found in the TO-2 i.e. seed treatment with PSB + Rhizobium culture, 50% RDF+ WS 18:18:18 @ 5 gram/litre of water at single spray at pre flowering stage.

OFT 3: Entomology

1.	Title of On farm Trial	**Assessment of fungicides for the management of Sheath blight of Rice**
2.	Problem diagnose	Five- to six-week-old leaf sheaths are highly susceptible. The presence of several large lesions on a leaf sheath usually causes death of the whole leaf, and in severe cases all the leaves of a plant may be blighted in this way.
3.	Details of technologies selected for assessment/refinement	Farmer practice: Spray of hexaconazole 5 EC @800ml/ha TO1: Spray of Propiconazole 13.9% + Difenoconazole 13.9% EC @500ml/ha. TO2: Spray of Thifluzamide 24 SC @ 1ml /liter of water (45 days after transplanting)
4.	Source of Technology	ATARI, Patna
5.	Production system and thematic area	Rice-Wheat Integrated Disease Management
6.	Performance of the Technology with performance indicators	The incidence of disease is reduced and increase yield marginally.
7.	Final recommendation for micro level situation	For management of sheath blight in Paddythe both (TO2 and TO3) is recommended.
8.	Constraints identified and feedback for research	Assessment of another molecule
9.	Process of farmers participation and their reaction	Actively participated with adaptation of the technology

B. Results:

Thematic area	**Technology options with detailed treatments**	**Cost of cultivation (Rs./ha)**	**Gross return (Rs/ha)**	**Net return (Rs./ha)**	**BC ratio**
Integrated Disease Management	FP: Spray of hexaconazole 5 EC @800ml/ha	40500	85159	44659	2.10
Integrated Disease Management	TO1: Spray of Propiconazole 13.9% + Difenoconazole 13.9% EC @500ml/ha.	41000	92319	51319	2.25
Integrated Disease Management	TO2: Spray of Thifluzamide 24 SC @ 1ml /liter of water (45 days after transplanting)	41000	91773	50773	2.24

Thematic area	**Technology options with detailed treatments**	**Cost of cultivation (Rs./ha)**	**Gross return (Rs/ha)**	**Net return (Rs./ha)**	**BC ratio**
Integrated Disease Management	FP: Spray of hexaconazole 5 EC @800ml/ha	40500	85159	44659	2.10
Integrated Disease Management	TO1: Spray of Propiconazole 13.9% + Difenoconazole 13.9% EC @500ml/ha.	41000	92319	51319	2.25
Integrated	TO2: Spray of Thifluzamide	41000	91773	50773	2.24

Disease Management	24 SC @ 1ml /liter of water (45 days after transplanting)				

Result*:* Among these technology optionsTO1 showed minimum (2.8) Relative Lesion Hight (RLH) with the yield (42.29 q/ha) and 2.24 B:C ratio as compared to TO2 (3.1) Relative Lesion Hight (RLH) along with the yield (42.04 q/ha) and 2.24 B:C ratio, respectively. Whereas plots treated with Farmer practices the yield (39.01 q/ha) and 2.10 B:C ratio with high %Relative Lesion Hight (RLH) 9.3 were recorded. This study showed that, TO 1 & 2 a new generation fungicides is more effective and increases the yield upto 8.4 percent.

OFT 4: Entomology

1	Season:	Summer
2	Title of the OFT:	Management of nematode in Okra
3	Thematic Area:	IPM
4	Problem diagnosed:	Nematode causeyield loss in okra
5	Important Cause:	Due to damage symptom underground soil very difficult to manage by farmers once infestation occurred
6	Production system:	Rice-potato-okra
7	Micro farming system:	Medium upland
8	Technology for Testing:	Farmer Practices: Chalorpyriphos spray @ 3 ml/ lt. TO1: • Soil solarization with polythene (40 µ m) white sheet for two weeks • Soil Treatment: *Pseudomonas fluorescens* @ 20 gm/m2 + *Trichoderma viride* @ 50 g/m2 • Seed Treatment: *Pseudomonas fluorescens* @ 10 gm/kg + *Trichoderma viride* @ 10 g/kg TO2: Fluensulfone (Nmitiz) 2G @ 2.5 gm/m2 or carbofuran 3g @ 3.6 g/m
9	Existing Practice:	Farmer practices (Profenophos 50 EC @ 2 gm/lt water)
10	Hypothesis:	Nematodepests'infestation reduces significantly
11	Objective(s):	Reduce pest infestation
12	Treatments: Farmers Practice TO1 TO2	 Farmer Practices: Chalorpyriphos spray @ 3 ml/ lt. TO1: • Soil solarization with polythene (40 µ m) white sheet for two weeks • Soil Treatment: *Pseudomonas fluorescens* @ 20 gm/m2 + *Trichoderma viride* @ 50 g/m2 • Seed Treatment: *Pseudomonas fluorescens* @ 10 gm/kg + *Trichoderma viride* @ 10 g/kg TO2: Fluensulfone (Nmitiz) 2G @ 2.5 gm/m2 or carbofuran 3g @ 3.6 g/m
13	Critical Inputs:	Seeds, polythene sheet and Nematicides
14	Unit Size:	0.0375 ha
15	No of Replications:	8
16	Unit Cost:	3000
17	Total Cost:	24000
18	Monitoring Indicator	% infestation and yield attributes Economic Indicator: Net return, C: B ratio
19	Source of Technology	ATARI, Patna

Exposure visit under CRA/ FLD/ CFLD Programme:

Sl.No.	Name of the programme	Date of the programme	Place	No. of participants
1	Within District exposure visit Jehanabad	12.10.2023	KVK farm and CRA village	34
2	Within District exposure visit Jehanabad	13.10.2023	KVK farm and CRA village	32
3	Within District exposure visit Ghosi	16.10.2023	KVK farm and CRA village	80
4	Within District exposure visit Makhdumpur	17.10.2023	KVK farm and CRA village	58
5	Within District exposure visit Kako	31.10.2023	KVK farm and CRA village	42
6	Within District exposure visit Modanganj	01.11.2023	KVK farm and CRA village	91
7	Within District exposure visit Kako	10.11.2023	KVK farm and CRA village	64
8	Within State Exposure Visit Cum Training organized	16/02/2024	KVK, Gaya	183
9	Exposure visit of within state programme in	21/02/2024	ICAR Patna	9
10	Exposure visit of within state programme in	12/03/2024	KVK Arwal	8
11	Exposure visit of within state programme in	14/03/2024	KVK Amas, Gaya	11

Field Day

Date	Village	Participants
09.10.2023	Amarpur Pali	15
07.11.2023	Nigar pali	10
23.11.2023	KVK, Jehanabad	30
30.11.2023	Charue	31
28.11.2023	Waina	89
25.11.2023	Chappana	134
28.11.2023	Waina	89
29.02.2024	Devghara (Lentil)	43
01.03.2024	Chappana	67
05.03.2024	Korma	117
14.03.2024	Charui	21
05.04.2024	Godsar	15
	Total	661

5. Activity under IRRI project (OFT, Cluster Demonstration, Mini kit, Crop cafeteria)

A. OFT on Varietal Evaluation of 6 Paddy Varieties by IRRI (Kharif- 2023)

Crop	Variety (6) (Provided by IRRI)	Area (ha)	No. of Farmers
Paddy	CR- Dhan 804, R. Bhagwati, Uttarsona, CO-51, IR64 sub1, Uttar Lakhshmi	1.4	7

Yield Performance of IRRI OFT at Farmers Field Kharif 2023:

Sl. No.	Variety Name	Sowing Date	Average effective tillers	Average Plant height	Average Panical Length	Average Grains /Panicales	Average unfilled grains /	Yield (t/ha)	Test wt (gm)

				(CM)	(CM)		Panical		
1	CR Dhan 804	25-06-2023	16	105	20.0	138	18	5.38	26.9
2	R. Bhagwati	25-06-2023	19	123.9	24.7	176	27	4.84	28.0
3	Uttar Sona	25-06-2023	14	115.1	21.8	136	20	5.38	25.9
4	C.O. 51	25-06-2023	14	93.10	23.0	151	29	5.2	20.9
5	IR 64 SUB 1	25-06-2023	19	98.10	23.9	160	27	**5.56**	27.1
6	Uttar Lakshmi	25-06-2023	10	114.0	24.7	132	21	4.98	24.0

B. Crop Cafeteria-IRRI (Kharif- 2023) at KVK Farm

Crop	Variety (20) (Provided by IRRI)	Area (ha)
Paddy	NLR-4001, Swarna Samridhi, NLR 40054, Telangana Sona, Sabour Heera, CO-56, DRR Dhan 50, HUR 917, CG Devbhog, Tripura Hakachok-2, BRRI-100, Swarna Shreya, Bina-17, Rajendra Sarswati, BRRI-75, PR-130, BRRI-84, Bina Dhan-11, IR 64 Sub 1, PR-126	0.1

Yield Performance of IRRI Crop Cafeteria at KVK Farm Kharif 2023:

Sl.No.	Variety Name	Sowing Date	Average effective tillers	Average Plant height (CM)	Average Panical Length (CM)	Average Grains /Panicales	Average unfilled grains / Panical	Yield (t/ha)	Test wt (gm)
1	Tripura Hakachuk-2	26-06-2023	12	115.3	26.6	182	20	5.32	19.7
2	BRRI 100	26-06-2023	12	110.1	22.3	225	18	4.8	25.4
3	Swarna Shreya	26-06-2023	13	112.6	24.6	237	18	5.6	19.9
4	Bina 17	26-06-2023	15	125.3	23.1	220	16	5.8	26.6
5	Rajendra Saraswati	26-06-2023	13	105.6	25.1	186	14	5.2	27.4
6	BRRI 75	26-06-2023	15	95.4	24.4	202	18	5.88	24.6
7	PR 130	26-06-2023	16	121.3	24.1	180	14	6.08	26.6
8	BRRI 84	26-06-2023	10	105	20.5	237	18	4.6	24.5
9	Bina Dhan 11	26-06-2023	16	104.3	24.3	125	17	6.0	24.5
10	IR 64 Sub 1	26-06-2023	10	112.3	24.9	195	16	5.28	22.3
11	PR 126	26-06-2023	15	108.5	26.3	178	14	6.0	25.3
12	NLR 4001	05-07-2023	17	106.6	25.8	180	17	**6.6**	20.3
13	Swarna Samriddhi	05-07-2023	16	100.1	25.6	212	17	**6.60**	27.1
14	NLR 40054	05-07-2023	15	105.5	27.7	203	15	6.0	18.5
15	Telangana Sona	05-07-2023	14	95.6	23.6	220	10	5.12	15.3
16	Sabour Heera	05-07-2023	13	90.8	28.4	215	12	6.56	21.1
17	CO 56	05-07-2023	15	135.5	23.1	160	15	6.08	20.5
18	DRR Dhan 50	05-07-2023	11	125.6	23.2	190	16	4.84	17.6
19	HUR 917	05-07-2023	12	117.5	23.1	156	10	4.88	18.7
20	CG Devbhog	05-07-2023	15	128.4	25.6	193	18	6.16	20.5

C. Cluster Demonstration –IRRI (Kharif- 2023)

Crop	Variety (2)(Provided by IRRI)	Area (ha)	No. of Farmers

Paddy	Uttarsona and Sabour Harshit	6.0	8

D. Head to Head trial- IRRI (Kharif- 2023)

Crop	Variety (5)(Provided by IRRI)	Area (ha)	No. of Farmers
Paddy	CO-51, C-G- Barani-2, BRRI-69, NLR-3354, DRR-44	1	5

6. Eradication of Malnutrition Programme

Particular	Village: Godsar (Ghosi), Jehanabad	
	Activity/No./Area	No. of Beneficiary
Kitchen Garden Kit	5 No.	100
Child Health Survey 20.07.23	1 No.	86
Animal Health Camp	2 No	139
Poultry Distribution	1500 No.	30

Particulars	Adopted Village	Awareness Programme		Capacity Building	
		No. of Programme	No. of Beneficiary	No. of Programme	No. of Beneficiary
Eradication of Malnutrition	Godsar (Ghosi)	13	659	12	336

Particulars	Adopted Village	Health Parameter			
		Age	Height	Weight	HB %
Eradication of Malnutrition	Godsar	08-15	4.5 Feet	26 Kg	7-8%

7. Centre for Excellence for Millets Value Chain Project

Capacity Building:

Particulars	Awareness Programme		Capacity Building (Training)	
	No. of Programme	No. of Beneficiary	No. of Programme	No. of Beneficiary
Millet Promotion	14	1030	9	236

Germplasm Evaluation (Kharif 2023):

Project	Crop	Germplasm	Variety	Total
Centre for Excellence for Millets Value Chain	Finger millet	6	7	42
	Foxtail Millets	5	7	35
	Proso Millets	7	5	35
	Barnyard millets	9	4	36
	Little Millets	7	5	35
	Kodo millets	8	4	32
	Total	**42**	**32**	**215**

Germplasm Evaluation (Summer 2024):

Project	Crop	Germplasm	Variety	Total
Centre for Excellence for Millets Value Chain	Finger millet	6	7	42
	Proso Millets	7	5	35
	Total	13	12	77

8. FPO formation and functioning

Sl. No.	Name of the FPO	Activity
1	Gandhar Agrotech farmers producer company limited, Modanganj, Jehanabad	Need based procurement of seeds and fertilizers for timely availability to member farmers and organic farming.
2	Sahyogi Agro Producer Company Ltd., Makhdumpur, Jehanabad	Production and marketing of agriculture and allied products
3	Cervam Kako Agro Producer Company Ltd., Kako, Jehanabad (2020)	Production and marketing of agriculture and allied products
4	Barabar producer Co. Ltd, makhdumpur, Jehanabad (CSS Scheme) 2021	Pulse production & processing
5	Prayatan Producer, Co. Ltd, Jehanabad (CSS Scheme) 2021	Pulse production & processing

9.Information on Skill Development Training Programme

Sl. No.	Title of the training	Duration (in hrs.)	Duration	No. of participants
1	Vermicompost Producer (Ver. 3.0)	80	28.02.2024 to 15.03.2024	30
2	Bee Keeper (Ver. 3.0)	80	11.03.2024 to 21.03.2024	30

10. Important Days and other programme conducted by KVK, Jehanabad

S.N.	Important Programme	Date	Participants
1	Vikshit Bharat Sankalp Yatra	02 -25. 12.2023	151
2	PM Kisan Samman Yojna	15.11.2023	60
3	PM Kisan Samman Yojna	28.02.2024	50
Important Days Celebrations			
4	Mahila Kisan Diwas	15.10.2024	32
5	World Soil Day	05.12.2024	45
6	Earth Saving Day	22.04.2024	30
Other programme			
7	Prayogshala se khet tak	02.12.2023	20
8	Kisan Mela participation (Sonepur) and exhibition of CRA stall	14.12.2023	450
9	Vaccination of H.S.+B.C. vaccination	04-28.12.2023	31
10	Participation in Kisan gosthi on modern agricultural machineries	17.12.2023	215
11	Participation in Kian yantrikaran mela	08-09.12.2023	252
12	Participation in launching of 4th agriculture Road Map at Patna	18.10.2023	2
13	Kisano ki baat Krishi Mantri ke Sath	13.10.2023	25
14	Animal Health camp cum vaccination of goats	20.10.2023	34
15	Attended training on safe use of Glyphosate as master trainer conducted by NIPHM, Hyderabad	11.10.2023	-
16	Sawal jabab, progshala se khet tak	01.11.2023	25
17	Kisan Gosthi on Kharif DSR	01.11.2023	45
18	Animal Health Camp participation	12.04.2024	36
19	Kisan Mela participation at KVK, Arwal	14.03.2024	690
20	Participation of Infertility camp organized by line dept.	11.03.2024	35

21	Kisan Gosthi on Garma crop	28.02.2024	100
22	Kisan Mela Agro Bihar, Patna	10.02.2024	Mass
23	Participation in Kisan mela at Khunti, Ranchi organized by ICAR, NISA, Ranchi	03-05.02.2024	Mass
24	Particiaption in Kisan Mela at BAU, sabour	17-19.02.2024	186
25	Participation in workshop on the topic Agri clinic Agri business centre programme organized by NABARD	22.02.2024	36
26	Participation in Krishi Yantrikaran Mela with KVK exhibiton at Krishi Bhawan, Jehanabad	30-31.01.2024	216

11. Other Extension Activities:

Nature of Extension Activity	No. of activities	Farmer's attend	Extension Officials attend	Total
Field Day	12	661	0	661
Participation in Kisan Mela	8	Mass	-	Mass
Kisan Choupal/ Gosthi	3	360	0	360
Radio/ TV Talk	4	-	-	4
Exhibition	6	Mass	0	Mass
Film Show (Vikshit Bharat Sampark Yatra)	26	Mass	0	Mass
Method Demonstrations	4	91	0	91
Advisory Services	1561	1561	0	1561
Farmers visit to KVK	1250	1250	0	1250
Diagnostic visits	51	51	0	51
Exposure visits	11	612	0	612
Animal Health Camp	4	145	10	155
Live Telecast of Flagship programmes (Including Vikshit Bharat Sansampark yatra)	30	Mass	2	Mass
Scientist Visit to Farmers Field	133	133	0	133
Total	3103	4864	12	4878

12. Any new initiative taken by KVK

- Organization of Animal Health Check up and Vaccination Camp in Mananpur village in convergence with ICAR-RCER, Patna
- Establishment of Centre of Excellence on Millets of 7 types with 245 germplasm
- Promotion of vegetable kits for establishment of nutrition garden for eradication of mal nutrition and under NARI programme.

Proposed Action Plan
(June 2024 to September 2024)

I. **Training**

SL. No.	Clientele	No. of training	No. of beneficiaries					
			Other		SC		Total	
			M	F	M	F	M	F
(i)	Training programme of farmers/ Farm women	21	418	50	75	44	493	94
(ii)	Training programme of rural youth	10	182	21	36	13	218	34
(iii)	Training programme of Extension functionaries	4	83	8	16	5	99	13
Total		35	683	79	127	62	810	141

II. On farm Trial (June to September 2024)

OFT 1: Agronomy

1	Title of On farm Trial	Improvement of Nitrogen use efficiency in rice
2	Problem diagnosed	Excessive use of chemical fertilizer andSpiraling price of urea leads to increase in cost of cultivation
3	Details of technologies selected for assessment/refinement	Farmer Practice: RDF (100:40:20) Kg/ha Technological Option 1:50% of RDN & 100% PK + nanourea @4ml/lt. water (Single spray at pre flowering stage). Technological Option 2: 50% of RDN & 100% PK + 2 spraysof Nano Urea at (25 to 30 days) and (60-65 days) @ 4 ml/lt water.
4	Source of Technology	BAU Sabour
5	Replication	10
6	Production system and thematic area	Rice-Lentil-Fallow Nutrient Management
7	Observation to be recorded	Plot size (10x10 m^2)/ in each tech. option, soil data before and after (pH, EC, OC, NPK,), Yield data, No. of effective tillers/m^2,1000 grain weight,Panicle weight, Grain and Straw yield and Economics.

OFT 2: Entomology

1.	Title of On farm Trial	**Assessment of fungicides for the management of Sheath blight of Rice**
2.	Problem diagnose	Five- to six-week-old leaf sheaths are highly susceptible. The presence of several large lesions on a leaf sheath usually causes death of the whole leaf, and in severe cases all the leaves of a plant may be blighted in this way.
3.	Details of technologies selected for assessment/refinement	Farmer practice: Spray of hexaconazole 5 EC @800ml/ha TO1: Spray of Propiconazole 13.9% + Difenoconazole 13.9% EC @500ml/ha. TO2: Spray of Thifluzamide 24 SC @ 1ml /liter of water (45 days after transplanting)
4.	Source of Technology	ATARI, Patna
5.	Production system and thematic area	Rice-Wheat Integrated Disease Management
6.	Performance of the Technology with performance indicators	The incidence of disease is reduced and increase yield marginally.
7.	Final recommendation for micro level situation	For management of sheath blight in Paddythe both (TO2 and TO3) is recommended.

8.	Constraints identified and feedback for research	Assessment of another molecule
9.	Process of farmers participation and their reaction	Actively participated with adaptation of the technology

OFT 3: (Soil Sc.)

Crop	Rice
Season	Kharif
Problem	Low yield of rice
Main cause	Injudicious use of fertilizers
Title of OFT	Assessment of efficacy of nano DAP on crop growth and grain yield
Thematic area	Natural Resource Management
Farmer practice	RDF (100:40:20) kg/ha
Technology option selected for assessment	T.O.1: 75% DAP + 100 % NK + ST/SD with nano DAP + Foliar spray with nano DAP 2 mL/L water at tillering stage T.O.2: 75% DAP + 100% NK + ST/SD with nano DAP + Foliar spray with nano DAP 4 mL/L water at tillering stage T.O.3: 75% DAP + 100% NK + ST/SD with nano DAP + 1st Foliar spray with nano DAP 4 mL/L water at tillering stage and 2nd foliar spray at panicle initiation stage
Seed treatment (ST)	Nano DAP @ 5 mL/kg seed
Seedling dippling (SD)	Nano DAP @ 5 mL/L water
Source of technology	ICAR-RCER, Patna : Annual Report 2021
No. of trial	10
Detail of critical input	Nano DAP
Cost of individual input	Rs. 600 / 500 mL
Performance indicator to be recorded	(i) Soil data before and after (pH, EC, OC, NPK,) (ii) Technical indicator (No. of tillers, effective tillers, grains per panicle, yield (Q/ha) (iii) Economic indicator (Cost of cultivation, gross return, net return, B:C ratio)

OFT 4: (Soil Sc.)

Crop	Chickpea
Season	Rabi
Problem	Low yield of chick pea
Main cause	Injudicious use of fertilizers
Title of OFT	Assessment of efficacy of nano DAP and biofertilizers on crop growth and grain yield
Thematic area	Natural Resource Management
Farmer practice	RDF (20:40:0) kg/ha
Technology option selected for assessment	T.O. 1: Seed treatment with PSB, Rhizobium + RDF T.O. 2: 75% of RDF + foliar spray of nano DAP @4mL/L of water at branching stage T.O. 3: Seed treatment with PSB,Rhizobium + 50% of RDF + foliar spray of nano DAP @4mL/L of water at branching stage

Source of technology	**ZRS, Kalaburagi, Karnataka (2024)**
No. of trial	10
Detail of critical input	Rhizobium, PSB, Nano DAP
Cost of individual input	Nano DAP-Rs. 600 / 500 mL Rhizobium/PSB- Rs. 325/L
Performance indicator to be recorded	(i) Soil data before and after (pH, EC, OC, NPK) (ii) Technical indicator (Grain Yield (Q/ha), no. of plant/m,100 grain wt., no. of pod /plant, stover yield) (iii) Economic indicator (Cost of cultivation, gross return, net return, B:C ratio)

III. Front Line Demonstration (June to September 2024)

a) Front Line Demonstration

Sl. No	**Crop/ enterprises**	**Technology demonstration**	**Area (Ha)/unit**	**No. of Demonstration**
1	Nutritional Garden Kit	Improved varieties of vegetable/ fruit plants for Eradication of Malnutrition	100 unit	50
2	Mushroom	Mushroom Spawn (Oyster/ Button)	100 unit	100
3	Lentil	Seed and soil treatment by Trichoderma to manage wilt disease	8	20
4	Wheat	Battery operated Sprayer for Drudgery reduction	4	10
5	Seedling Tomato, Chilli, Brinjal, Cauliflower	Vegetable seedlings of HYV	5.0 ha	100
6	Maize (African Tal)	Fodder production for dairy cattle	100 unit	100
7	Vaccine	FM/BQ and FMD	200 dose	150
SCSP				
8	Poultry	Khagadnath	700 No.	50
9	Goatry	Black Bengal	20 No.	20
10	Fruit Plan	Mango and Guava	20 unit	50
11	Poultry	Vanraj & Gram Priya	600 No.	6

FLD Animal science (2023)

Farming Situation and Purpose	**Enterprises**	**No. of Unit**	**Animal / poultry (No.)**	**Critical Inputs**	**Total Cost**	**Technology**	**Farmers Contribution**	**KVK Contribution (Rs)**
1. To increasing milk production through feeding of green fodders in cattle	Cattle	50	100	Jai (Oat) seeds	17000/-	-do-	-	17000/-

2.Sorted semen straw	Cattle	20	20	Sorted semen	20000/-	-do-	-	20000/-

b) Cluster Front Line Demonstration:

Sl. No.	Crop	Variety	Technical Intervention	Sown Area(ha)
1	Mustard	RH-725	Cluster frontline demonstration	200

c) Demonstration under Climate Resilient Programme (Kharif 2024)

Crop	Intervention	Village					Total Area (acre)
		Korma (Old)	Chhapana (Old)	Kurtha (New)	Kalanor (New)	Marsua (New)	
		Area (acre)	Area (acre)	Area (acre)	Area (acre)	Area (acre)	
Arhar	Raised Bed	4	4	13	17	12	50
Groundnut	Raised Bed	0	0	25	25	30	80
Maize	Raised Bed	5	10	20	15	20	70
Finger millet	Raised Bed	20	10	15	10	10	65
Rice	Direct Seeded Rice(DSR)	10	10	10	10	10	50
Rice	Nutrient Expert/Green seeker/INM	30	30	30	20	15	125
Rice	Field bunding & water harvesting	10	10	5	5	10	40
Rice	Alternate wetting and drying (AWD)	20	20	20	20	15	95
Rice	Community Irrigation	20	0	0	0	0	20
Total							595

IV. Extension Activities

Nature of Extension Activity	**No. of activities**
Field Day	5
Exposure visit	10
Kisan Mela	02
Kisan Ghosthi & Kishan Chaupal	5
Exhibition	04
Workshop	04
Advisory Services	500
Scientific visit to farmers field	300
Farmers visit to KVK	1000
Diagnostic visits	100
Animal Health Camp	2
Video Conferencing	16
Flagship programme	4

KRISHI VIGYAN KENDRA, KATIHAR

Report of 26th Extension Education Council Meeting
(From October 2023 to May 2024)

1. **Achievement of Training Programme :**

A. Training programme for Practicing Farmers/Farm women/ Rural Youth/ Extension functionaries:

Discipline	No. of Courses	No. of Participants											
		Others			SC			ST			Grand Total		
		M	F	T	M	F	T	M	F	T	M	F	T
Crop production	35	607	129	736	111	83	194	60	19	79	778	231	1009
Horticulture	22	348	262	610	48	17	65	10	3	13	406	282	688
Home Science	16	115	177	292	14	85	99	14	8	22	143	270	413
Extn. Education	35	643	168	811	79	65	144	70	61	131	792	294	1086
Plant Protection	17	354	98	452	149	98	247	57	29	86	560	225	785
Total	125	2067	834	2901	401	348	749	211	120	331	2679	1302	3981

2. **Sponsored training programme**

Sl. No.	Training programme	Duration	No. of Participants	Sponsoring agency
1	Rabi Cropdiscussion & millets production	16.10.2023	35	DAO, Katihar
2	Renewal Energy	12.10.2023	52	BREDA, Patna
3	Scientific culativation of Mushroom	04.10.2023	71	Horticultural Deptt, Katihar
4	Sabji ki Jaivik Kheti	05.10.2023	62	DAO, Katihar
5	Sabji ki Jaivik Kheti	12.10.2023	44	DAO, Katihar
6	Scientific cultivation of Rabi vegetable	14.10.2023	225	DAO, Katihar
7	Scientific cultivation of Rabi vegetable	16.10.2023	53	ATMA, Katihar
8	Scientific cultivation of Rabi vegetable	20.10.2023	95	ATMA, Katihar
9	Scientific cultivation of Rabi vegetable	25.10.2023	105	ATMA, Katihar
10	Scientific cultivation of Rabi vegetable	29.10.2023	98	ATMA, Katihar
11	cultivation of Rabi Crop	01.11.2023	26	DAO, Katihar
12	Scientific cultivation of Rabi vegetable	02.11.2023	76	ATMA, Katihar
13	Value addition of maize for agriculatural Marketing	28.11.2023 to 30.11.2023	30	NIAM, Jaipur

14	Nursery Management in Vegetable	06.12.2023	650	ATMA, Katihar
15	Scientific Cultivation of Brocceli	07-08.12.2023	58	ATMA, Katihar
16	Scientific Cultivation of Mushroom	09-10.12.2023	81	ATMA, Katihar
17	Cultivation of maize	24.01.2024	55	Pioneer, Katihar
18	Nutrient Management in maize	16.01.2024	40	Iffco, Katihar
19	Processing Technique of Makhana	23-24.01.2024	200	ATMA, Katihar
20	Training for Stock Holder dealers	03.01.2024	36	ATMA, Katihar
21	Training for Pesticides	05.01.2024	35	ATMA, Katihar
22	Insecticide act and their principle and their utility	05.01.2024	32	ADPP, Katihar
23	Scientific cultivation of summer season vegetable	06.02.2024	500	ATMA & Udyan Deptt. Katihar
24	Beekeeper	30.03.2024	30	BSDM, Katihar
25	Sabji ki Jabik kheti	16.03.2024	104	DAO, Katihar
26	Sabji ki Jabik kheti	19.03.2024	85	DAO, Katihar
27	District level Kharif Workshop	30.05.2024	47	ATMA, Katihar

3. Special Days Celebrated:-

Sl.No.	Date	Activity	No. of Participants
1.	02.10.2023	Gandhi Jayanti (2nd Oct.)	34
2.	15.10.2023	Mahila Kisan Diwas (15th Oct.)	38
3.	16.10.2023	World Food Day (16th Oct.)	30
4.	27.10-02.11.2023	Vigilance Awareness Week	49
5.	31.10.2023	National Unity Day (31st Oct.)	28
6.	10.11.2023	World Science Day (10th Nov.)	51
7.	11.11.2023	National Education Day (11th Nov.)	46
8.	15.11.2023	Janjatiya gaurav diwas	26
9.	26.11.2023	National Constitution Day (26th Nov.)	24
10.	05.12.2023	World Soil Day (5th Dec.)	29
11.	23.12.2023	Kisan Diwas (23rd Dec.)	44
12.	26.01.2024	Republic day (26th Jan.)	35
13.	08.03.2024	International Women's Day (8th Mar.)	40

4. RAWE Programme

Type of attachment	No of student trained	No of days stayed
RAWE	10	140
RAWE	04	30
RAWE	08	Till now

OFT:-

. **OFT (Horticulture)**

- **Thematic area:** IDM
- **Problem definition/Name of OFT: Measures to management of Panama Wilt of Banana.**

1.	Title of On farm Trial (OFT)	**Measures to management of Panama Wilt of Banana.**
2.	Problem diagnosed	Heavy lossewss in Banana due to Panama Wilt diseses
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	TO_1-Farmer Practices (Tissue Culture plants) TO_2- Application of Sabour Trichoderma 1@10 gm /litre of water (Drenching th soil near root zone in standing crop) TO_3- Application of ICAR Fusicont @10 gm/liter of water (Drenching th soil near root zone in standing crop)
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	BAU, Sabour
5.	Production system and thematic area	Banana- Banana and IDM
6.	Performance of the Technology with performance indicators	Disease (%), Yield q/ha, Net return, B:C ratio
7.	Final recommendation for micro level situation	TO3- Application of ICAR Fusicont @10 gm/liter of water recommende for control Panama Wilt.
8.	Constraints identified and feedback for research	Heavy lossess in Banana & Panama Wilt diseses
9.	Process of farmers participation and their reaction	Good for farmers

Table No. 1: Effect of trichorderm to control Panama Wilt of Banana

Treatments	**% Wilt incidence**			**Mean Wilt incidence**
	5th months	**7th months**	**9th months**	
TO_1-Farmer's Practice	**8.52**	**13.26**	**17.55**	**15.63**
TO_2- Application of Sabour Trichoderma 1@10 gm /litre of water	**2.25**	**4.20**	**5.95**	**8.43**
TO_3- Application of ICAR Fusicont @10 gm/liter of water	**2.45**	**3.90**	**4.98**	**8.01**

Thematic area	**Technology options with detailed treatments**	**Yield (q/ha)**	**Cost of cultivation (Rs./ha)**	**Gross return (Rs/ha)**	**Net return (Rs./ha)**	**BC ratio**
IDM	TO_1-Farmer's Practice	202.8	91000.00	202800.00	11180.00	2.22
IDM	TO_2- Application of Sabour Trichoderma 1@10 gm /litre of water	281.90	94550.00	281900.00	187350.00	2.98
IDM	TO_3- Application of ICAR Fusicont @10 gm/liter of water	342.20	95550.00	342200.00	246650.00	3.58

OFT (Horticulture)

Thematic area: IPM

Problem definition/Name of OFT: Assessment of fruit bagging in Guava for quality improvement

1.	**Title of On farm Trial (OFT)**	**Assessment of fruit bagging in Guava for quality improvement**
2.	Problem diagnosed	Guava- Guava
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	TO_1-Farmer Practices (No Bagging) TO_2- Papper Bagging TO_3- Cellophone bag cover
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	BAU, Sabour, Bhagalpur
5.	Production system and thematic area	IPM
6.	Performance of the Technology with performance indicators	Day of maturity, Fruit fly, Damage (%), Disease incidence(%), Physical Damage (%), Fruit Weight (gm), Appearance Pulp colour, Shelf life (days).
7.	Final recommendation for micro level situation	TO_3- Cellophone bag cover recommendate for farmer
8.	Constraints identified and feedback for research	quality improvement for guava
9.	Process of farmers participation and their reaction	Good

Table 1: Effect of fruit bagging for yield and quality improvement in Guava

Treatments	**Days to Maturity (Days)**	**Fruit Weight (g)**	**No of fruits per Tree**	**Yeild Tree (kg)**	**Yield (t/ha)**	**No. of fruit damage by fruit fly**	**Damaged by Fruit Fly (%)**	**No. of fruit infected by diseases**	**No. of fruit infected by diseases (%)**	**No. of physical damage of fruit**	**No. of physical damage of fruit (%)**	**Shelf life (Days)**
TO_1-Farmer's Practice (No Bagging)	120.84	248.96	60.54	15.07	15.07	12.36	20.41	8.39	13.84	6.18	10.21	08.10
TO_2-Papper Bagging	95.89	289.95	65.42	18.97	18.96	4.56	07.11	3.64	5.56	3.12	4.74	10.50
TO_3-Cellophone bag cover	90.64	269.14	68.28	20.22	20.21	2.48	03.36	2.08	3.05	2.11	3.05	12.20

Table 2: Economics of Guava Cultivation

Thematic area	Technology options with detailed treatments	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return(Rs./ha)	BC ratio
IPM	TO_1-Farmer's Practice (No Bagging)	150.7	150000.00	452100.00	302100.00	3.01
IPM	TO_2- Papper Bagging	189.6	180000.00	948000.00	768000.00	5.27
IPM	TO_3- Cellophone bag cover	202.1	190000.00	1010500.00	820500.00	5.32

OFT (Agronomy)

- **Thematic area:** INM
- **Problem definition/Name of OFT:** Improvement of nitrogen use efficiency in Paddy

1.	Title of On farm Trial (OFT)	Improvement of nitrogen use efficiency in Paddy
2.	Problem diagnosed	Excessive use of chemical fertilizer and spiraling price of urea increase in cost of cultivation
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	FP : RDF (100:40:20 N:P:K) kg/ha TO_1: 50% RDN& 100 % PK + Nano urea @ 4ml/lit. water (Single spray at Pre flowering stage) TO_2: 50% RDN& 100 % PK + 2 spray of Nano urea at 25-30 DAS and 60-65 DAS Nano urea @ 4ml/lit. water
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	BAU, Sabour, Bhagalpur (OFT Workshop)
5.	Production system and thematic area	Paddy-wheat and INM
6.	Performance of the Technology with performance indicators	No. of tillers/m^2, Test weight (gm), grain yield (q/ha) gross return (Rs/ha), net return(Rs/ha),BC ratio.
7.	Final recommendation for micro level situation	TO_2: 50% RDN& 100 % PK + 2 spray of Nano urea at 25-30 DAS and 60-65 DAS Nano urea @ 4ml/lit. water recommendate for farmers
8.	Constraints identified and feedback for research	Excessive use of chemical fertilizer
9.	Process of farmers participation and their reaction	Good

Thematic area	Technology options with detailed treatments	Area (ha in crop & Fodder)/ Nos (in livestock)		Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Proposed	Actual					
INM	FP : RDF (100:40:20 N:P:K) kg/ha	0.1	0.1	36.47	25100	76614	51514	2.83
INM	TO_1: 50% RDN&	0.1	0.1	39.28	28600	85748	57148	3.01

	100 % PK + Nano urea @ 4ml/lit. water (Single spray at Pre flowering stage)							
INM	TO_2: 50% RDN& 100 % PK + 2 spray of Nano urea at 25-30 DAS and 60-65 DAS Nano urea @ 4ml/lit. water	0.1	0.1	40.84	29200	89153	59953	3.05

OFT (Extension Education)

1.	Title of On farm Trial (OFT)	Assessing the Extension Education Methods for awareness and use of Soil Health Card
2.	Problem diagnosed	
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	FP: Without Extension Education Methods TO_1: Farmers having SHC with Training Literature TO_2: Farmers having SHC with Customized Social Media Advisory TO_3: Farmers having SHC with Training Literature and Customized Social Media Advisory
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	ATARI zone IV OFT workshop
5.	Production system and thematic area	**Capacity Building**
6.	Performance of the Technology with performance indicators	1. Knowledge related to SHC 2. Change in Awareness level with respect to use of SHC 3. Adoption of Recommended Practice in relation to SHC 4. Data related to Extension Efficiency Parameter

Table- 1 : distribution of respondents according to level of knowledge on SHC

Technological Option	Low(0-14 Score)		Medium (15-29Score)		High (30-44 Score)	
	f	%	f	%	f	%
Farmer's Practice	18	90	2	10	0	0
TO_1	4	20	12	60	4	20
TO_2	2	10	12	60	6	30
TO_3	2	10	3	15	15	75

Table-2: Distribution of respondent according to extent of adoption

Technological Option	Low(0-16 Score)		Medium (17-33Score)		High (34-50 Score)	
	f	%	f	%	f	%
Farmer's Practice	17	85	3	15	0	0
TO_1	4	20	14	70	2	10

TO_2	3	15	11	55	6	30
TO_3	2	10	5	25	13	65

Table-3: Distribution of respondent according to awareness about SHC

Technological Option	Fully Aware (41-60 Score)		Aware (21-40 Score)		Not Aware (0-20 Score)		Use of SHC	
	f	%	f	%	f	%	f	%
Farmer's Practice	2	10	4	20	14	70	4	20
TO_1	4	20	9	45	7	35	6	30
TO_2	7	35	8	40	5	25	8	40
TO_3	13	65	6	30	1	5	14	70

Achievement of Front Line Demonstrations:

A. Details of FLDs conducted during the year 2023

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Ragi	Millets Production Technology	Seed (VLM-376)	10	6.25	20.5	16.0	28.12	33,630	88,500	54,870	2.63:1	30,500	68,500	38,000	2.25:1
Sorghum	Millets Production	Seed (CSV-15)	10	04	24.65	21.34	14.05	23500	70992	47492	3.02	22800	61459	38659	2.70
Pearl Millets	Millets Production	Seed (MPMH-21)	10	04	28.75	23.80	20.79	21700	66125	44425	3.04	21300	54740	33440	2.56
Proso Millet	Millets Production	Seed (TNAU-202)	10	04	19.36	15.16	27.7	16000	61952	45952	3.80	16000	48512	34512	3.03
Bottle Gourd	Vegetable Production Technology	Seed (Narendra rashmi)	10	03	334	269	24.16	80500	334000	253500	4.15	68000	269000	201000	3.69

Sponge Gourd	Vegetable Production Technology	Seed (Rajendra Nanua-1)	20	03	251	201	24.87	81200	376500	285300	4.64	69500	301500	232000	4.33
Jute	Weed Management	Weedicide (Pendimethaline)	10	4	26.22	20.19	29.86	18090	78660	60570	4.3	16800	61620	44820	3.6

CFLD Achievement

Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	Area (ha)	Yield (q/ha)		% increase	Economics of Demonstration (Rs/ha)			Economics of Check (Rs/ha)		
					Demo	Check		Gross Return	Net Return	BCR	Gross Return	Net Return	BCR
Mustard	Oil seed production	**Musatrd RH-761** Seed Treatment,(carbendazim) INM(Multi micronutrients), IWM (Pendimethalin)	50	20	17.15	12.54	36.76	86607	62808	3.64	63327	40977	2.83
Green gram	Pulse Production	**Green gram** Seed var. IPM 205-7 ,Seed, Treatment,(Carbendazim) INM(Multi micronutrients), IWM (Pendimethalin)	50	20	9.41	6.18	52.26	63162	45262	3.52	49135	32035	2.87
Black gram	Pulse Production	**Blackgram** Seed var. KPU 07-08 Seed, Treatment,(Carbendazim) INM(Multi micronutrients), IWM (Pendimethalin)	50	20	8.73	6.28	39.01	51348	33448	2.86	41448	25048	2.54

Natural Farming:

Training programme

Sl. No	Date	Place		Male	Female	Extension Worker	Grand Total
		Village	Block				
1	17.10.2023	Falka	Falka	27	03	1	31
2	03.11.2023	Azamnagar	Azamnagar	27	01	2	30
3	04.12.2023	KVK, Katihar	Katihar	20	00	0	20
4	22.12.2023	Ramchandarpur	Pranpur	28	00	2	30
5	05.01.2024	Purvi Chandpur	Sameli	12	34	1	47
6	13.02.2024	Hawai Adda	Katihar	21	00	1	22
7	21.03.2024	KVK, Katihar	Katihar	22	00	0	22
8	28.03.2024	KVK, Katihar	Katihar	08	17	0	25
9	29.03.2024	Bisunpur	Mansahi	18	22	1	41
10	08.05.2024	Mahinathpur	Korha	07	13	0	20
Total				**190**	**90**	**8**	**288**

Awareness programme

Sl. No	Date	Place		Male	Female	Extension Worker	Grand Total
		Village	Block				
1	05.12.2023	KVK, Katihar	Katihar	54	41	1	96
2	14.12.2023	Ratanpur	Manihari	34	1	0	35
3	21.12.2023	Lalganj	Pranpur	15	19	0	34
4	05.01.2024	Purvichandpur	Sameli	5	41	1	47
5	06.01.2024	Muradpur	Sameli	9	13	0	22
6	09.01.2024	Kursela	Kursela	26	14	1	41
7	11.01.2024	Bhangha	Falka	37	0	1	38
8	14.01.2024	Hatwara	Falka	25	0	0	25
9	17.01.2024	Musapur	Korha	26	11	1	38
10	21.01.2024	Bisunpur	Korha	26	9	1	36
11	23.01.2024	Batheli	Dandkhora	31	8	1	40
12	25.01.2024	Survasa	Katihar	30	1	0	31
13	16.02.2024	Lahsa	Mansahi	25	2	1	28
14	05.03.2024	Baharkhal	Korha	31	7	2	40
15	21.05.2024	Vinodpur	Korha	41	3	1	45
Total				**415**	**170**	**11**	**596**

Natural Farming performance at KVK, Farm (Area 1 acre)

Year	Season	Crop	Variety	Production (q/acre)		Remaks
				Demonstration	Local check	
2023-24	Rabi	Wheat	DBW 187	10.32	13.27	

Farmers List of Natural Farming Demonstration (Kharif, Rabi & Summer)

Farmer's Name	Block	Vill	Mobile No.
Sri shashi Kumar Sinha	Mansahi	Vishunpur	8809854986
Lili Marandi	Manihari	Neema	7763022163
Bajji Murmu	Manihari	Harlajori	7070473560
Mukesh Kumar Choudhary	Barari	Mohnachanpur	93045502055
Mukesh Kumar	Barari	Mohnachanpur	7979889500
Bhola Prasad Mandal	Pranpur	Budh nagar	8873649177
Budhan Lal Tudu	Mansahi	Mohanpur	8541930880
Raju Mahto	Barari	Sardar Nagar	6705255266
Ram Lal Mahto	Barari	Sardar Nagar	8757559072
Bijadhar Mahto	Barari	Sardar Nagar	8292516590
Mithun Kumar	Hasanganj	Dehar ganj	7070821390
Diwakar Kumar Sinha	Mansahi	Vishnupur	6203121496
Punchlal Mandal	Sameli	Bakhari	9771362420
Baijnath Mahto	Sameli	Bakhari	9342093216
Ganesh Ram	Sameli	Bakhari	7870161124

A. Eradication of Malnutrition:

1. Awareness Programme

Sl. No.	Date	Place/ Village	No. of Beneficiaries		Total
			Male	Female	
1.	06.10.2023	Bastaul	02	24	26
2.	05.10.2023	Raniganj	01	23	24
3.	03.11.2023	Lakhpha	14	06	20
4.	02.04.2024	Batheli	12	10	22
5.	06.04.2024	Batheli	13	12	25

2. Baseline Survey :

Sl. No.	Name of Village/Tola	No. of people surveyed		Total
		Male	Female	
1.	Batheli	5	5	10
2.	Barjhalla	23	17	30

B. Millet Promotion activities :

1. Awareness Programme

Sl. No.	Date	Place/ Village	No. of Beneficiaries		Total
			Male	Female	
1.	16.10.2023	Katihar	33	2	35
2.	06.11.2023	Baharkhal	30	00	30

2. Capacity Building

Sl. No.	Topic Name	Date	No. of Beneficiaries	
			Male	Female
1.	Nutraitional Value of Millets & Laddu Preparation	05.10.2023	1	23
2.	Scientific Cultivation of Millets	20.12.2023	12	04
3.	Grain storage technique on millets	12.01.2024	35	0

Climate Resilient Agriculture (CRA)
CRA Kharif – 2023 Result

Crop	Variety	Technology	Area (acre)	Grain Yield (Q/ha)		Net Return		B:C Ratio	
				Demo	Local Check	Demo	Local Check	Demo	Local Check
Paddy	**Arize 6444Gold, 27P31, 27P37, Arize 6129 Gold, Arize Tej Gold, MC 13 , MR 8383, Swarna Sub -1**	DSR	400	48.42	36.18	76601	50681	3.63	2.79
	PAC 8744, BB 11, Rajendra Bhagwati	AWD	30	46.93	36.05	73348	50197	3.52	2.76
	MTU 7029, Rajendra Sweta,	FD& WH	30	44.46	35.98	66756	49444	3.20	2.70
	MR 8383, Swarna Sub - 1, BB 11	INM	46	45.70	36.12	70363	50150	3.39	2.75
Maize	**P3377,DKC 7074, DKC 9144,PAC 751**	Raised bed	90	74.14	65.23	100141	84480	3.60	3.25
Sorghum	**CSV -15**	Raised Bed	4	28.62	23.65	45534	32987	2.36	2.02
Foxtail millet	**SIA 3156**	Line sowing	15	12.75	10.13	22149	14842	2.28	1.90
Finger millet	**CFMV-1**	Line sowing	12	21.65	18.25	50612	40330	3.25	2.89
Pearl millet	**HHB 272**	Raised bed	8	32.16	24.36	48860	33210	3.08	2.54
Groundnut	**JL 24**	Raised Bed	4	15.38	12.52	50559	35886	2.45	2.07
Soybean	**P-1241**	Raised Bed	4	17.2	13.14	43340	29403	2.76	2.31

KVK Farm

Type of seed produced	Variety	Quantity of seed (q)
Wheat	HD-2967	53
Paddy	Sabour Shree	67.76
Makhana	Sabour Makhana-1	43.5
Seedlings of different vegetables	-	10000

Skill development Training Programme

Job role	Title of the training	Duration (in hrs.)	No. of candidates
Vermi compost (RPL)	Vermi compost producer	80	30
Beekeeper (RPL)	Beekeeper	80	30

Viksit Bharat Sankalp Yatra

Date	Name of Gram Panchaya	Male	Female	Total
06.12.2023	Saheb Nagar	56	18	74
07.12.2023	bharmara	45	05	50
	Chaitauiriya	72	8	80
08.12.2023	Dhuriyahi	58	4	62
	Dilalpur	32	6	38
09.12.2023	Baghmara	156	47	203
	Bauliya	188	19	207
10.12.2023	rajbara, Rautara	1165	285	1450
11.12.2023	Bagjaar	137	48	185
	Dakshnik kasha kosh	165	23	188
12.12.2023	Neema, Uttar kanta kosh	385	35	420
13.12.2023	Fatehnagar	127	33	150
	Kumaripur	85	15	100
14.12.2023	Manoharpur	200	40	240
	Narayanpur	160	45	205
15.12.2023	Amadabad Nagar Panchayat	75	25	
	Manihari Nagar Panchayat	87	17	100
16.12.2023	Baida, Janlatal	150	15	165
		105	20	125
17.12.2023	lakhanpur, bariya	159	76	235
18.12.2023	Kadwa	150	30	180
	Kursel	160	50	210
19.12.2023	Sikrona	140	30	170
	Kantia	155	35	190
20.12.2023	Pahlagarh	190	35	225
	Bhogao	165	25	190
21.12.2023	Daksini Lalganj	255	55	310
	Uttari Lalganj	230	45	275
	Gouripur	185	22	207
22.12.2023	Kewla , Pranpur. Kathghar	360	125	485

23.12.2023	Dharhan Pranpur	185	35	220
24.12.2023	Kehunia, Sahja	350	175	525
25.12.2023	Barjhalla, Bastaul	625	230	855
26.12.2023	West barinagar Barari East Barinagar Barari	650	300	950
27.12.2023	Dakshini bhandartal Uttari Bhandhartal Gurumela	280 350 100	70 50 120	350 400 220
28.12.2023	Kalikapur Bazar Sujapur Kantnagar	400 250 375	200 50 125	600 300 500
29.12.2023	Rainiya Sikat	300 250	100 50	400 300
30.12.2023	Jagdishpur Bareta	300 400	100 100	400 500
31.12.2023	Gayahatta Shitmani	100 75	51 35	151 110

Other Extension Activities:
Kisan Mela
Kisan Mela under SCSP on 14-15 February,2024
PM Live Programme

Sl.No.	Date	Activity	No. of Participants
1.	15.11.2023	PM Live telecast	112
2.	09.12.2023	PM live for Vikshit Bharat sankalp yojana 2023	417
3.	16.12.2023	PM live for Vikshit Bharat sankalp yojana 2023	306
4.	27.12.2023	PM live for Vikshit Bharat sankalp yojana 2023	978

Extension Activities

Nature of Extension Activity	No. of activities	Total
Film Show	03	145
Kisan gosthi	06	178
Advisory Services	01	536
Scientist visit to farmers field	30	1145
Farmers visit to KVK	1354	1354
Exposure Visit	03	150

Status of Revolving Fund

Balance as on 31.03.2024	Kinds in hands	Total
33,06,461	16,79,520	49,85,981

Proposed Action Plan
(June to September 2024)

Training Programme:-

A. Training of Practicing Farmers/ Farm Women

Sl. No.	Discipline	No. of training Programme proposed	No. of Farmers
1.	Agronomy	08	240
2.	Extension Education	08	240
3.	Home- Science	10	300
4.	Horticulture	06	180
5	Plant protection	08	200

B. Training for Rural Youth

Sl. No.	Discipline	No. of training Programme proposed	No. of Farmers
1.	Agronomy	02	50
2.	Extension Education	02	50
3.	Home- Science	02	50
4.	Horticulture	02	50

C. Training for Extension Functionaries

Sl.No.	Discipline	No. of training Programme proposed	No. of Farmers
1.	Agronomy	03	75
2.	Extension Education	03	75
3.	Home- Science	03	75
4.	Horticulture	03	75

D. Vocational Training Programme

Thematic area	Course Title	Duration (days)	Venue off/on
Food security	Role of Millets in providing food security among Rural women	**1**	ON/OFF
Seed Production	Seed production of paddy	1	ON/OFF
Planting material Production	Techniques of Graft , gouty	1	ON/OFF
Seed Production	Seed Production technique of Potato	1	ON/OFF
Vermi culture	Vermi compost production	1	ON/OFF
Beekeeping	Entrepreneurship Development through Beekeeping	1	ON/OFF
Income generation	Income generation through Mushroom Production, Value addition of Agricultural Products and other small scale enterprises	1	ON/OFF
TOTAL		**7**	

Seed production at KVK Farm

Crop	Variety	Area(ha)
Wheat	HD-2967	2.0
Makhana	Sabour Makhana-1	1.8

Planting material production

Crop	Population
Mango	1000
Guava	1000
Litchi	1000
Vegetable seedling	50000

Frontline Demonstration

Sl. No	Season	Crop	Variety/Componenet	Area in ha.	No. of Demonstration
1	Summer	Jute	Pendimethline	08	20
2	Summer	Jute	Trichoderma viridi	04	30
3	Kharif	Okra	Kashi Kranti	0.5	10
4	Kharif	Fodder Sorghum	CSV-33MF	08	20
5	Kharif	Sorghum (Jwar)	CSV -15	04	10
6	Kharif	Azotobactor& P.S.B..(Paddy)	Azotobactor& P.S.B	04	10
7	Kharif	Pearl Millet (Bajra)	HHB-272	04	10
8	Kharif	Mushroom	Milky Mushroom	--	25
9	Kharif	Brinjal	Spinosad 5% SC	0.25	30
10	Kharif	Cowpea	Kashi Kanchan	0.5	10

Extension Activities

Name of Extension Activities	No.	Participants
Field Day	8	280
Kisan Ghosthi	3	280
Exhibition	2	200
Farmers Seminar	1	100
Workshop	1	150
Scientific visit to farmers field	85	850
Farmers visit to KVK	3500	3500
Exposure visits	2	100
Ex-trainees Sammelan	2	70
Self Help Group Conveners meetings	2	80
Celebration of important days	5	250

KRISHI VIGYAN KENDRA, KHAGARIA

Report of 26th Extension Education Council Meeting
(From October 2023 to May 2024)

1. Achievement of Training Programme

A .Practicing Farmers and Farm Women :-

Sl. No.	Discipline	Duration (Days)	No. of Courses	No. of Beneficiaries					
				Others		SC / ST		Total	
				M	F	M	F	M	F
1	Agronomy	36	36	877	151	180	52	1057	203
2	Plant Protection	49	49	1054	765	378	57	1432	822
3	Horticulture	07	07	122	46	02	09	124	55
4	Ag. Engg.	11	09	245	43	41	12	290	55
TOTAL		**103**	**101**	**2298**	**1005**	**601**	**130**	**2903**	**1135**

B. Rural Youth :-

Sl.No.	Discipline	Duration (Days)	No. of Courses	No. of Beneficiaries					
				Others		SC / ST		Total	
				M	F	M	F	M	F
1	Agronomy	14	06	93	47	45	40	138	87
2	Plant Protection	32	08	155	22	34	61	189	83
3	Horticulture	05	02	22	09	15	22	37	31
4	Ag. Engg.	03	01	13	01	02	05	14	07
TOTAL		**54**	**17**	**283**	**79**	**96**	**128**	**378**	**208**

C. Extension Functionaries:-

Sl.No.	Discipline	Duration (Days)	No. of Courses	No. of Beneficiaries					
				Others		SC / ST		Total	
				M	F	M	F	M	F
1	Agronomy	12	04	156	08	20	40	176	48
2	Plant Protection	03	03	134	12	06	02	140	14
3	Horticulture	02	02	01	72	0	15	01	87
TOTAL		**17**	**9**	**291**	**92**	**26**	**57**	**317**	**149**

SCSP

SL. No.	Date	Place	Topic	No. of Beneficiaries	
				SC / ST	
				M	F
1	12.02.2024	Sansarpur	Scientific Cultivation of vegetable crops	0	18
2	13.02.2024	Gouchhari	Scientific Cultivation of vegetable crops	9	16
3	27.02.2024	KVK	Scientific Cultivation of poultry farming	24	23
4	29.02.2024	Khagaria	Scientific Cultivation of Goat farming	21	9
5	04.03.2024	Gouchhari	Management and practices of Goat farming	15	8
6	28.03.2024	Gouchhari	Management and practices of backyard poultry farming	14	6
TOTAL				**83**	**80**

D. Sponsored Training Programmes

S.N	Title	Thematic area	Month	Duration (days)	Client	No. of courses
					PF/RY/EF	
01	Mushroom Production	Entrepreneurship	Nov	01	EF	01
02	Honey Bees	Entrepreneurship	Jan	03	RY	03
03	Honey Production	Crop Management	Jan	03	RY	03
04	Scientific Cultivation of Maize	Cropping System	April	03	EF	01
TOTAL				**10**		**08**

S.N	Title	No. of Participants								Sponsoring Agency
		Male			Female			Total		
01	Mushroom Production	35	08	-	12	05	-	47	13	ADH Horticulture
02	Honey Bees	20	05	-	13	22	0	33	27	Horticulture ADHO
03	Honey Production	20	05	-	13	22	0	33	27	Horticulture ADHO
04	Scientific Cultivation of Maize	86	06	-	05	02	-	91	08	ATMA
TOTAL		**161**	**24**	**0**	**43**	**51**	**0**	**204**	**75**	

CLIMATE RESILIENT AGRICULTURE (CRA)
Achievements and yield result of *Kharif*

Sl. No.	Name of Crop	Variety	Intervention	Target area (acre)	Achieved area (acre)	No. of Beneficiaries	Grain yield (q/ha)		% increase in yield
							Demo	Check	
1.	Paddy	Sabour Sampann	DSR	350	350	366	47.68	39.24	21.5
			AWD	50	50	50	47.69	39.24	21.53
			WH & FB	50	50	50	47.96	39.24	22.5
			Nutrient expert/Green seeker/INM	44	44	44	47.85	39.24	21.94
2.	Maize	Warrior	Raised Bed	50	50	100	39.65	35.35	12.16
3.	Millet	RAU-1	Zero Tillage	50	50	60	12.10	9.85	
Total area (in acre)									

CLIMATE RESILIENT AGRICULTURE (CRA)

Achievements and yield result of *Rabi*

S. No.	Name of Crop	Variety	Intervention	Target area (acre)	Achieved area (acre)	No. of Beneficiaries	Grain yield (q/ha)		% increase in yield
							Demo	Check	
1.	Wheat	HD- 2967	Zero Tillage Technology	350	350	415	46.91	42.18	11.21
2.	Wheat	HD- 2967	INM/Green seeker based	70	70	80	47.72	42.18	13.13
3.	Lentil	IPL-316	Zero Tillage Technology	50	50	59	10.67	9.21	15.85
4.	Mustard	RH-725	Zero Tillage Technology	43	43	54	13.26	11.89	11.52
5.	Potato	K-Khayati	Raised Bed Planting	10	10	200	192.37	172.2	11.71
6.	Maize	Bahubali	Raised Bed Planting	100	100	200	95.50	84.71	13.46
Total area (in acre)				**623**	**623**	**1008**			

Achievements (Summer 2024)

Sl. No.	Crop	Technology	Variety	Achieved Area (Acre)	Beneficiaries
1	Green Gram (Moong)	Zero Tillage	IPM-410-03	200	292
2	Till	Zero Tillage	GT-06	60	80
TOTAL			260	260	372

Capacity Development Program (October, 2023 - May, 2024)

S. No.	Capacity Development Program	Target		Achievement	
		No. of Programs	No. of Beneficiaries	No. of Programs	No. of Beneficiaries
1.	Training Program	25	1059	25	1059
2.	Field Day	08	309	8	309
3.	Exposure visit within District	09	381	9	381
4.	Exposure visit within State	09	458	9	458
5.	Interstate Exposure visit	02	9	2	9
6.	Other, if any (ATMA)	05	250	5	250
Total		58	2493	58	2493

Natural Farming

Awareness Programme

Sl.No	Date	Name of Village	No. of Beneficiaries		Grand Total
			Male	Female	
1.	23.11.2023	KVK Campus	33	10	43

2.	30.11.2023	KVK, Khagaria	45	11	56
3.	01.12.2023	Alauli	298	34	332
4.	02.12.2023	Sonmanki	288	89	377
5.	03.12.2023	Beldour	175	71	246
6.	04.12.2023	Bisanpur	368	35	403
7.	07.12.2023	Badlaghat	149	51	200
8.	10.12.2023	Sonvarsha	166	89	255
9.	11.12.2023	Borna	135	70	205
10.	12.12.2023	Rani sakarpura	87	288	375
11.	13.12.2023	Rahimpur	154	178	332
12.	30.12.2023	Gouchhari	372	28	400
13.	31.12.2023	Meghouna	298	212	510
14.	04.01.2024	Pansalwa	185	117	302
15.	03.01.2024	Deotha	98	113	211
16.	08.01.2024	Sansarpur	99	87	186
17.	09.01.2024	Sitadatpur	82	122	204
18.	06.01.2024	Rampur	78	105	183
19.	11.01.2024	Alouli	99	73	172
20.	12.01.2024	Baltara	244	62	306
21.	13.01.2024	Parwatta	155	137	292
22.	11.01.2024	Kulharia	61	0	61
23.	12.01.2024	Khajraitha	70	0	70
24.	25.01.2024	Kolwara	49	0	49
25.	03.02.2024	Borna	70	04	74
26.	06.02.2024	Imli	31	0	31
27.	28.02.2024	Sonihar	34	02	36
28.	22.03.2024	Fultora	168	132	300

Training Prog.

Sl.No	Date	Name of Village	No. of Beneficiaries		Grand Total
			Male	Female	
01	21.11.2023 to 22.11.2023	KVK, Campus	32	-	32
02	05.01.2024 to 06.01.2024	KVK, Campus	19	06	25
03	08.01.2024 to 09.01.2024	KVK, Campus	27	09	36
04	29.03.2024 to 30.03.2024	KVK, Campus	38	11	49

Eradication Of Malnutrition

Awareness Programme

Sl.No	Date	Name of Village	No. of Beneficiaries		Grand Total
			Male	Female	
1	12.01.2024	On Campus	35	0	35
2	09.01.2024	Sansarpur	40	10	50
3	07.02.2024	On Campus	10	15	25
4	06.03.2024	Sansarpur	18	34	52
5	05.04.2024	Sansarpur	17	13	30
6	22.05.2024	On Campus	0	54	54
7	15.05.2024	On Campus	0	15	15

HRD Prog.

Sl. No.	Name of Prog.	Name of Person & Designation	Date & Duration	Organised By
01	Annual Workshop of CRA	Sri Jitendra Kumar, SMS, Agronomy	12-13 April, 2024, 02 Days	BAU, Sabour
02	Workshop on Natural Farming	Sri N.K.Singh, SMS, Plant Protection	13.04.2024	BAU, Sabour
03	Workshop on Malnutrition Eradication prog.	Smt. Rupam Rani, SMS, Horticulture	08-09.04.2024	BAU, Sabour
04	Natural Farming	Sri N.K.Singh, SMS, Plant Protection Smt. Rupam Rani (SMS, Horticulture)	10-15.03.2024	MANAGE, Hydrabad
05	Training cum exposure visit on " Rice Post Production Practices"	Sri Dhananjay Paswan Das, SMS, Ag. Engg.	13-15, March, 2024	IRRI, South Asia, Regional Center (SRAC)
06	Orientation prog. for newly recruited SMS	Sri Dhananjay Paswan Das, (SMS, Ag. Engg.) Smt. Rupam Rani (SMS, Horticulture)	18-22 March, 2024	BAU, Sabour
07	ICAR Sponsored short course on Crop diverfication & Utilization of crop waste to achieve climate resilient and agriculture and important in farmers income in fragile agri ecosystem	Smt. Rupam Rani (SMS, Horticulture)	15-25.01.2024	DRPCAU, Pusa

Literature

Sl. No.	Topic	Author Name	No.
01	Rasayanik evm jaiwik kheti ka prabal wikalp	Dr. Bipul Kr. Mandal, SS&Head N.K. Singh, (SMS, Plant Protection)	8000
02	Prakritik kheti me prayog hone wale wibhinna formulation banane wa prayog karne kee widhi	Dr. Bipul Kr. Mandal, SS&Head N.K. Singh, (SMS, Plant Protection)	
03	Tamatar Utpadan kee saral taknik	Dr. Bipul Kr. Mandal, SS&Head Rupam Rani, (SMS, Horticulture)	2000
04	Uddaniki fasallon me upyog hone wale oujar evm uskee mahatwapurna karya	Dr. B.K Mandal, S.S & Head Sri Jitendra Kumar (SMS Agro.)	2000
05	Jalwayu Parivartan ke badalte parivesh me Makke ki safal Kheti	Dr. B.K Mandal, S.S & Head Sri Jitendra Kumar (SMS Agro.)	2000
06	Kele ki unnat utpadan taknik	Dr. B.K Mandal, S.S & Head Sri Jitendra Kumar (SMS Agro.)	2000

3.Achievements of Front Line Demonstrations

(A) Horticulture

Sl.No	Crop	Season	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)
1	Banana	Kharif	Banana G-9	03	0.8	Awaited
2.	Banana	Kharif	PP Bag	10	0.5	Awaited
3.	Mango	Kharif	Regular bearing variety of	12	01 acre	Awaited

			Mango cultivation			

(A) Plant Protection

Sl. No	Crop	Season	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)
1	**Maize**	**Rabi**	**Thianethoxam + Lambdacyhalothrin**	**29**	**11.6**	**77.45**

(B) Cluster Frontline Demonstration on Oilseed

Crop Name	Season	Actual area (ha)	No. of farmers	Variety	Yield (q/ha)		
					Demo	Check	% Increase
Soybean	Kharif	20.00	50	PS-1241	13.60	10.70	27.10
Mustard`	Rabi	30.00	75	RH-725	12.10	8.90	35.95
Sunflower	Summer	20.00	50	KBSH-41	17.50	14.60	19.86

(C) Gramin Krishi Mausam Sewa (GKMS)

- AAS bulletins were prepared and disseminated to the farmers= **52**
- AAS bulletins were prepared using Agromet-DSS in English and regional languages
- **Modes of mass communication adopted for AAS dissemination:**

Sl.No.	Communication	Total number of Farmers benefited
1.	Whatsapp	3384
2.	Facebook	4095
3.	E-mail	Organization like- **AGWANPUR, SAHARSA, Sabour, ATARI Patna and IMD (ADSS)**
4.	Newspaper	Across the district
5	Model	Dissemination of information regarding project in different kisan Mela.

- Successfully conducted different awareness campaign on the topic Krishi/KisanMelas and also Damini rain and Meghdoot Alarm app among of Awareness programme on Meghdoot, and Rain Alarm app among the farmers of Khagaria District.
- Total number of Newspaper article= 06

Feedback taken from farmers related to AAB through Whatsapp video calling=**42**

D. RPL (Recognition Of Prior Learning) Training Programme

Year	Name of the Job role	Name of the certified Trainer of KVK for the Job role	Date of start of training	Date of completion of training	No. of participants	Whether uploaded to SDMS Portal (Y/N)	Status
2023-24	Bee Keeper	Sri N. K. Singh	16.10.2023	02.11.2023	29	Y	Completed

E. RPL (Recognition Of Prior Learning) Training Programme

Year	Name of the Job role	Name of the certified Trainer of KVK for the Job role	Date of start of training	Date of completion of training	No. of participants	Whether uploaded to SDMS Portal (Y/N)	Status
2023-24	Bee Keeper	Sri N. K. Singh	18.03.2024	18.04.2024	27	Yes	Completed

F. RPL (Recognition Of Prior Learning) Training Programme

Year	Name of the Job role	Name of the certified Trainer of KVK for the Job role	Date of start of training	Date of completion of training	No. of participants	Whether uploaded to SDMS Portal (Y/N)	Status
2023-24	Vermicompost Producer	Sri Jitendra Kumar & Sri Dipak Kumar Kanchan	29.03.2024	16.04.2024	30	Yes	Completed

G. ASCI (Agriculture Skill Council of India) Training Programme

Year	Name of the Job role	Name of the certified Trainer of KVK for the Job role	Date of start of training	Date of completion of training	No. of participants	Whether uploaded to SDMS Portal (Y/N)	Status
2023-24	Vermicompost Producer	Sri Jitendra Kumar & Sri Dipak Kumar Kanchan	20.03.2024	22.03.2024	40	Yes	Completed

4. Achievements on technologies assessed and refined

OFT :- 01 (Agronomy)

1.	Title of On farm Trial	Improvement of Nitrogen use efficiency in rice.
2.	Problem diagnosed	Excessive use of chemical fertilizer and Spiraling price of urea leads to increase in cost of cultivation
3.	Details of technologies selected for assessment/refinement	(a) **Farmer Practice:** RDF (100:40:20) Kg/ha (b) **Technological Option 1**: 50% of RDN & 100% PK + Nano urea @4ml/lt. water (Single spray at pre flowering stage). (c) **Technological Option 2:** 50% of RDN & 100% PK + 2 sprays of Nano Urea at (25 to 30 days) and (60-65 days) @ 4 ml/lt water.

4.	Source of Technology	BAU, Sabour
5.	Production system and thematic area	Nutrient Management
6.	Performance of the Technology with performance indicators	•Yield /ha •Economics analysis

Table :

Thematic area	Technology options with detailed treatments	Area (ha in crop & Fodder)		Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Proposed	Actual					
Nutrient Management	(a) **Farmer Practice:** RDF (100:40:20) Kg/ha	**1.00**	**1.00**	**40.60**	**30,200**	**81,200**	**51,000**	**2.68**
	(b) **Technological Option 1**: 50% of RDN & 100% PK + Nano urea @4ml/lt. water (Single spray at pre flowering stage).			**41.35**	**30,300**	**82,700**	**52,400**	**2.72**
	(c) **Technological Option 2:** 50% of RDN & 100% PK + 2 sprays of Nano Urea at (25 to 30 days) and (60-65 days) @ 4 ml/lt water.			**41.95**	**30,600**	**83,900**	**53,300**	**2.74**

Result :- Maximum yield (41.95 q/ha), net return (Rs. 53,300 /ha) and B:C ratio (2.74) was recorded with TO3.

OFT :- 02 (Agronomy)

1.	**Title of On farm Trial**	**Integration of fertilizer in different form on yield of Lentil.**
2.	Problem diagnosed	Injudicious use of chemical fertilizer.
3.	Details of technologies selected for assessment/refinement	TO_0 (Farmer Practice) - Seed treatment + RDF TO_1 - 50% of RDF + WS 19:19:19 @ 5gm./ltr water (Single spray at pre flowering stage) TO_2 – Seed treatment with PSB + Rhizobium, 50% of RDF + WS 19:19:19 @ 5 gm./ltr water (Single spray at pre flowering stage)

4.	Source of Technology	BAU, Sabour
5.	Production system and thematic area	Nutrient Management
6.	Performance of the Technology with performance indicators	•Yield /ha •Economics analysis

Table :

Treatment	No. Of Trial	Yield q/ha	Cost of cultivation	GR (Rs/ha)	NR (Rs/ha)	B;C ratio
TO_0	08	8.07	20250	41157	20907	2.03
TO_1	08	10.90	22450	55590	33140	2.47
TO_2	08	12.67	24650	64617	39967	2.62

Result :- Maximum yield (12.67 q/ha), net return (Rs. 39967 /ha) and B:C ratio (2.62) was recorded with TO_2.

OFT :- 03 (Plant Protection)

1.	**Title of On farm Trial**	**Assessment of management practices for Red Banded Caterpillar in Mango**
2.	Problem diagnosed	Heavy loss due to attack of Red Banded Caterpillar in mango
3.	Details of technologies selected for assessment/refinement	**F.P :-** Spray of Chlorpyriphos as and when symptoms appear **TO 1 :-**(a) Collection and destruction of all fallen fruits **(b)** Spray deltamethrin 0.0028 % (Deltamethrin 2.8EC@1ml/lit) at marble size and repeat after two weeks. **TO2 :-** Two sprays of Thiacloprid 21.7 SC 0.04 %@(2ml/lit of water) at 25 – 30 days interval.
4.	Source of Technology	ATARI , Patna
5.	Production system and thematic area	Mango, Integrated Pest Management
6.	Performance of the Technology with performance indicators	•Observation will be taken for No. Of fallen fruits/ Larvae / damaged fruits •Yield /ha •Economics analysis

TABLE :- 01

TO	No. of Trials	Yield (q/ha)	% Increase	% Incidence	% Reduction	GC Rs./ha	GR Rs./ha	NR Rs./ha	B:C Ratio
FP	08	350.60	-	13.90	-	46580	210360	163780	3.51
TO-1	08	425.18	46.22	6.58	52.66	44850	255108	210258	4.68
TO-2	08	512.50	92.20	2.78	80.00	43950	307500	263550	5.9

***Result* :- Data revealed that TO-2 recorded maximum yield 512.50 q/ha BC ratio 5.9 and % reduction 80.00 was found.**

OFT :- 04 (Plant Protection)

1.	**Title of On farm Trial**	**Eco friendly management of Banana Scarring Beetle (Basilepta subcostatum Jacoby).**
2.	Problem diagnosed	Decreasing the market price due to infestation of Scarring beetle in Banana.
3.	Details of technologies selected for assessment/refinement	**F.P :-**Chlorpyriphos 20 EC @1.0 ml/lit **TO 1- :** • Soil application of Chlorpyriphos 20 EC @ 0.08 % (4ml/lit) • Bunch spraying with acephate (0.1125%) just after hand opening followed by bunch cover with polypropylene bag. **TO 2 :-** • Soil application of Beauveria bassiana (1*107 cfu/ml, @ 200 ml/plant) • Bunch spraying with acephate (0.1125 %) just after 1st hand opening, followed by bunch cover with polypropylene bag.
4.	Source of Technology	ATARI, Patna
5.	Production system and thematic area	Banana, Integrated Pest Management
6.	Performance of the Technology with performance indicators	Infestation %, Yield (q/ha) G. Cost (Rs/ha), GR (Rs/ha) NR (Rs/ha), B:C ratio

Result :-

TABLE :- 01

TO	No. of Trials	Yield (q/ha)	% Increase	% Incidence	% Reduction	GC Rs./ha	GR Rs./ha	NR Rs./ha	B:C Ratio
FP	08	573.75	-	8.57	-	250650	459000	208350	1.83
TO-1		581.03	1.26	2.92	65.92	239850	581030	341180	2.42
TO-2		578.17	0.77	3.99	53.44	236160	520353	284193	2.20

Nature of Extension Activity	No. of activities	Farmers				Extension Officials			Total		
		M	F	T	SC/ ST % of total)	Male	Female	Total	Male	Female	Total
Field Day	3	59	34	93	10	02	-	2	61	34	
Krishak Ghosthi	2	815	295	1110	15	05	1	6	820	296	
Lectures delivered as resource persons	02	51	06	57	3	03	0	3	54	6	
Scientist visit to farmers field	212	974	234	1208	17	0	0	0	974	234	
Farmers visit to KVK	1070	1288	388	1676	5	0	0	0	1288	1676	
Consultancy through mobile services	2734	2626	108	2734	8	5	2	7	2631	115	
Diagnostic visits	104	402	60	462	9	0	0	0	402	60	
Exposure visits	01	63	11	74	3	0	0	0	63	11	
Soil test	00				0	0	0	0	0	0	
Agro Advisory Services					0	0	0	0	52		
News Paper coverage	14	Mass									

TOTAL	**4142**	**6278**	**1136**	**7414**	**70**	**15**	**3**	**18**	**6345**	**2432**	**4128**

Result :- **Data revealed that TO-1 recorded maximum incidence reduction 65.92 %, yield 581.03 q/ha, net return Rs. 341180 /ha & B:C ratio 2.42 was found which is followed by TO-2.**

4. Extension Activity

5. Celebration of Important Days/ OtherEvents

Sl. No.	Date	Important Days	Participants
1.	16.10.2024	World Food Day	43
2.	05.12.2023	World Soil Day	82
3.	23.12.2023	Kisan Diwas	52
4.	01.10.2023	Swachhata Abhiya	21
5.	30.10.2023	Swachhata Abhiyan	15
6.	13-14 March, 2024	SCSP Kisan Mela	1160
TOTAL			**1373**

C. **Technology week celebration**

Type of activities	No. of activities	Number of participants	Related crop/livestock technology
Training & Awareness	04	109	Coarse Grain

E. Interaction/Live telecast programme of Hon'ble PM/Hon'ble or Argil Minister

Sl.	Date of event	Name of Event/Programme	Interaction of Hon'ble PM/AM	Participants			
				Farmers	Staffs	VIP/Others	Total
01	15.11.2023	PM Live Telecast	**30**	**41**	**12**	**00**	**53**

6. SEED AND PLANTING MATERIAL PRODUCTION

Sl. No.	Season	Crop	Variety	Area (ha)	Yield (q)	Planting material	
						Crop	No.
01	Kharif	Paddy	S. Samp ann	04	140	Cauliflower Cabbage Tomato Brinjal Banana	9894
02	Rabi	Wheat	HD-2967	6.4	123		

7. Revolving Fund

7.5 Status of revolving fund (Rs. in lakh) for FY- 2023 - 24

Year	Opening balance as on 1st April, 2023	Income during the year	Expenditure during the year	Net balance in hand (Cash + Kind)
2023-24		**1232753.00**	**2,70,000.00**	**32,6,264.00 + 5,60,000.00**

Proposed Action Plan
(June 2024 to September 2024)

1. TRAINING PROGRAMMES TO BE CONDUCTED

(A) Farmers and farmwomen

Discipline	Duration (Days)	No. of Courses	No. of participants		
			SC/ST	Others	Total
Agronomy	22	11	88	187	275
Plant Protection	20	10	80	170	250
Horticulture	14	07	56	119	175
Ag. Engg.	14	07	56	119	175
Total	**70**	**35**	**280**	**595**	**875**

(B) Rural Youth

Discipline	Duration (Days)	No. of Courses	No. of participants		
			SC/ST	Others	Total
Agronomy	04	02	16	34	50
Plant Protection	08	04	32	68	100
Horticulture	02	01	08	17	25
Ag. Engg.	02	01	08	17	25
Total	**16**	**8**	**64**	**136**	**200**

(C) Extension Functionaries

Discipline	Duration (Days)	No. of Courses	No. of participants		
			SC/ST	Others	Total
Agronomy	02	01	08	17	25
Plant Protection	02	01	08	17	25
Horticulture	02	01	08	17	25
Ag. Engg.	02	01	08	17	25
Total	**8**	**4**	**32**	**68**	**100**

(D) Vocational Trainings

Thematic Area*	Title	Duration	No. of participants			
			SC	ST	Others	Total
Seed Production	Quality Seed Production	06	**08**	--	**17**	**25**
Beekeeping	Honey bee management and production technology	04	**08**	--	**17**	**25**
Mushroom Cultivation	Income Generation through Mushroom Cultivation	06	**08**	--	**17**	**25**
Protective Cultivation	Income Generation through Protective Cultivation	06	**08**	--	**17**	**25**
Importance of Medicinal Plant	Income Generation through Importance of Medicinal Plant	06	**08**	--	**17**	**25**
Natural Farming	Natural farming	06	**08**	--	**17**	**25**
TOTAL		**34**	**48**		**102**	**150**

2.CLUSTER FRONTLINE DEMONSTRATION

Sl. No.	Season	Crop	Variety / Technology	Area (ha)	No. of Farmers / Demonstration
01	**Rabi & Summer**	**Soybean**	**PS-1241**	**20.00**	**50**
02		**Mustard**	**RH-725**	**200.00**	**500**
03		**Sunflower**	**KBSH-41**	**40.00**	**100**

3. On Farm Trial

OFT :- 01 (Agronomy)

1.	**Title of On farm Trial**	**Improvement of Nitrogen use efficiency in rice.**
2.	Problem diagnosed	Excessive use of chemical fertilizer and Spiraling price of urea leads to increase in cost of cultivation
3.	Details of technologies selected for assessment/refinement	(a) **Farmer Practice:** RDF (100:40:20) Kg/ha (b) **Technological Option 1**: 50% of RDN & 100% PK + Nano urea @4ml/lt. water (Single spray at pre flowering stage). (c) **Technological Option 2:** 50% of RDN & 100% PK + 2 sprays of Nano Urea at (25 to 30 days) and (60-65 days) @ 4 ml/lt water.
4.	Source of Technology	BAU, Sabour
5.	Production system and thematic area	Nutrient Management
6.	Performance of the Technology with performance indicators	Seed, Nano urea

OFT :- 02 (Plant Protection)

1.	**Title of On farm Trial**	**Assessment of management practices for Red Banded Caterpillar in Mango**
2.	Problem diagnosed	Heavy loss due to attack of Red Banded Caterpillar in mango
3.	Details of technologies selected for assessment/refinement	**F.P :-** Spray of Chlorpyriphos as and when symptoms appear **TO 1 :-**(a) Collection and destruction of all fallen fruits **(b)** Spray deltamethrin 0.0028 % (Deltamethrin 2.8EC@1ml/lit) at marble size and repeat after two weeks. **TO2 :-** Two sprays of Thiacloprid 21.7 SC 0.04 %@(2ml/lit of water) at 25 – 30 days interval.
4.	Source of Technology	ATARI , Patna
5.	Production system and thematic area	Mango, Integrated Pest Management
6.	Performance of the Technology with performance indicators	•Observation will be taken for No. Of fallen fruits/ Larvae / damaged fruits •Yield /ha •Economics analysis

OFT :- 03 (Plant Protection)

1.	**Title of On farm Trial**	**Eco friendly management of Banana Scarring beetle (Basilepta subcostatum Jacoby).**
2.	Problem diagnosed	Decreasing market price due to infestation of Scarring beetle in Banana
3.	Details of technologies selected for assessment/refinement	**F.P :-**Chlorpyriphos 20 EC @1.0 ml/lit **TO 1- :** • Soil application of Chlorpyriphos 20 EC @ 0.08 %(4ml/lit) • Bunch spraying with acephate (0.1125%) just after hand opening followed by bunch cover with polypropylene bag. **TO 2 :-** • Soil application of Beauveria bassiana (1*107 cfu/ml, @ 200 ml/plant) • Bunch spraying with acephate (0.1125 %) just after 1st hand opening, followed by bunch cover with polypropylene bag.
4.	Source of Technology	ATARI, Patna
5.	Production system and thematic area	Banana, Integrated Pest Management
6.	Performance of the Technology with performance indicators	Infestation %, Yield (q/ha) G. Cost (Rs/ha), GR (Rs/ha) NR (Rs/ha), B:C ratio

4 .Extension and Training activities under FLD/CFLD

Activity	Title of Activity	No.	Clientele	Duration	Venue On/Off	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Training	Scientific cultivation of paddy	01	PF/RY/EF	02	On/Off/Online	4	2	-	-	13	6	17	8	25
Training	Scientific cultivation of Soybean	01	PF/RY/EF	02	On/Off/Online	4	2	-	-	13	6	17	8	25
Field Day	Scientific cultivation of Soybean	01	PF/RY/EF	01	On/Off/Online	4	2	-	-	13	6	17	8	25
Training	IPM & IDM in Paddy	01	PF/RY/EF	01	On/Off/Online	4	2	-	-	13	6	17	8	25
Field Day	Impact of Bio pesticides	01	PF/RY/EF	01	On/Off/Online	4	2	-	-	13	6	17	8	25
Field Day	Impact of Nutri Garden	01	PF/RY/EF	01	On/Off/Online	4	2	-	-	13	6	17	8	25
Field Day	Impact of Drudgery Reduction on BhindiPlucker	01	PF/RY/EF	01	On/Off/Online	2	4	-	-	6	13	8	17	25
Field	Impact of	01	PF/RY/E	01	On/Off/Onli	4	2	-	-	1	6	1	8	2

Day	Mushroom cultivation		F		ne					3		7		5
Field Day	Impact of Tie & Die kit	01	PF/RY/EF	01	On/Off/Online	2	4	-	-	6	13	8	17	25

5. Schedule Caste Sub Plan Programme

Sl No	Activity	Total No. of Farmers	Villages	Block
1.	Training	300	Gohchari	Gogri
2.	OFT	08	Gohchari	Gogri
3.	FLD	25	Gohchari	Gogri
4.	Awareness Exposure Visit	180	Gohchari	Gogri
5.	Nursery Plants	10,000	Gohchari	Gogri
6.	Suckers, Cutting	2500	Gohchari	Gogri
7.	Mushroom Cultivation	10	Gohchari	Gogri
8.	Small Entreneureship	20	Gohchari	Gogri
9.	Large Entreneureship	02	Gohchari	Gogri
10.	Pond	01	Gohchari	Gogri
11.	Vermicompost	05	Gohchari	Gogri
12.	Plant Protction Chemical	25	Gohchari	Gogri
13.	Vaccination	100	Gohchari	Gogri
14.	Soil Testing	100	Gohchari	Gogri
15.	Kitchen Garden	20	Gohchari	Gogri
16.	Literature	3000	Gohchari	Gogri
17.	Honey Bees Colonies	50	Gohchari	Gogri

6. SEED AND PLANTING MATERIAL PRODUCTION

Sl. No.	Season	Crop	Variety	Area(ha)	Planting material	
					Crop	No.
01	Kharif	Paddy	Sabour Ardhajal	03	Papaya, Moringa Brinjal, Bottle gourd Bitter gourd	9500
02	Rabi	Wheat	HD-2967	07		

7. EXTENSION ACTIVITIES

Activities	No.	Participants
Field Days	05	250
Krishak Gosthi	04	200
Scientists visit to farmers field	50	250
Farmers visit to KVK farm	500	500
Popular Articles	04	Mass
Pamphlet& Bulletin	02	Mass
Mobile advisory service	250	250
Newspaper coverage	24	Mass
Kisan Mela	02	Mass
TOTAL	**841**	**1450**

KRISHI VIGYAN KENDRA, KISHANGANJ

Report of 26th Extension Education Council Meeting
(From October 2023 to May 2024)

1. Achievement of Training Programmes

A. Training Programme for Practicing Farmers/Farm women *(On/Off/Virtual Mode)*

Discipline	No. of Courses	Duration	No. of Participants											
			Others			SC			ST			Grand Total		
			M	F	T	M	F	T	M	F	T	M	F	T
Agronomy	13	13	339	29	368	3	0	3	25	30	55	367	59	426
Horticulture	22	23	312	91	403	115	147	262	0	0	0	427	238	665
Plant Protection	35	40	867	156	1023	49	44	93	38	22	60	954	222	1176
Agril. Extension	09	09	169	11	180	30	27	57	18	11	29	217	49	266
Home Science	03	03	13	22	35	1	50	51	0	0	0	14	72	86
Total	**82**	**88**	**1700**	**309**	**2009**	**198**	**268**	**466**	**81**	**63**	**144**	**1979**	**640**	**2619**

B. **Training Programme for Rural Youth *(On/ Off)***

Discipline	No. of Courses	Duration	No. of Participants											
			Others			SC			ST			Grand Total		
			M	F	T	M	F	T	M	F	T	M	F	T
Plant Protection	03	06	66	19	85	3	0	3	3	2	5	72	21	93
Horticulture	02	06	30	2	32	7	14	21	0	0	0	37	16	53
Total	**5**	**12**	**96**	**21**	**117**	**10**	**14**	**24**	**3**	**2**	**5**	**109**	**37**	**146**

C. Training Programme for Extension functionaries

Discipline	No. of Courses	Duration	No. of Participants											
			Others			SC			ST			Grand Total		
			M	F	T	M	F	T	M	F	T	M	F	T
Plant Protection	04	13	96	12	108	12	0	12	0	0	0	108	12	120
Horticulture	01	01	13	6	19	2	0	2	0	0	0	15	6	21
Total	5	14	109	18	127	14	0	14	0	0	0	123	18	141

D. Skill Development (BSDM, RPL & ASCI) training programme

Sl. No	Sponsored Agencies	Name of Courses/ Job Role	Duration (Days)	Beneficiaries			Total
				Other	SC	ST	
1.	RPL	Ag. Extension Service Provider	08	20	10	0	30
Total			**08**	**20**	**10**	**0**	**30**

E. Sponsored training programme

Sl. No	Sponsored Agencies	Name of Courses/ Job Role	Duration (Days)	Beneficiaries			Total
				Other	SC	ST	
1.	DHO, Kishanganj	Beekeeping	03	20	5	0	25
2.	DAO, Kishanganj	Jute Cultivation	01	25	0	0	25
Total			**04**	**45**	**5**	**0**	**50**

2. Front Line Demonstration

Details of FLDs implemented during **October 2023 to May 2024**

Sl. No	Crop	Thematic Area	Tech. Demo. with detailed treatments	No. / Area (ha.)	No. of Farmers	Yield(q/ha)		% Increase
						Demo	Check	
1.	Millet	ICM	New crop and Improved variety RAU-8	2.8	14	5.8	4.2	38.09
2.	Paddy	ICM	Introduction of new paddy variety Heera	2.0	10	45.15	32.65	38.28
3.	Paddy	ICM	Introduction of new paddy variety Sona	2.0	10	40.26	32.65	23.30
4.	Paddy	INM	Nano Urea @ 250 ml/acre	25.0	100	41.42	39.78	4.12
5.	Pseudo Millet (Buck Wheat)	ICM	Improved Seed (Himpriya)	4.8	12	16.36	14.18	10.54
6.	Maize	IPM	Emamectin benzoate 5SG, Thiomethoxame and Lamdacyhalothrin for management of fall army worm	4.0	20	83.60	72.40	15.46
7.	Cucurbitaceous crop (Pointed Gourd)	IPM	Pheromone trap for management of fruit fly	4.0	20	Result Awaited		
8.	Brinjal	IPM	Emamectin Benzoate 5 SG for management of Fruit and Shoot borer	4.0	20	215.05	180.0	19.47
9.	Tea	IPM	Yellow Sticky Trap @ 25 pc/acre	8.0	20	Result Awaited		
10.	Makhana	ICM	Improved Seed (S. Makhana 1)	7.0	9			
11.	Pine apple	IWM	Use of Diuran 80 WP @ 1000 g/acre for Post emergence herbicide for weed control	4.8	12			
12.	Jute	ICM	Improved variety JRO – 204	4.0	10			

3. Cluster Frontline Demonstration (Rabi 2023-24)

Sl. No	Crop	Variety	Tech. Demo. with detailed treatments	No. / Area (ha.)	No. of Farmers	Yield(q/ha)		% Increase
						Demo	Check	
1.	Mustard	DRMR-150-35	Improved variety, PSB and Azatobactor	30	75	10.55	8.45	24.85

4. Schedule Cast Sub-Plan (SCSP)

Sl. No	Crop/ Enterprise	Variety	Tech. Demo. with detailed treatments	No. / Area (ha.)	No. of Farmers	Yield(q/ha)/ Lt/day/animal		% Increase
						Demo	Check	

Sl. No	Crop/ Enterprise	Variety	Tech. Demo. with detailed treatments	No. / Area (ha.)	No. of Farmers	Yield(q/ha)/ Lt/day/animal		% Increase
						Demo	Check	
1.	Maize	P 3526	Improved variety	3	18	97.06	83.05	16.87
2.	Mineral Mixture	-	Mineral Mixture	80 kg	40	6.75	5.50	22.72
3.	Makhana	Sabour Makhana 1	Improved variety	7	08	Result Awaited		
4.	Backyard Poultry	Banraja	Backyard Poultry for egg production	1000	50	Result Awaited		
5.	Dragon Fruit	Rosa	Transplanting	725	36	Result Awaited		

5. Schedule Cast Sub-Plan (SCSP) Equipment/Implement/Others

Sl. No	Name of Input	No	No. of Beneficiaries
1.	Battery Sprayer	18	18
2.	Bee Box	12	06
3.	Lapeta Pipe	12	12
4.	Rose cane	30	30

6. Climate Resilient Agriculture Programme

Sl. No	Season	Crop	Variety	Tech. Demo. with detailed treatments	No. / Area (ha.)	No. of Farmers	Yield(q/ha)		% Increase
							Demo	Check	
1.	**Kharif 2023**	Paddy	Sabour Samppan	Direct Seeded Rice/ Transplanting	128	320	42.56	40.23	5.79
2.		Paddy	Sabour Samppan	Water harvesting and field bunding	40	100	41.20	35.64	15.60
3.		Paddy	Sabour Samppan	Alternate Wet & Dry method	16	40	45.38	39.65	14.45
4.		Paddy	Sabour Samppan	LCC/ INM/ green seeker based nutrient management	40	100	44.85	38.15	17.56
5.		Ginger -bitter gourd	Little Champ + Shankar	Ginger-bitter gourd intercropping	06	36	182 + 75	142	28.16
6.		Community Irrigation			08	20			
7.		Laser land leveling			36.4	91			
8.	**Rabi 2023-**	Potato	K. Pukhraj	Raised Bed	1.2	10	224.16	202.98	10.43

Sl. No	Season	Crop	Variety	Tech. Demo. with detailed treatments	No. / Area (ha.)	No. of Farmers	Yield(q/ha)		% Increase
							Demo	Check	
9.	24	Mustard	NRCHB 101	Zero Tillage	8.0	20	7.65	6.91	10.71
10.		Wheat	HD 2967	Zero Tillage	6.0	15	34.81	31.66	9.95
11.		Wheat	HD 2967	Raised Bed	6.0	15	35.34	31.66	11.62
12.		Maize	P 3526	Raised Bed	103.0	515	96.57	89.48	7.92
13.		Maize	P 3526	INM	7.0	35	95.66	89.48	6.91
14.	**Summer 2024**	Moong	Sikha/ MH 1142	Zero Tillge	104.0	260	Green manuring		

7. NICRA

Sl. No	Crop	Variety	Tech. Demo. with detailed treatments	No. / Area (ha.)	No. of Farmers	Yield(q/ha)		% Increase
						Demo	Check	
1.	Jute	J.B.O. 2003 H	Garma-2023	3.20	08	26.4	21.80	21.10
2.	Cow	Lacto feed	2022-23	38(No.)	20	1344	1232	9.00
3.	Compost	Vermicompost	2022-23	10 unit	10	667 kg	582	14.60
4.	Fish	Amur Carp	2022-23	02.00	10	1.30	0.80	62.50
5.	Paddy	Sawrna Sab-1	Kharif-2023	12.00	30	44.80	39.0	14.80
6.	Paddy	Sabour Samridhi	Kharif-2023	12.00	30	34.70	32.80	5.70
7.	Paddy	Sabour Sappan	Kharif-2023	04.00	10	39.20	33.80	15.90
8.	Banana	G-9	2023-24	02.00	10	436	424	2.80
9.	Fish	Jayanti Rohu	2023-24	02.00	10	0.80	0.60	33.30
10.	Makhana	Sabour Makhana 1	Summer 2023	07.00	07	24.40	19.60	24.50
11.	Maize	P 3526	Rabi 2023-24	8.00	20	96	84	14.20
12.	Potato	Kufri Pukhraj	Rabi 2023-24	0.50	10	287	244	14.90
13.	Berseem	Mescavi	Rabi 2023-24	1.00	20	469	412	13.80
14.	Oat	Kent	Rabi 2023-24	1.20	20	647	514	25.80
15.	Potato	Kuri Khyati	Rabi 2023-24	0.50	10	258	244	5.70
16.	Backyard Poultry	Kadaknath	2023-24	500	10	0.91	0.72	26.30
17.	Jute	JRO 204	Summer 2024	2.50	20	Vegetative growth stage		
18.	Banana	Banana Bunch cover	Summer 2024	10 pc	20	Result awaited		
19.	Cow	Mineral Mixture	2023-24	112 pc	20	Result awaited		
20.	Backyard Poultry	Vanraja	Summer 2024	500	20	Result Awaited		

8. Natural Farming

Sl. No	Crop	Variety	Tech. Demo. with detailed treatments	No. / Area (ha.)	No. of Farmers	Yield(q/ha)		% Increase
						Demo	Check	
2022-23								
1.	Banana	Malbhog	Natural Farming	0.4	1	300.0	400.0	-25.0
2.	Capsicum	Indira	Natural Farming	0.4	1	136.0	168.0	-19.04
3.	Pineapple	Kew	Natural Farming	1.2	3	Result Awaited		
4.	Dragon Fruit	Rosa/Siam Red	Rosa/Siam Red	1.2	3	108.0	132.0	-18.18
2023-24								
5.	Banana	Malbhog	Natural Farming	0.8	2	Result Awaited		
6.	Capsicum	Indira	Natural Farming	0.4	1			
7.	Pineapple	Kew	Natural Farming	2.0	5			
8.	Dragon Fruit	Rosa/Siam Red	Rosa/Siam Red	1.6	4			

9. Detail of On Farm Trials:

OFT-01 (Agronomy)

1.	Title of On farm Trial (OFT)	**Improvement of Nitrogen use efficiency in paddy**
2.	Problem diagnosed	Excessive use of chemical fertilizer and Spiraling price of urea leads to increase in cost of cultivation
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmers practice- **RDF (100:40:20) Kg/ha** TO1- **50% of RDN & 100% PK + nano urea @4ml/lt. water (Single spray at pre flowering stage)**. TO2- **50% of RDN & 100% PK + 2 sprays of Nano Urea at (25 to 30 days) and (60-65 days) @ 4 ml/lt water.** **(Especially for Medium duration variety of BAU Sabour, BAU Ranchi and Dr RPCAU, Pusa, ICAR RCER, Patna)**
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	BAU, Sabour
5.	Production system and thematic area	Paddy-Maize and INM
6.	Performance of the Technology with performance indicators	Plot size (10 x10 m2)/ in each tech. option, soil data before and after (pH, EC, OC, NPK,), Yield data, No. of effective tillers/m2, 1000 grain weight, Panicle weight, Grain and Straw yield and Economics.
7.	Final recommendation for micro level situation	Table reveal that maximum grain yield was recorded with TO2 followed by TO1. Maximum net return Rs 63514 per ha and B:C 2.94 were recorded with TO2 followed by TO1. Both are maximum over farmer practice.
8.	Constraints identified and feedback for research	Farmers are showing low interest to spray nano urea in Paddy. Due to high rainfall and regular rain during the spray so this is critical to spray at critical growth stage.
9.	Process of farmers participation and their reaction	Training, group meeting and gosthi

Results with Table

Thematic area	Technology options with detailed treatments	Area (ha in crop & Fodder)/ Nos (in livestock)		Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Proposed	Actual					
INM	Farmers practice- RDF (100:40:20) Kg/ha	2.8	2.8	32.56	34500	71078	36578	2.06
	TO1- 50% of RDN & 100% PK + nano urea @4ml/lt. water (Single spray at pre flowering stage).			42.74	33100	93301	60501	2.82
	TO2- 50% of RDN & 100% PK + 2 sprays of Nano Urea at (25 to 30 days) and (60-65 days) @ 4 ml/lt water.			44.12	32800	96314	63514	2.94

OFT-02 (Agronomy)

1.	Title of On farm Trial (OFT)	Improvement of Nitrogen use efficiency in wheat.
2.	Problem diagnosed	Excessive use of chemical fertilizer and Spiraling price of urea leads to increase in cost of cultivation
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmers practice- **RDF (100:40:20) Kg/ha** TO1- **50% of RDN & 100% PK + nano urea @4ml/lt. water (Single spray at 35 DAS).** TO2- **50% of RDN & 100% PK + 2 sprays of Nano Urea at (35 DAS) and (60-65DAS) @ 4 ml/lt water.** **(Timely sown variety of BAU Sabour. BAU Ranchi and RPCAU, Pusa, ICAR RCER, Patna) Under Rice-Wheat cropping system.**
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	BAU, Sabour
5.	Production system and thematic area	**Rice-Wheat cropping system and INM**
6.	Performance of the Technology with performance indicators	Plot size (10x10 m2)/ in each tech. option, soil data before and after (pH, EC, OC, NPK,), Yield data, No. of effective tillers/m2, 1000 grain wt., Panicle wt., Straw yield and Economics.
7.	Final recommendation for micro level situation	Maximum grain yield was recorded with TO2 followed by TO1. Maximum net return Rs 24718 per ha and B:C (1.73) were recorded with TO2 followed by TO1, both were higher over farmer practice.
8.	Constraints identified and feedback for research	Excessive use of chemical fertilizer and Spiraling price of urea leads to increase in cost of cultivation
9.	Process of farmers participation and their reaction	Training, group meeting and gosthi

Result with table

Technology option	Effective Tillers/m2	Grain/ ear head	1000 grain weight (g)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
Farmers practice- RDF (100:40:20) Kg/ha	165.8	19.5	35.6	21.3	31500	48458	16958	1.54
TO1- 50% of RDN & 100% PK + nano urea @4ml/lt. water (Single spray at pre flowering stage).	172.7	21.2	35.8	24.8	32800	56420	23620	1.72
TO2- 50% of RDN & 100% PK + 2 sprays of Nano Urea at (25 to 30 days) and (60-65 days) @ 4 ml/lt water.	174.3	22.8	36.2	25.7	33750	58468	24718	1.73

OFT – 03 (Horticulture)

1.	Title of On farm Trial	**Assessment and performance of plant growth regulator for synchronize flowering in pineapple (Var-Kew)**
2.	Problem diagnosed	The pineapple requires higher cost of cultivation (Rs about one lakh per acre). Traditionally farmers use imbalanced and non-judicious use of hormones due to desynchronize flowering and low yield of pineapple.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Farmer Practice:** Use of Ethrel 25 ppm. **TO_1 :** Application of 25ppm Ethephone in combination with 2 % urea and 0.04 % $CaCO_3$ **TO_2 :** Application of 10 ppm NAA
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Pineapple Research Station, Vazhakkulam, Kerala Agricultural University, Vellanikkara. Thrissur, Kerala
5.	Production system and thematic area	Pineapple based cropping system, Plant Growth Regulator
6.	Performance of the Technology with performance indicators	**A. Technological observations:** Plant height (cm), Days to flowering, Days to first fruit harvest, Yield (q/ha), Soil testing **B. Economical observations:** Cost , Net return (Rs), B:C ratio
7.	Final recommendation for micro level situation	**Result Awaited**
8.	Constraints identified and feedback for research	Result Awaited
9.	Process of farmers participation and their reaction	Training, group meeting and gosthi

Result: Result awaited

OFT-04 (Horticulture)

1.	Title of On farm Trial (OFT)	**Assessment of fruit bagging in Guava for quality improvement**
2.	Problem diagnosed	Low guava productivity and income result from flower and fruit drop, black spot, and fruit fly issues. These issues significantly impact the overall yield and quality of guava crops.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmers practice- **No Bagging** TO1- **Cellophane bag cover** TO2- **Paper bagging**
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Finalization in OFT workshop held in BAU, Sabour
5.	Production system and thematic area	Guava based cropping system and IPM & IDM
6.	Performance of the Technology with performance indicators	Result Awaited
7.	Final recommendation for micro level situation	Result Awaited
8.	Constraints identified and feedback for research	Days to maturity, Fruit fly damage (%), Disease incidence (%), physical damage (%), Fruit wt.(gram), Appearance pulp colour, Shelf life (days), Yield per tree or per ha, Economics (Rs./ha)
9.	Process of farmers participation and their reaction	Training, group meeting and gosthi

Result: Result awaited

OFT – 5 (Entomology)

	Season:	Rabi
1.	**Title of the OFT**	Eco-friendly management practices to control fruit fly in cucurbits.
2.	**Thematic Area:**	Integrated Pest management
3.	**Problem diagnosed**	Most of the fruit of cucurbits damage due to fruit fly, ultimately yield affected and farmers indiscriminate use hard insecticides which is harmful for human.
4.	**Technology for Testing:**	Farmers practice- Use of any pesticides as per their knowledge. TO1- Commercial fruit fly pheromone trap @ 10/h. TO2- Self made poison bait fruit fly trap @ 10/h.
5.	**Source of Technology**	**DRPCAU, Pusa**
6.	**Monitoring Indicator:**	Technological observations: Number of fruits/infected fruits at different harvest Insect infestation (%) Yield (q/ha) Economic indicators: Cost of cultivation(Rs.) Net return (Rs.) B:C Ratio
7.	Final recommendation for micro level situation	

8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	Training, group meeting and gosthi.

Result Awaited

OFT – 6 (Entomology)

	Season:	Rabi
1.	**Title of the OFT**	Management of *Phytophthora* heart rot and root rot disease in pineapple
2.	**Thematic Area:**	Integrated disease management
3.	**Problem diagnosed**	Heart rot and root rot one of the major disease caused by *Phytophthora parasitica* and *P. cinnamoni* is the most serious problem in all the pineapple growing area. So development of integrated disease management technology is very necessary.
4.	**Technology for Testing:**	TO1- (i) Soil application of Trichoderma sp. @ 5 Kg/ha with FYM (ii) Fosetyl AL @ 1000 ppm bi-monthly spray with first spray after two month of planting. TO2- (i) Soil application of Trichoderma sp. @ 5 Kg with FYM (ii) Mancozeb @ 2000 ppm and Difenconazole @ 1000 ppm alternate bi-monthly spray with first spray after two month of planting.
5.	**Source of Technology**	Pineapple Research Station, Vazhakkulam,
6.	**Monitoring Indicator:**	**A. Technological observations:** • Days of D-leaf • Days of 50 % flowering • Days of maturity • Fruit yield (q/ha.) **B. Economics:** • Yield (q/ha) • Cost of cultivation (Rs/ha) • Net return (Rs/ha) • B:C ratio
7.	Final recommendation for micro level situation	
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	Training, group meeting and gosthi.

Result Awaited

10. Seed /Plant material produced at KVK, farm (Kharif 2023)

Crops	Variety	Quantity of seed (q)	Value (Rs)	Provided to number of farmers
Paddy	Sabour Sampann	83.20	3,32,800/-	(Sent to DSF)
Dragon fruit slip	Red flesh with red cover	1206 nos	48,240/-	-
Finger Millet	Bakula	11 kg	440/-	

Seed production at KVK, Farm (Rabi 2023-24)

Crops	Variety	Quantity of seed (q)	Value (Rs)	Remarks
Wheat	HD 2967	36.0	1,44,000.00 (Approx)	First Weight
Mustard	DRMR – 150 -35	1.00	12000.00 (Approx)	First Weight
Potato	UC Map/Other	24.00	43,200.00 (Approx)	First Weight
Buck Wheat	Hempriya	1.0	8,000.00 (Approx)	First Weight

11. List of special programmes undertaken by the KVK, which have been financed by ATMA/ Central Govt/ State Govt./NHM/NFDB/RKVY/ Other Agencies

Name of activity	Number	Participants	With line department
District level workshop for Rabi season	1	135	ATMA, Kishanganj
Training	1	25	ADH, Kishanganj
Training	1	25	DAO
Renewable Energy Training	1	50	BREDA, Patna
Training	2	220	ATMA, Kishanganj

12. Soil samples analyzed

No. of Samples	No. of Farmers	No. of Villages
0	0	0

13. RAWE Programme

No of student trained	No. of Students	No of days stayed
Batch – 1	12 (DKAC)	Continuing

14. Extension Activity

Sl. No.	Nature of Extension Activity	No. of activities	Farmers		Extension Officials		Total		
			M	F	M	F	M	F	T
1.	Field Day	10	1011	90	19	2	1030	92	1122
2.	Kisan Mela	04	307	30	11	2	318	32	350
3.	Kisan Ghosthi other than Kisan Chaupal	02	200	1	4	1	204	2	206
4.	Lectures delivered as resource persons	02	73	2	0	0	73	2	75
5.	Advisory Services	08	36	0	9	0	45	0	45
6.	Scientific visit to farmers field	14	79	9	9	0	88	9	97
7.	Farmers visit to KVK	93	74	2	14	3	88	5	93
8.	Diagnostic visits	04	17	0	4	0	21	0	21
9.	Exposure visits	014	1371	187	40	8	1411	195	1606
Total		**151**	**3168**	**321**	**110**	**16**	**3278**	**337**	**3615**

15. Special Programme Conducted

Sl. No	Programme Name	Number of Progamme	Beneficiaries						Grand Total
			Other		SC		ST		
			M	F	M	F	M	F	
1.	**VBSY Livetelecast**	01	43	1	0	0	0	0	44
2.	PM Live telecast programme (Krishi Samman Nidhi 15th Installment Programme)	01	109	1	1	0	0	0	111
3.	Kisano Se Baat Mantri Ke Sath virtual programme with Ag. Minster, GoB	01	15	0	0	0	0	2	17
4.	Awareness Programme on Natural Farming	5	441	91	28	42	43	21	666
5.	PM Live telecast programme (Krishi Samman Nidhi 16th Installment Programme)	01	113	1	4	0	0	0	118
6.	Awareness Programme on Makhana Production Technique	01	96	4	4	0	0	0	104
7.	Health Camp & Awareness programme on Eradication of Malnutrition	01	7	6	06	26	0	0	45
8.	Prayogshala se Khet Tak Sabal-Jabab Karyakarm	4	65	3	6	10	0	0	84
Total		15	889	107	49	78	43	23	1189

16. Celebration of Important Days

Celebration of Important Days	No. of activities	Farmers		Extension Officials		Total		
		M	F	M	F	M	F	Total
Gandhi Jayanti (2nd Oct.)	1	19	2	0	0	9	2	**9**
Mahila Kisan Diwas (15th Oct.)	1	0	30	0	2	0	32	**32**
World Food Day (16th Oct.)	1	7	15	1	0	8	15	**23**
Ekta Diwas (31st Oct)	1	10	3	2	0	12	3	**15**
National Constitution Day (26th Nov.)	1	8	1	0	0	8	1	**9**
World Soil Day (5th Dec.)	1	115	5	3	1	118	6	124
Kisan Diwas (23rd Dec.)	1	50	10	4	2	54	12	**66**
Republic day (26th Jan.)	1	10	3	20	5	30	8	**38**
International wetland Day (2 Feb)	1	15	12	0	0	15	12	**27**
National Science Day (28th Feb)	1	5	30	2	0	7	30	**37**
International Women's Day (8th Mar.)	1	1	36	0	3	0	0	**40**
World Water Day (22nd March)	1	25	2	0	0	25	2	**27**
Total	**11**	**265**	**149**	**32**	**13**	**286**	**123**	**447**

Proposed Action Plan
(June 2024 to September 2024)

Training programme to be organized

(a) Farmers and farmwomen

Discipline	No. of Courses	Duration (Days)	No of participants			
			SC	ST	Other	Total
Agronomy	16	16	48	32	320	400
Horticulture	16	16	48	32	320	400
Plant Protection	12	12	36	24	240	400
Agril. Extension	16	16	80	32	288	400
Home Science	16	16	48	32	320	400
Grand Total	**76**	**76**	**260**	**152**	**1488**	**1900**

(b) Rural Youth

Discipline	No. of Courses	Duration (Days)	No of participants			
			SC	ST	Other	Total
Agronomy	1	4	5	5	15	25
Horticulture	1	4	7	7	11	25
Plant Protection	1	4	5	5	15	25
Agril. Extension	2	8	10	10	30	50
Home Science	2	8	25	10	15	50
Grand Total	**7**	**28**	**52**	**52**	**86**	**175**

(c) Extension functionaries

Discipline	No. of Courses	Duration (Days)	No of participants			
			SC	ST	Other	Total
Agronomy	1	1	5	5	15	25
Horticulture	1	1	7	7	11	25
Plant Protection	1	1	5	5	15	25
Agril. Extension	2	2	10	10	30	50
Home Science	4	4	50	30	20	100
Grand Total	**9**	**9**	**77**	**57**	**91**	**225**

(d) Vocational

Thematic Area*	Title	Duration	No. of participants			
			SC	ST	Others	Total
Vermiculture	Vermicompost production	5	4	1	20	25
Beekeeping	Sustainable Beekeeping	7	4	1	20	25
Planting Material Production	Techniques of graft, gooties in propagation of fruit plants.	7	4	1	20	25
Grand Total		**19**	**12**	**3**	**60**	**75**

(e) Skill Development Programme

Sl. No.	Job Role	Duration (hrs)	No. of participants	Remarks
1	Gardner	80	30	BSDM (RPL)

1 On Farm Trial

Sl. No.	Title of OFTs	Discipline
1.	Assessment of Nitrogen use efficiency in rice through Nano-urea	Agronomy

2 (A) Frontline demonstration

Sl. No	Season	Crop	Variety	Technology	Area in ha.	No. of Demonstration
1.	Kharif	Paddy	Sabour Sampann	Emamectin Benzoate 5 SG for management of Fruit and Shoot borer	4.0	20
2.	Kharif	Finger Millet	RAU- 08	Transplanting method	5.0	25
3.	Kharif	Vegetable kit	Kharif vegetable	Nutritional Kitchen Garden	4.0	10
Total					**13**	**55**

3 Climate Resilient Agriculture demonstration (Kharif 2024)

Sl. No	Season	Name of Technology	Area (ha)	No. of demonstrations
1	Kharif 2024	DSR/line sowing with climate resilient variety	168	420
		Water harvesting and field bunding in paddy	24	60
		Alternate wetting and drying of paddy	16	40
		INM/ green seeker based nutrient management in paddy	16	40
		Ginger-bitter gourd intercropping	6	15
		Community irrigation	8	20
		Total	**238**	**595**

4 NICRA Project

Sl. No	Season	Crop/ Animals	Variety/ Breed	Technology	Area in ha./no.	No. of Demonstration
1.	Kharif	Paddy	Swarna Sub – 1	Flood tolerant variety	24	60
2.			Sabour Sampann	Flood and drought tolerant variety	08	20
3.						
4.	**Total**				**32**	**80**
5.	Others	Dairy Animal	Cow	Mineral Mixture	100 no.	20
6.		Fish	Indian Major Carp	Fish Feed	10 pond	10
Total					**110**	**30**

5 Seed and planting material production

Name of the Crop / Enterprise	Variety / Type	Period From Jan to December 2023	Area (ha.)	Details of Production				
				Type of Produce	Expected Production (quintals)	Cost of inputs (Rs.)	Expected Gross income (Rs.)	Expected Net Income (Rs.)
Paddy	R. Sweta	Kharif	4.0	Seed	85.00	160000.00	357000.00	197000.00
Finger	Vakula	Kharif	0.10	Seed	1.00	2000.00	4000.00	2000.00

Millet								
Dragon Fruit	Red cover with red flesh	-	0.035	Cutting	3000 no.	15000.00	120000.00	105000.00

6 Extension Activities

Name of Extension Activities	No.	Participants
Field Day	03	100
Kisan Gosthi	06	300
Kisan Chaupal	16	800
Method Demonstrations	2	75
Scientific visit to farmers field	30	60
Farmers visit to KVK	200	200
Diagnostic visits	15	15
Ex-trainees Sammelan	01	50
Soil health Camp	01	50
Video Conferencing	20	400
Self Help Group Conveners meetings	01	40
Celebration of important days (specify)	07	450
Total	302	2540

5. Soil and water testing

No. of samples to be analyzed	
Soil	250

KRISHI VIGYAN KENDRA, KAIMUR

Report of 26th Extension Education Council Meeting
(From October 2023 to May 2024)

1. ACHIEVEMENT OF TRAINING PROGRAMME:

(A) PRACTICING FARMERS:

S. No.	Discipline	No. Of Courses	Duration	SC		ST		OTH		TOTAL	
				M	F	M	F	M	F	M	F
1.	Crop Production	13	13	45	12	201	55	242	12	488	79
2.	Horticulture	9	9	24	3	82	30	33	3	139	36
3.	Plant Protection	7	7	24	5	40	22	55	7	119	34
4.	Soil & Fertilizer Management	6	6	22	10	40	22	65	5	127	37
5.	Capacity Building and Group Dynamics	2	2	10	-	10	7	12	2	32	9
6.	Animal Science	4	4	30	16	25	16	24	5	79	37
	TOTAL	**41**	**41**	**155**	**46**	**398**	**152**	**431**	**34**	**984**	**232**

(B) RURAL YOUTH:

S. No.	Discipline	No. Of Courses	Duration	SC		ST		OTH		TOTAL	
				M	F	M	F	M	F	M	F
1.	Agronomy	1	4	1	-	-	-	16	9	17	9
2.	Plant Protection	2	6	4	7	-	-	36	10	40	17
3.	Horticulture	3	9	24	14	56	40	42	4	122	58
4.	Animal Science	6	24	60	4	61	1	44	11	165	16
	TOTAL	**12**	**43**	**89**	**25**	**117**	**41**	**138**	**34**	**344**	**100**

C) **SPONSORED TRAINING PROGRAMME:**

S. No.	Title	No. Of Courses	Duration	SC		ST		OTH		TOTAL	
				M	F	M	F	M	F	M	F
1.	Mote Anaj Ki Kheti	1	3	8	-	2	-	28	-	38	0

S. No.	Title	No. Of Courses	Duration	SC		ST		OTH		TOTAL	
				M	F	M	F	M	F	M	F
2.	Sabji Ki Kheti	1	3	7	-	6	-	25	-	38	0
3.	Krishak Vaigyanik Milan Samaroh	1	2	6	-	6	-	17	-	29	0
4.	Goat farming	1	4	-	13	-	12	2	12	2	37
5.	Renewable energy in Agriculture	1	1	17	7	11	2	14	4	42	13
	TOTAL	5	13	38	20	25	14	86	16	149	50

2. FRONT LINE DEMONSTRATION:

Details of FLDs implemented during April -September 2022

a) General

S. No.	Crop	Thematic Area	Technology Demonstrated	Actual Area (ha)	No. of farmers/ Demons-trated	Yield (Qtls/ha)		
						Local	Demo	% Incre-ase
Other than OLS & PLS:								
1.	Linseed	Integrated Crop Management	JLS-67	4.00	12	8.20	8.98	9.51
2.	Lentil	Integrated Crop Management	IPL-220 (Bio-fortified)	0.25	05	10.60	11.32	6.79
3.	Tomato	Production of low volume high value crop	Kashi Abhiman	0.50	17	230	312	35.65
4.	Brinjal	Production of low volume high value crop	Navkiran	0.05	15	352.50	418.86	18.82
5.	Trichoderma in Pea	Integrated Disease Management	Trichoderma	4.00	10	9.72	12.78	31.48
6.	Pseudomonas in Brinjal	Integrated Disease Management	Pseudomonas	0.25	5	275	336	22.18
7.	Oyster mushroom	Mushroom production	Oyster mushroom	10 units	10	1.02 Kg/Bag	-	-

b) Cluster Front Line Demonstration

Crop	Thematic Area	Technology Demonstrated	Actual Area (ha)	No. of farmers/ Demonstrated	Yield (Qtls/ha)		
					Local	Demo	% Increase
OILSEED							
Linseed	Integrated Crop Management	Variety (Sabour Tisi-1) +Bio-fertilizer+ Micro-nutrient	10.0	30	8.55	9.74	13.94
Mustard	Integrated Crop Management	Variety (RH-725) +Bio-fertilizer+ Micro-nutrient	30.0	75	9.85	13.24	34.41
PULSES							
Lentil	Integrated Crop Management	Variety (IPL-316)+ Vermi-compost + Micro-nutrient+ Bio-pesticide	15.0	47	10.60	12.22	15.28

3. ON FARM TRIAL (OFT):

a) OFT-1 (Agronomy)

Title of OFT : Diversification of Rice-based cropping system

Problems Identified: Low profitability of existing cropping system

Thematic area: Integrated Crop Management

Details of technologies selected for assessment:

Technological Options	Technology Details
Farmers' Practice	Rice (MTU-7029) – wheat (HD-2967)
TO_1	Rice – Maize + Potato
TO_2	Rice – Maize + Vegetable pea
TO_3	Rice – Wheat – Green gram

Source of Technology: BAU, Sabour

Results :

Soil Data (Mean Value)

Parameter	Before					
	PH	EC (d S m^{-1})	OC (%)	N (kg/ha)	P (kg/ha)	K (kg/ha)
Farmers Practice	5.02	0.222	0.18	101	11	67.1
Tech. Option-I	5.04	0.241	0.17	102	11.5	67.3
Tech. Option-II	5.01	0.237	0.18	101	11.9	67.0
Tech. Option-III	5.07	0.228	0.18	99	12.1	67.5

Parameter	After					
	PH	**EC (d S m^{-1})**	**OC (%)**	**N (kg/ha)**	**P (kg/ha)**	**K (kg/ha)**
Farmers Practice	5.11	0.284	0.19	109	14	68.2
Tech. Option-I	5.12	0.223	0.19	111	13	67.6
Tech. Option-II	5.09	0.241	0.19	113	11	69.2
Tech. Option-III	5.07	0.267	0.19	106	12.5	65.4

Average Yield (Q/ha)

Technology	Rice	Wheat	Maize	Potato	Vegetable pea	Green Gram	Total Rice equivalent yield (Q/ha)
Farmer Practice	40.55	28.33 Paddy (34.62)	-	-	-	-	74.88
Tech. Option-I	35.98	-	24.63 Paddy (20.52	149.03 Paddy (115.91)	-	-	172.40
Tech. Option-II	36.20	-	23.02 Paddy (19.18)	-	33.93 Paddy (50.89)	-	106.27
Tech. Option-III	41.23	30.95 Paddy (37.82)	-	-	-	8.01 Paddy (27.59)	106.64

Cost of Cultivation (Rs./ha.)

Technology	Cost of Cultivation (Rs./ha)	Gross Return (Rs./ha)	Net Return (Rs./ha	B.C Ratio
Farmer Practice	63300.00	135316.00	72016.00	2.13
Tech. Option-I	121500.00	310351.00	188851.00	2.55
Tech. Option-II	84600.00	191301.00	106701.00	2.26
Tech. Option-III	81200.00	191966.00	110766.00	2.36

Recommendation:
On the basis of highest income (Rs. 3,10,351/ha), net return (Rs.1,88,851/ha) and BC ratio (2.55) Tech. Option-01 (Rice–Maize+Potato) is recommended.

b) OFT-2 (Soil Science)

Title of OFT : Improvement of Nitrogen Use Efficiency in Wheat

Problems Identified: Excessive use chemical fertilizer and spiraling prices of urea leads to increase in cost of cultivation

Thematic area: Integrated Nutrient Management

Details of technologies selected for assessment:

FP :	N:P:K::100:40:20 kg ha^{-1}
TO_1 :	50% RDN and 100% PK + 1 spray of nano urea and 35 DAS at 4ml per litre
TO_2 :	50% RDN and 100% PK + 2 spray of nano urea at 35 DAS and 60-65 DAS @ 4 ml/litre of water

Source: OFT Finalization Workshop

Replication-8

Net plot size- 2400 Sq.m.

Results :

Technology option	**Yield & Yield Attributes**				
	Plant height at harvest (cm)	**No. of e tillers per running meter**	**Test Wt (gm)**	**Grain Yield (q /ha)**	**Straw Yield (q /ha)**
FP : N:P:K::100:40:20 kg ha^{-1}	87.52	71.20	33.11	33.31	48.53
TO_1 : 50% RDN and 100% PK + 1 spray of nano urea and 35 DAS at 4ml per litre	90.61	75.05	34.90	35.17	51.33
TO_2 : 50% RDN and 100% PK + 2 spray of nano urea at 35 DAS and 60-65 DAS @ 4 ml/litre of water	92.99	79.10	35.78	35.98	53.34
SEm+	0.193	0.350	0.035	0.091	0.070
CD(P=0.05)	0.587	1.060	0.105	0.275	0.213

Economics				
Technology option	**Cost of Cultivation (Rs/ha)**	**Gross return (Rs./ha)**	**Net return (Rs./ha)**	**B:C Ratio**
FP	35619	92254	56635	2.59
TO 1	34812	97312	62500	2.79
TO 2	34719	100030	65311	2.88

Technology option	**Soil Physicochemical Properties**					
	pH	**EC (d S-1)**	**OC (%)**	**Available N (kg/ha)**	**Available P (kg/ha)**	**Available K (kg/ha)**
Initial Soil	7.17	0.17	0.29	111.08	13.90	113.60
FP : N:P:K::100:40:20 kg ha^{-1}	7.14	0.16	0.29	115.08	11.90	116.93
TO_1 : 50% RDN and 100% PK +	7.12	0.20	0.33	151.56	14.34	125.01

Technology option	Soil Physicochemical Properties					
	pH	EC (d S-1)	OC (%)	Available N (kg/ha)	Available P (kg/ha)	Available K (kg/ha)
1 spray of nano urea and 35 DAS at 4ml per litre						
TO_2 : 50% RDN and 100% PK + 2 spray of nano urea at 35 DAS and 60-65 DAS @ 4 ml/litre of water	7.50	0.16	0.42	154.39	15.70	127.11
SEm±	0.281	0.011	0.008	0.932	0.100	0721
CD(P=0.05)	NS	NS	0.025	2.827	0.304	2.188

(G) SPECIAL PROGRAMME UNDERTAKEN BY KVK:

Climate Resilient Agriculture Program (CRAP)

The program is being implemented by KVK Kaimur under technical guidance of BAU, Sabour. The interventionwise achievement is as under in Rabi 2023-24

a) Target and Achievement of different Interventions (Rabi 2023-24)

Sl. No.	Interventions	Crop (Variety)	Physical Achievement			
			Target (Acre)	Achievement (Acre)	No. of beneficiaries	Achievement (%)
1.	Zero Tillage Technology	Wheat (DBW187)	230	230	234	100
2.	Happy Seeder wheat	Wheat (HD2967)	10	10	12	100
3.	Raised Bed Planting	Wheat (HD2967)	13	13	13	100
4.	NE/Green seeker based NM	Wheat (DBW187)	25	25	25	100
5.	Zero Tillage Technology /Raised bed planting	Chickpea (GNG 2299)	50	50	55	100
6.	Zero Tillage Technology	Lentil (IPL-316)	50	50	50	100
7.	Raised Bed/ZT Planting	Mustard (RH-749)	175	175	175	100
8.	NE/Green seeker based NM	Mustard (RH-725)	25	25	29	100
9.	Raised Bed Planting	Potato (K. Sinduri)	25	25	75	100
10.	Community Irrigation	Community Irrigation	20	-		-
	Total		623	603	668	

b) Tranining Achievement of different Interventions (Rabi 2023-24)

S.N.	Date	Title of Training	No. of Beneficiaries
1	03.10.23	Scientific Cultivation of Chickpea	27
2	27.11.23	Pest Management of Potato	79
3	28.11.23	Nutrient Management of wheat	58
4	29.11.23	Nutrient Management of Mustard	53
5	30.11.23	Pest and disease management of Potato	50
6	23.12.23	Nutrient management and use of LCC in Wheat	38
7	29.12.2023	Weed management in wheat crop	31
8	09.01.2024	Pest and disease management in Mustard Crop	50
9	10.01.2024	Weed management in wheat crop	66
10	11.01.2024	Pest and disease management in Lentil Crop	29
11	18.01.2024	Pest and disease management in Mustard Crop	22
12	23.01.2024	Pest and disease management in Wheat Crop	22
13	02.02.2024	Pest and disease management in Lentil Crop	12
14	03.02.2024	Pest and disease management of Potato	32
15	05.02.2024	Pest and disease management in Wheat Crop	23
16	16.03.2024	Scientific Cultivation of Green Gram	23
17	24.03.2024	Scientific Cultivation of Green Gram	28
18	05.04.2024	Scientific Cultivation of Black Gram	21
19	10.04.2024	Scientific Cultivation of Black Gram	24
		Total	**688**

c) Exposure visits / Field Day

Sl. No.	Activity	Date	Particular / Intervention	Place	No. of beneficiaries
1.	Exposure visit	09.10.2023	Within State	Buxer	104
2.	,,	10.10.2023	,,	Aurangabad	106
3.	Field day	06.01.2024	Zero tillage Mustard	Chainpura	115
4.	,,	12.01.2024	Line sowing (Finger millet)	Sikarwar	130
5.	Exposure visit	16.02.2024	Kisan Mela (Within state)	BAU, Sabour	102

G) OTHER PROGRAMS

i) Kisan Mela organised at KVK on 7 March 2024 in which more 100 farmers participated.

ii) Technology week organised during 20-26th Jan. 2024 at KVK

iii) Training on Plant protection measures, Poultry farming for SC farmers under SCSP sponsored by ICAR-IIAB, Ranchi and Input distribution program (Winnowing fan, Seed bins, sprayer etc.)
iv) RPL training to on Bee keeping under Bihar Skill development Mission to 60 rural youths
v) Scientists participated in Rabi Mahotsava organised by ATMA, Kaimur
vi) Scientists took part in Field visit jointly with ATMA, Kaimur
vii) Scientists imparted training to Fertilizer Dealers in DEASI program

(I) OTHER EXTENSION ACTIVITIES:

Activities and sub-activities	**No.**	**No. of Beneficiaries**
Field day	13	251
Scientist visit to farmers field	13	134
Farmers visit to KVK	-	1945
Kisan Ghosthi	04	265
Other Extension activities, Clinical, Advisory service, Agril. Tech. Week	16	712
New paper coverage	28	-
Rado talk	08	-
Parthenium Eradication Week	01	156

Proposed Action Plan
(June 2024 to September 2024)

1) TRAINING PROGRAMME

(a) Farmers and farmwomen

Thematic area	Title of Training	No.	Dura-tion	Venue On/Off	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
I) CROP PRODUCTION														
Resource Conservation technology	Direct Seeded Paddy cultivation	1	01	On	07.07.24	5	-	5	-	15	-	25	-	25
Cropping system	Economics of Natural farming	1	01	On	13.06.24	-	-	20	5	-	-	20	5	25
Water management	Paddy cultivation through Alternate wetting & Drying method	1	01	On	08.07.24	10	-	10	-	5	-	25	-	25
Seed production	Seed production techniques for Kharif crops	1	01	On	06.06.24	5	-	10	-	10	-	25	-	25
Nursery management	Nursery management of Paddy	1	01	On	02.06.24	5	-	10	-	10	-	25	-	25
Integrated crop management	Package of practices for Ground nut	1	01	Off	07.06.24	5	-	15	-	5	-	25	-	25
,,	Package of Practices for Pigeon pea	1	01	On	01.07.24	5	-	15	-	5	-	25	-	25
,,	Scientific cultivation of millets	1	01	On	04.07.24	5	-	15	-	5	-	25	-	25
Fodder Production	Scientific methods for Fodder cultivation	1	01	On	29.08.24	5	-	-	-	20	-	25	-	25

Thematic area	Title of Training	No.	Dura-tion	Venue On/Off	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Production of organic inputs	Importance of organic farming	1	01	On	08.09.24	5	-	-	-	20	-	25	-	25
II) HORTICULTURE														
a) Vegetable crops														
Integrated Nutrient Mgt.	INM in Tomato	1	01	On	03.06.24	05	-	10	-	10	-	25	-	25
Water Management	Water management in Potato	1	01	Off	05.09.24	5	-	10	-	10	-	25	-	25
Enterprise development	Post-harvest management of vegetables	1	01	On	10.08.24	5	-	5	10	5	-	15	10	25
Production of low volume high value crops	Production techniques of Kharif tomato	1	01	On	20.07.24	5	-	-	10	10	-	15	10	25
b) Fruits														
Layout and management of Orchard	Scientific method of Guava production in orchard	1	01	On	12.08.24	5	-	-	10	10	-	15	10	25
c) Tuber crops														
Production and management technology	Scientific cultivation of Onion	1	01	On	25.07.24	5	-	10	-	10	-	25	-	25
e) Medicinal and Aromatic plants														
Value addition	Value addition of Satawar	1	01	On	20.06.24	5	-	5	10	5	-	15	10	25
III) SOIL HEALTH & FERTILITY MGT.														
Soil & water	Different tech. of water	1	01	On	24.06.24	5	-	10	-	10	-	25	-	25

Thematic area	Title of Training	No.	Dura-tion	Venue On/Off	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
conservation	conservation													
Integrated Nutrient Mgt.	INM in Paddy	1	01	Off	20.07.24	5	-	5	10	5	-	15	10	25
Production & use of organic input	Importance and use of Bio-fertilizers	1	01	On	18.07.24	5	-	10	-	10	-	25	-	25
Mgt. of problematic soil	Management of acidic soil	1	01	Off	20.06.24	5	-	10	-	10	-	25	-	25
Micronutrient deficiency in crops	Importance of Micro-nutrients and their application techniques	1	01	Off	31.08.24	5	-	-	10	10	-	15	10	25
Soil & water testing	Fertilizer application on the basis of Soil Health Card	1	01	Off	22.06.24	5	-	-	10	10	-	15	10	25
Natural farming	importance of natural farming in agriculture	2	01	Off	10.06.24	5	-	2	-	18	-	25	-	25
IV. LIVESTOCK PRODUCTION & MGT.														
Dairy mgt.	Care & mgt. of Dairy animal	1	01	Off	07.06.24	5	-	10	-	10	-	25	-	25
,, ,,	Importance of clean milk production	1	01	Off	17.06.24	5	-	10	-	10	-	25	-	25
Poultry mgt.	Care & management of backyard poultry	1	01	Off	28.07.24	5	-	15	-	5	-	25	-	25
Poultry mgt.	Care & management of quail rearing	1	01	On	17.08.24	5	-	10	-	10	-	25	-	25
Production of quality animal products	Value addition of milk	1	01	On	25.07.24	5	-	5	-	15	-	25	-	25
V. PLANT PROTECTION														
Integrated Pest	IPM in paddy	1	01	Off	08.08.24	5	-	5	-	15	-	25	-	25

Thematic area	Title of Training	No.	Dura-tion	Venue On/Off	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
management														
,, ,,	IPM in cucurbits	1	01	Off	15.07.24	-	-	5	-	20	-	25	-	25
Integrated Disease mgt.	IDM in Paddy	1	01	Off	12.08.24	5	-	5	-	15	-	25	-	25
,, ,,	IDM in Cucurbits	1	01	Off	22.07.24	5	-	5	-	15	-	25	-	25
,, ,,	IDM in Kharif vegetables	1	01	On	25.07.24	5	-	5	-	15	-	25	-	25
Bio control of pest & diseases	Use of Bio-pesticides in Organic farming	1	01	On	14.06.24	5	-	-	-	20	-	25	-	25
,, ,,	Importance of Pheromone trap in managing fruit and shoot borer in brinjal.	1	01	On	24.06.24	5	-	-	-	20	-	25	-	25
Production of Bio-control agents & Bio-pesticides	Importance of Bio-control agents & Bio-pesticides in Natural Farming	1	01	On	05.09.24	5	-	10	-	10	-	25	-	25
VI. CAPACITY BUILDING AND GROUP DYNAMICS														
Mobilization of social capital	Recent advancement in agricultural technologies	1	01	Off	27.09.24	5	-	15	-	5	-	25	-	25

(b) Rural youths

Thematic area	Title of Training	Duration	Venue On/Off	Tentative Date	No. of Participants								
					SC		ST		Other		Total		
					M	F	M	F	M	F	M	F	T
Production of Organic inputs	Production and use of organic inputs in agriculture	04	On	02-05.6.24	5	-	-	-	15	-	20	-	20

Thematic area	Title of Training	Duration	Venue On/Off	Tentative Date	No. of Participants								
					SC		ST		Other		Total		
					M	F	M	F	M	F	M	F	T
Production of planting materials	Production of fruits and ornamental plants	05	ON	01-05.8.24	5	-	-	-	15	-	20	-	20
Nursery management of horticulture crops	Production of vegetable nursery	04	On	12-15.6.24	5	-	-	-	15	-	20	-	20
Dairy farming	Care & mgt. of Dairy animal.	05	On	05-09.9.24	3	-	2	-	15	-	20	-	20

SKILL DEVELOPMENT TRAINING:

Thematic area	Title of Training	No.	Dura-tion	Venue On/Off	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Production of Planting materials	Organic cultivator (ICAR)	1	210 hrs.	On	20.06.2024	3	2	3	2	10	5	16	9	25
Bee keeping	Bee keeping (BSDM)-RPL	1	60 hrs.	On	15.09.2024	6	3	6	3	9	3	21	9	30

(c) Extension functionaries

Thrust area/ Thematic area	Title of Training	No.	Dura-tion	Venue On/Off	Tentative Date	No. of Participants								
						SC		ST		Other		Total		
						M	F	M	F	M	F	M	F	T
Integrated Pest Mgt. (IPM)	Advancement in IPM for sustainable farming	1	02	On	22-23.8.24	3	-	-	-	22	-	25	-	25
Integrated Nutrient Mgt. (INM)	Role of major & micro-nutrients their deficiency symptom & mgt.	1	01	On	27-28.06.24	3	-	-	-	22	-	25	-	25
Protected cultivation technology	Importance and use of Green House and Shed-net	1	01	On	09.09.24	-	-	-	-	20	5	20	5	25
Natural farming	Importance of natural farming in present scenario	1	01	On	25.08.24	-	5	-	-	-	15	-	20	20
Household Food security	Nutrition security through *Poshan Vatika*	1	02	On	07-08.07.24	-	3	-	7	15	-	-	25	25

2. Frontline demonstration

a) General

Sl. No.	Crop & variety / Enterprises	Proposed Area (ha)/ Unit (No.)	Technology package for demonstration	Parameter (Data) in relation to technology demonstrated	Cost of Cultivation (Rs.)			No. of farmers / demonstration		
					Name of Inputs	Demo	Local	Total		
								M	F	T
1.	Sawan (Var.-DHBM-93-2)- Barnyard Millet	01	Varietal (Seed)	Yield (Q/ha)	Seed	18,000	16,000	5	-	5
2.	Kodo (Var.-JK-13 /41)	01	Varietal (Seed)	Yield (Q/ha)	Seed	18,000	16,000	5	-	5
3.	China (TnAU-202)	01	Varietal (Seed)	Yield (Q/ha)	Seed	20,000	18,000	2	3	5
4.	Jowar (Var.-CSV-15)	01	Varietal (Seed)	Yield (Q/ha)	Seed	20,000	16,000	3	2	5
5.	Bajra (MPMH-21)- Pearl Millet	01	Varietal (Seed)	Yield (Q/ha)	Seed	20,000	18,000	3	2	5
6.	Ragi (CFMV-2) - Finger Millet	01	Varietal (Seed) + weedicide	Yield (Q/ha)	Seed	17,000	12,000	5	-	5
7.	Maize (Hybrid)- Shaktiman -5	01	Varietal (Seed)	Yield (Q/ha)	Seed	28000	22000	20	-	20
8.	Paddy (Sabour Kunwar)	04	Varietal (Seed)	Yield (Q/ha)	Seed	39200	38000	10	-	10
9.	Napier grass (Hybrid Napier-10)	0.25	Varietal (Sapling)	Fresh leaves weight (Qtls/ha)	Sapling	25000	-	10	-	10

b) Cluster Front Line Demonstration

Season	Crop	Variety	No. of demonstrations	No. of area (ha)
OILSEEDS				
Kharif	Niger	Utkal Nier-150	250	100
Kharif	Sesame	GT-6	100	140
Kharif	Groundnut	K-1812	50	20

3. On-farm trials to be conducted:

Thematic area	Title	Problem diagnosed	Treatments	No. of farmers
Integrated Weed Management.	Assessment of efficacy of weedicides in transplanted Rice.	Low yield of Paddy due to high weeds infestation.	Farmers' Practice: Hand weeding (No use of herbicide). Technology Option-1: Pretilachlor 50% EC @ 750gm. a.i./ha. as pre-emergence followed by one hand weeding at 30 DAT. Technology Option-2: Pretilachlor 50% EC @ 750gm. a.i./ha. as pre-emergence followed by Bis-pyribac sodium 10% SC @ 25 gm.a.i./ha.	08
Natural resource Management	Assessment of efficacy of phosphorus in Rice-Wheat cropping system	Low yield of Rice	T1: 50% of RDP 100% N and K + seed treatment with Nano DAP @ 4ml/kg seed + Spray with Nano DAP @4 ml/litre water at tillering stage T2: 75% RDP & 100% N and K + + seed treatment with Nano DAP @ 4ml/kg seed + 2spray of Nano DAP at tillering stage (25-30 DAT) and booting stage (60-65 DAT) @ 4 ml/litre of water	10
Low value high volume crop	Assessment of disease resistant high yielding Bottle guard varieties	Low yield and Profit of vegetables producers of Kaimur Plateau	T1 (FP) : Traditional varieties T2: Kashi Kriti (VRBOG 63-02) T3: Kashi Ganga	10
Integrated Pest Management	Management of Brown plant hopper in Rice	Low yield of Rice	FP**:** Application of Chloropyriphos 50 EC @ 3ml/Lit of water TO-1: Spraying of Dinotefuron 20 SG @ 0.40 g/Lit. of water TO-2 : Spraying of Triflumezopyrim 10 SC @ 0.48 ml/ lit of water	10

4. Extension Activities

Sl. No.	Activities/ Sub-activities	No. of activities proposed	Total		
			Male	Female	Total
1.	Field Day	8	150	35	185
2.	Kisan Mela	1	750	300	1050
3.	Kisan Ghosthi	2	225	150	275
4.	Exhibition	1	250	50	300
5.	Film Show	15	200	150	350
6.	Group meetings	5	75	25	100
7.	Lectures delivered as resource persons	10	1200	150	1350
8.	Advisory Services		200	-	200
9.	Scientific visit to farmers field	10	150	-	150
10.	Farmers visit to KVK	-	600	150	750
11.	Diagnostic visits	10	150	-	150
12.	Exposure visits	1	25	-	25
13.	Ex-trainees Sammelan	1	25	5	30
14.	Animal Health Camp	1	25	-	25
15.	Agri mobile clinic	2	50	-	50
16.	Soil test campaigns	3	50	25	75

KRISHI VIGYAN KENDRA, LAKHISARAI

Report of 26th Extension Education Council Meeting
(From October 2023 to May 2024)

2. ACHIEVEMENT OF TRAINING PROGRAMME

A. Farmers & Farm

Discipline	No. of Course	No. of Participants						Grand Total		
		Other			SC/ST					
		M	F	T	M	F	T	M	F	T
Plant Breeding	30	897	73	970	20	19	39	917	92	1009
Plant Protection	18	155	64	219	90	253	343	245	317	562
Agronomy	20	667	41	708	39	30	69	706	71	777
Horticulture	22	322	138	460	63	118	181	385	256	641
Home Science	30	120	286	406	32	299	331	152	585	737
TOTAL	**120**	**2161**	**602**	**2763**	**244**	**719**	**963**	**2405**	**1321**	**3726**

B. Rural Youth

Discipline	No. of Course	No. of Participants						Grand Total		
		Other			SC/ST					
		M	F	T	M	F	T	M	F	T
Plant Breeding	4	54	8	62	26	0	26	80	8	88
Plant Protection	1	11	0	11	4	0	4	15	0	15
Agronomy	1	17	0	17	5	0	5	22	0	22
Horticulture	1	17	2	19	5	2	7	22	4	26
Home Science	2	10	13	23	3	13	16	13	26	39
TOTAL	**9**	**109**	**23**	**132**	**43**	**15**	**58**	**152**	**38**	**190**

C. Extension Functionaries

Discipline	No. of Course	No. of Participants						Grand Total		
		Other			SC/ST					
		M	F	T	M	F	T	M	F	T
Plant Breeding	2	51	6	57	2	1	3	53	7	60
Plant Protection	3	35	22	57	3	1	4	38	23	61
Agronomy	2	19	19	38	2	1	3	21	20	41
Horticulture	4	69	27	96	4	1	5	73	28	101
Home Science	3	35	22	57	3	1	4	38	23	61
TOTAL	**14**	**209**	**96**	**305**	**14**	**5**	**19**	**223**	**101**	**324**

D. Sponsored Training Programme

Topic	Sponsoring Agency	No. of Participants						Grand Total		
		Other			SC/ST					
		M	F	T	M	F	T	M	F	T
Rabi Mahotsav	ATMA Lakhisarai	150	30	180	40	15	65	190	45	235
CCNM-DAESI	ATMA	30		30				30	0	30
Mushroom Production	ATMA	80		80				80	0	80
Farmer Scientist Interaction	ATMA	25	4	29	1	1	2	26	5	31
Energy Conservation in Agriculture	BREDA	45	1	46	4	3	7	49	4	53

Topic	Sponsoring Agency	No. of Participants						Grand Total		
		Other			SC/ST					
		M	F	T	M	F	T	M	F	T
Kisan Mela on Jaivik Kheti	ATMA	116	154	270	16		16	132	154	286
Krishi Yantrikaran Mela	ATMA	118	132	250	22		22	140	132	272
ZT & Use of different farm implement & Field Visit	DAO Lakhisarai	22	2	24	2		2	24	2	26
Kisan Mela cum buyer seller meet	ATMA	500		500				500	0	500
Kisan Mela cum buyer seller meet	ATMA	300		300				300	0	300
Exposure visit of farmer	ATMA	32	18	50	34		34	35	22	57
District level Kharif Workshop	ATMA	160	17	177				160	17	177

3. Achievement of Front Line Demonstration

Season	Crop/ Particular	Variety/ Technology Demo	Area (ha)/No.	No. of farmer	Remarks
Rabi	Herbicide (Wheat)	Sulphosulfuron 75%WG + Metasulphuron 5%WG	10	25	FLD
Rabi	Tomato	Kashi (Nucleopolyhedral Virus)	1	20	FLD
Rabi	Tomato	Kashi Vishesh	1	28	FLD
Rabi	Onion	Pendimethelin & Oxyflurofen	5	10	FLD
Rabi	Onion	NHRDF-Red3	1	8	FLD
Rabi	Wheat	ZT, HD 2967	12	40	NICRA
Rabi	Wheat	ZT, HI-1563	12.4	31	NICRA
Rabi	Mustard	RH-725	24	69	NICRA
Rabi	Lentil	IPL-220	16	64	NICRA
Rabi	Barseem	Multicut	1.6	45	NICRA
Rabi	Jowar	Trimurti Charu	0.5	69	NICRA
Rabi	Oat	Kaint	1.6	45	NICRA
Rabi	Mineral Mixture & Dewormer	-	200 Kg	100	NICRA
Rabi	Chick Pea	RVG-203	2	28	SCSP
Summer	Green Gram	Sikha	12	30	SCSP
Yearly	Nutritional Garden	Seeds of Vegetables, GLVs & Fruit Plants	140	140	FLD+ NARI

4. Cluster FLD

Sl. No.	Crop demonstrated	Variety	Number of farmers	Area in ha
1	Lentil	IPL 316	50	20
2	Rapeseed & mustard	RH-725	77	30

5. Other Extension Activities:

Activities & Sub-activities	No./Details	No. of beneficiaries
Scientist Visit to farmer's field	295	2178
Farmer's visit to KVK	1674	1674
Consultancy through Mobile	2643	2643
Diagnostic Services	21	46
Kisan Gosthi	4	579
PM Live	3	329
World Soil Day	1	108
Kisan Mela	1	439
Animal Health Camp	4	414
Exposure Visit	6	432
Field Day	13	669
Natural Farming Awareness Programme	9	849
Krishi Gyan Vahan	8	439
Vikshit Bharat Sankalp Yatra	65	42577

6. Performance of farm

A. Standing crop

Crop	Variety	Class of Seed	Area (ha)	Expected Yield (q)
Green gram	Sikha	F/S	3.5	28

B. Seed Availability at KVK, Farm

Crop	Variety	Type of seed produced	Seed Quantity (q)
Paddy	Sabour Sampanna	F/S	265.0
Paddy	R. Sweta	F/S	165.0
Paddy	R. Sweta	C/S	11.50
Wheat	HD-2967	F/S	82.0
Wheat	DBW-187	F/S	92.0
Mustard	RH-725	T/L	7.80
Chick Pea	Sabour Chana-1	B/S	46.60
Potato	Neelkanth	T/L	12.0
Potato	Yusi Map	T/L	9.5
Potato	Badi Alu	T/L	10.25

7. Seed Hub Programme

Year	Crop	Variety	Type of seed produced	Quantity (q)
2022-23	Lentil	IPL-316	C/S	121.30
	Lentil	IPL-220	C/S	22.90
	Chick Pea	RVG-202	C/S	208.28
	Chick Pea	RVG-203	C/S	60.10
	Chick Pea	Sabour Chana-1	F/S	223.54
	Green Gram	Shikha	C/S	144.10

Procurement of seed under process for the year 2023-24

8. On Farm Trial

OFT-1 (Plant Breeding)

1.	Title of On farm Trial (OFT)	**Assessment of Gram cultivar for yield under late sown condition.**
2.	Problem diagnosed	Lacking of high yielding recent released cultivar of gram in Lakhisarai district
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Farmers Practice**: Deshi chana **T.O.1**: Gram var. Sabour Chana-2 **T.O.2:** Gram var. GNG-2299
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Dept. of Plant Breeding & Genetics, BAU Sabour
5.	Production system and thematic area	Rain fed & Crop Production
6.	Performance of the Technology with performance indicators	Yield & B:C ratio
7.	Final recommendation for micro level situation	Gram cultivar GNG-2299 recommended for growing in Lakhisarai district under late sown condition
8.	Constraints identified and feedback for research	None
9.	Process of farmers participation and their reaction	Positive

Results with Table

Technology options with detailed treatments	**Area (ha in crop & Fodder)/ Nos (in livestock)**		**Yield (q/ha)**	**Cost of cultivation (Rs./ha)**	**Gross return (Rs/ha)**	**Net return (Rs./ha)**	**BC ratio**
	Proposed	**Actual**					
Farmers Practice: Desi Chana	0.5	0.5	8	25600	41840	16240	1.63
T.O.1: Gram cv..Sabour Chana-2	0.5	0.5	9	25600	47070	21470	1.83
T.O.2:Gram cv. GNG-2299	0.5	0.5	12	25600	62760	37160	2.45

OFT-2 (Plant Breeding)

1.	Title of On farm Trial (OFT)	**Assessment of biofortified lentil cultivar for yield**
2.	Problem diagnosed	Lacking of high yielding biofortified Lentil cultivar in Lakhisarai district.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Farmers Practice**: Lentil cultivar Rubi **T.O.1**: Lentil cv. IPL-220 (Biofortified) **T.O.2:** Lentil cv. IPL-316 **T.O.3:** Lentil cv. L-4717
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Dept. of Plant Breeding & Genetics, BAU Sabour
5.	Production system and thematic area	Rain fed & Crop Production
6.	Performance of the Technology with performance indicators	Yield & B:C ratio
7.	Final recommendation for micro level situation	Lentil cv IPL-220 & PAL-4717 recommended for cultivation in Lakhisarai district
8.	Constraints identified and feedback for research	None
9.	Process of farmers participation and their reaction	Positive

Results with Table

Technology options with detailed treatments	Area (ha in crop & Fodder)/ Nos (in livestock)		Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
	Proposed	Actual					
Farmers Practice: Lentil cultivar Rubi	1.25	1.25	12	35962.5	66000	30037.5	1.83
T.O.1: Lentil cv. IPL-220	1.25	1.25	16	35962.5	88000	52037.5	2.45
T.O.2: Lentil cv. IPL-316	1.25	1.25	14	35962.5	77000	41037.5	2.14
T.O.3: Lentil cv. PAL-4717	1.25	1.25	16	35962.5	88000	52037.5	2.45

Results: Lentil cultivar IPL- 220 & PAL-4717 showed highest B:C ratio(2.45) followed by lentil cultivar IPL-316 B:C ratio (2.14) and farmer practice lentil cultivar rubi showed lowest B:C ratio 1.83

OFT- 3 (Agronomy)

1.	Title of On farm Trial	Improvement of Nitrogen use efficiency in wheat.
2.	Problem diagnosed	Excessive use of chemical fertilizer and spiraling price of urea leads to increase in cost cultivation.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Farmers practices:** RDF (100:40:20) Kg/ha **T.O.1:**50% of RDN & 100% PK + Nano urea @4ml/lit. water (Single spray at 35 DAS) **T.O.2**: 50% of RDN & 100% PK + 2 Spray ofNano urea at (35 DAS) and (60-65 DAS) @4ml/lit. water
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	OFT Finalization workshop dt. 1-3 Sept. 2022, BAU Sabour
5.	Production system and thematic area	Rice-Wheat system, INM
6.	Performance of the Technology with performance indicators	Yield, No. of effective tillers/ m², 1000 grain wt., Panicle wt, Straw yield & Economics
7.	Final recommendation for micro level situation	Use of Nano Urea is very effective in reducing dose of chemical Fertilizer.
8.	Constraints identified and feedback for research	Use of Nano Urea is effective and remunerative method in reducing chemical fertilizer by enhancing fertilizer use efficiency.
9.	Process of farmers participation and their reaction	Farmers were very enthusiastic to see the performance of Nano Urea.

Table:-

Technology option	No. of Trials	Yield component			Yield (qt./ha)	Cost of cultivation(Rs./ ha)	Gross return (Rs/ha)	Net return (Rs./ha)	B:C ratio
		No. of effective tillers/ m2	No. of grains/ Spike	(1000 grain wt.).in gm.					
Farmers practices:	10	164.5	30.6	32.0	34.6	28,600	83,800	55,200	2.93
T.O.1:	10	172.4	31.6	32.4	35.4	27,400	85,500	58,100	3.12
T.O.2:	10	176.8	31.8	32.5	36.8	27,600	88,200	60,600	3.20
CD at 5%					1.26				

OFT -4 (Agronomy)

1.	Title of On farm Trial	**Integration of fertilizer in different form on yield of lentil**
2.	Problem diagnosed	Injudicious use of chemical fertilizer
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Farmer's practices:** Seed Treatment + RDF. **T.O.1:**50% of RDF + NPK(WS) 18:18:18 @ 5 gm/lit. water (Single spray at pre flowering stage) **T.O.2:**Seed treatment with PSB + Rhizobium, 50% of RDF + NPK(WS) 18:18:18 @ 5 gm/lit. water (Single spray at pre flowering stage)
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	OFT Finalization workshop dt. 1-3 Sept. 2022, BAU Sabour
5.	Production system and thematic area	Rice-Wheat system, INM
6.	Performance of the Technology with performance indicators	Yield, No. of Plant/ m², 1000 grain wt., No. of Pod/plant, Strover yield & Economics
7.	Final recommendation for micro level situation	Use of bio-fertilizer & NPK is very effective in reducing dose of Chemical Fertilizer.
8.	Constraints identified and feedback for research	Use of bio-fertilizer & NPK is effective and remunerative method in reducing chemical fertilizer by enhacing fertilizer use efficiency.
9.	Process of farmers participation and their reaction	Farmers were very enthusiastic to see the performance of NPK & Bio-fertilizer in Lentil

Table:-

Technology option	No. of Trials	Disease/Insect-pest incidence %	Yield component			Yield (qt./ha)	Cost of cultivation(Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	B:C ratio
			No. of plants/ m2	No. of Pod /Plant	Test wt. (1000 grain wt.)					
Farmer's practices:	10	18.4	45.2	36.2	20.25	12.80	23400	87200	63800	3.73
T.O.1:	10	13.6	47.6	38.5	20.60	14.20	24600	96800	72200	3.94
T.O.2:	10	8.4	50.8	40.8	21.40	14.70	24800	98600	73800	3.98
CD at 5 %						0.84				

Results: Data presenting in table showed that the maximum Lentil yield (14.70/ha) was recorded in option TO.2 in comparison to farmer practice and TO.1 along with highest B:C ratio (3.98).

OFT- 5 (Home Science)

1.	Title of On farm Trial (OFT)	**Assessment of preparation methods of Potato Flakes for more shelf life & enhancement of income**
2.	Problem diagnosed	Lack of knowledge about value addition of potato flakes for income enhancement
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Farmers' Practice:** Preparation of potato flakes without preservatives **T.O. 1 :**Preparation of Potato Flakes **Formulation – Ingredients** Sliced potatoes (3-5mm) – 5.0Kg, Salt 50g, Water-7.5 liter, KMS- 6.0g **T.O. 2 :**Preparation of Potato Flakes with sour taste.

		Formulation – Ingredients Sliced potatoes (3-5mm) – 5.0kg, Salt-50g, Water-7.5 liter, KMS- 6.0g, Glacial Acetic acid -50.0ml
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	OFT Finalization Workshop, 14-15 Sept. 2022, RAU, Pusa
5.	Production system and thematic area	Value Addition
6.	Performance of the Technology with performance indicators	Sensory Analysis: (Fried in edible refined oil) i. Taste ii. Texture (Crispness) iii. Colour iv. Flavour v. Overall Acceptability 2. Shelf life (0, 15, 30, 45, 60 and 75 days)
7.	Final recommendation for micro level situation	T.O.2 i.e. Preparation of Potato flakes with sour taste is recommended for micro-level situation
8.	Constraints identified and feedback for research	Preservatives are not locally available
9.	Process of farmers participation and their reaction	Demonstration & Training

B. Results with Table and good quality photographs in jpg.

Table.1: Sensory Analysis of Technologies at different time interval

Sensory characteristics	**Taste**			**Texture**		
Duration	FP	T.O.1	T.O.2	FP	T.0.1	T.O.2
0 Day	4.4	4.5	4.8	4.3	4.4	4.7
15 Days	4.4	4.5	4.8	4.3	4.4	4.7
30 Days	4.4	4.5	4.8	4.3	4.4	4.7
45 Days	4.3	4.5	4.7	4.2	4.4	4.6
60 Days	4.2	4.4	4.6	4.2	4.4	4.6
75 Days	4.2	4.2	4.5	4.1	4.2	4.5

Sensory characteristics	**Colour**			**Flavour**			**Overall acceptability**		
Duration	FP	T.O.1	T.O.2	FP	T.O.1	T.0.2	FP	T.O.1	T.O.2
0 Day	4.3	4.5	4.6	4.1	4.4	4.7	4.275	4.45	4.7
15 Days	4.2	4.5	4.6	4.1	4.4	4.7	4.25	4.45	4.7
30 Days	4.2	4.5	4.6	4.1	4.4	4.7	4.25	4.45	4.7
45 Days	4.1	4.4	4.6	4.1	4.3	4.6	4.175	4.4	4.6
60 Days	4.1	4.4	4.5	4	4.3	4.6	4.125	4.375	4.575
75 Days	4.1	4.3	4.4	4	4.2	4.5	4.1	4.225	4.475

*Respondents feedback (5 point scale Hedonic Scale)

Result: Table shows that overall acceptability score of T.O.2 is more than that of T.O.1 and farmers practice at 0 days as well as over the period of 15, 30, 45, 60 and 75 days. Beside this, the colour and flavour superiority of T.0.2 over T.0.1 and farmers practice may have potential for marketing to enhance their income.

OFT- 6 (Plant Pathology)

1.	Title of On farm Trial	Assessment of different fungicides for management of Spot blotch of Wheat
2.	Problem diagnosed	Necrosis of leaf, reduction of leaf photosynthetic area
3.	Details of technologies selected for assessment/refinement	**Farmer Practices :** Bavistin @ 2.5 g/Lit at the time of disease appearance **T.O.1 :**Seed treatment with Vitavax 200WS @

	(Mention either Assessed or Refined)	2.5g/Kg Seed + Foliar spray of Propiconazole @ ml/Lit water first at boot leaf and second spray 20 days after first spray **T.O.2 :**Seed treatment with Trichoderma viridae@ 5g/KgSeed+Foliar spray of Hexaconazole @ 1ml/Lit water first at boot leaf stage and second spray 20 days after first spray **T.O.3 :**No treatment
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	UBKV, Cooch Behar, West Bengal
5.	Production system and thematic area	Rice-Wheat production system
6.	Performance of the Technology with performance indicators	Disease severity, Yield, B:C ratio
7.	Final recommendation for micro level situation	TO-1 is recommended for farmers as it has least disease and high BC ratio
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	Training and demonstration

Thematic area: IPM
Problem definition: Necrosis and reduction of leaf photosynthetic area
Technology assessed:

Table:

Technical Options	**No of trials**	**Test wt. (1000 grain wt.)**	**Disease incidence (%)**
FP	5	36.4b	17.9b
TO1	5	39.2a	12.6d
TO2	5	36.2b	16.1c
TO3	5	31.7c	21.3a
	CD@5%	1.25	1.71
	CV	2.45	7.33

Technical Options	**No of trials**	**Yield (q/ha)**	**Cost of cultivation (Rs/ha)**	**Gross return (Rs/ha)**	**Net return (Rs/ha)**	**BC ratio**
FP	5	21.2b	32850	42450	9600	1.29
TO1	5	24.8a	34000	52920	18920	1.56
TO2	5	22.6ab	34350	48620	14270	1.42
TO3	5	17.4c	32300	39250	6950	1.22
	CD@5%	2.24				
	CV	7.67				

TO1 i.e. seed treatment with Vitavax followed by foliar spray with Propiconazole results in least disease incidence (11.8%), highest yield (24.5q) and BC ratio (1.49). Hence, TO1 is recommended to farmers against Spot blotch of Wheat.TO1 has significantly less disease than farmers practice and negative control TO3. Farmers practice (spray of Carbendazim) is at par with TO2 (seed treatment with Trichoderma viridae followed by spray of Hexaconazole) which implies that both treatment is equally effective in management of spot blotch of wheat.

OFT- 7 (Plant Pathology)

1.	Title of On farm Trial	Assessment of bio-intensive management of wilt disease in tomato crop
2.	Problem diagnosed	Wilting of tomato crop in large scale
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmers Practice: Seed treatment T.O.1: Soil solarization Seed treatment by Pseudomonas fluorescens @10g/kg Nursery bed treatment of Trichoderma @50g/m2 Soil application of Pseudomonas fluorescens @5kg/ha mixed with 500 kg vermicompost per hectare @30 DAT T.O.2: Soil solarization Seed treatment by Trichoderma viridae 10 g/kg Nursery bed treatment of Trichoderma viridae@50g/m2 Soil application of Trichoderma viridae @5 kg/ha mixed with 500 kg vermicompost per hectare @30 DAT T.O.3 : No treatment
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	IIHR, Banglore
5.	Production system and thematic area	Rain fed & Crop Production
6.	Performance of the Technology with performance indicators	Disease incidence, Yield & B:C ratio
7.	Final recommendation for micro level situation	T.O.1 is recommended to farmers as ithas shown least disease incidence and high BC ratio
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	Training and Demonstration

Thematic area: IPM
Problem definition: Wilting of tomato crop in large scale
Technology assessed:
Table:

Technical Options	No of trials	Disease incidence (%)	Plant Mortality		
			30 DAT	45 DAT	60 DAT
FP	5	20.6b	12.4	14.6	21.6
TO1	5	14.6c	8.2	11.8	18.8
TO2	5	13.5c	9.8	14.2	21.6
TO3	5	34.6a	12.8	16.1	23.8
CD@5%		2.74			
CV		9.04			

Proposed Action Plan
(June 2024 to September 2024)

1. Proposed Training Programme:

S. no.	Discipline	Month	Thematic area	Course title	Course No.	Duration (days)	No. of participants			
							SC	ST	Others	Total
1	Plant Breeding & Genetic	Apr	Seed Production	Seed Production of Rice & Pigeonpea	1	2	0	-	22	22
2	Plant Breeding & Genetic	May	Seed Production	Seed Production of Rice & Pigeonpea	2	2	6	-	19	25
3	Plant Breeding & Genetic	May	Seed Production	Seed Production of Rice & Pigeonpea	2	2	6	-	19	25
4	Plant Breeding & Genetic	June	Seed Production	Seed Production of Rice & Pigeonpea	2	2	6	-	19	25
5	Plant Breeding & Genetic	June	Seed Production	Seed Production of Rice, Pigeonpea & blackgram	2	2	6	-	19	25
6	Plant Breeding & Genetic	July	Seed Production	Seed Production of Rice, Pigeonpea & blackgram	2	2	6	-	19	25
7	Plant Breeding & Genetic	July	Seed Production	Seed Production of Rice, Pigeonpea & blackgram	2	2	6	-	19	25
8	Plant Breeding & Genetic	Aug	Seed Production	Seed Production of Rice, Pigeonpea & blackgram	2	2	6	-	19	25
9	Plant Breeding & Genetic	Aug	Seed Production	Seed Production of Pigeonpea	2	2	6	-	19	25
10	Plant Breeding & Genetic	Sept.	Seed Production	Seed Production of Rapseed and Mustard, Lentil, Gram	2	2	6	-	19	25
11	Plant Breeding & Genetic	Sept.	Seed Production	Seed Production of Lentil & Gram	2	2	6	-	19	25
12	**Plant Protection**	**April**	**IPM**	**IPM of Summer Veg.**	**2**	**2**	**6**	**-**	**19**	**25**
13	Plant Protection	April & May	IPM	Scientific & safe storage of cereal and pulses	2	2	6	-	19	25
14	Plant Protection	May	IDM	Integrated pest and disease mgt. in orchard	1	2	5	-	20	25
15	Plant Protection	May	IPM	Integrated insect pest management	1	2	5	-	20	25

				of summer cucurbitaceous vegetable						
16	Plant Protection	May	IDM	IDM of summer cucurbitaceous vegetable	1	2	5	-	20	25
17	Plant Protection	June	IPM	Integrated pest management of Okara & Brinjal	1	2	6	-	19	25
18	Plant Protection	June	IDM	Technique and importance of seed treatment in rice	2	2	5	-	20	25
19	Plant Protection	July	IDM	IDM in Rice	2	2	5	-	20	25
20	Plant Protection	July	IPM	IPM in Rice	2	2	5	-	20	25
21	Plant Protection	Aug	IPM	IPM in Rice	2	2	6	-	19	25
22	Plant Protection	Aug	IPM	IPM in Kharif Maize	2	2	5	-	20	25
23	Plant Protection	Aug	IDM	IDM in Kharif Maize	2	2	5	-	20	25
24	Plant Protection	Sept.	Biocontrol of pest & disese mangement	Management of Rice pest & Desease through biogents	1	2	5	-	20	25
25	Plant Protection	Sept.	IPM	Integrated pest & disease management in orchard.	1	2	5	-	20	25
26	**Hort.**	**April**	**Layout and Mgt. of orchards**	**Layout and management of mango and guava orchards**	**2**	**2**	**6**	**-**	**34**	**40**
27	Hort.	April	Cultivation of vegetables	Scientific cultivation of Cucurbits.	2	2	10	-	30	40
28	Hort.	May	Cultivation of vegetable	Scientific cultivation of Onion	2	1	6	-	34	40
29	Hort	May	Medicinal and Aromatic plants	Production and management of Satawar and Mentha	2	2	10	-	40	50
30	Hort	May	High value vegetable production	Production technology of Elephant foot yam (Ol) and French bean. Broccoli and baby corn etc.	2	2	8	-	40	48
31	Hort.	June	Nursery raising	Nursury raising of solonaceous	2	2	6	-	34	40

				vegetable crops						
32	Hort.	June	Yield increment	Use of plant growth regulator in enhancement of vegetable yield	1	2	5	-	15	20
33	Hort	June	Plant propogation technique	Propogation technique of major fuit crops.	2	1	10	-	30	40
34	Hort.	July	Cultivation of fruit	Scientific cultivation mango/ Guava	2	2	10	-	40	50
35	Hort.	July	Cultivation of vegetables	Scientific cultivation of Tomato	1	1	5	-	15	20
36	Hort.	July	Plant propogation technique	Propogation technique of major fuit crops.	2	1	10	-	30	40
37	Hort.	Aug	Cultivation of fruit	Scientific cultivation of Papaya & Guava	2	1	8	-	32	40
38	Hort.	Aug	Nursery raising	Nursery raising of cole crops (Califlower)	2	1	10	-	30	40
39	Hort.	Sept.	Cultivation of veg.	Scientific cultivation of early cauliflower	2	1	10	-	30	40
40	Hort.	Sept.	INM	Integrated Nutrient Mgt. in Solanaceous crops	1	1	5	-	15	20
41	Hort.	Sept.	Protective cultivation	Protected cultivation of capsimum and tomato	1	1	5	-	15	20
42	Home Sci.	Apr	Household food security by kitchen gardening and nutrition gardening	Importance of kitchen gardening for human health	**1**	**2**	**5**	**-**	**15**	**20**
43	Home Sci.	Apr	Storage loss minimization technique	Home scale methods of safe grain storage	1	2	5	-	15	20
44	Home Sci.	Apr	Enterprise development and income	Preparation of chips, Badi & Papad.	1	2	5	-	15	20

			generation							
45	Home Sci.	May	Minimization of nutrient loss in processing	Prevention of nutrient loss during cooking process	1	2	5	-	15	20
46	Home Sci.	May	Woman and child care	Health and nutrition care of pregnant women & children	1	2	5	-	15	20
47	Home Sci.	May	Value addition	Preservation of seasonal fruits and vegetables	1	2	5	-	15	20
48	Home Sci.	June	Gender mainstreaming through SHGs capacity building	Formation & functions of SHGs	1	2	5	-	15	20
49	Home Sci.	June	Designing & development of high nutrient diet	Preparation of high nutrient efficient diet using millets	1	2	5	-	15	20
50	Home Sci.	July	Minimization of nutrient loss in processing	Prevention of nutrient loss during cooking process	1	2	5	-	15	20
51	Home Sci.	July	Location specific drudgery reducing technology	Implements for drudgery reduction	1	2	5	-	15	20
52	Home Sci.	July	Design & development of low/minimum cost diet	Preparation of low cost diet for children using millets	1	2	5	-	15	20
53	Home Sci.	Aug	Household food security gardening & nutrients gardening	Importance of nutritional garden for human health	1	2	5	-	15	20

54	Home Sci.	Aug	Women & Child care	Health & nutritional care of pregnant women & child	1	2	5	-	15	20
55	Home Sci.	Aug	Enterprise development & Income generation	Candle and Agarbatti making	1	2	5	-	15	20
56	Home Sci.	Sept.	Designing & development for high nutrient efficient diet	Preparation of high nutrient efficient diet using millets	1	2	5	-	15	20
57	Home Sci.	Sept.	Women & Child care	Health & nutritional care of pregnant women & child	1	2	5	-	15	20
58	Home Sci.	Sept.	Rural Craft	Basic stitches of Embroidery	1	2	5	-	15	20
59	Agronomy	April	Crop Diversification	Scientific method of sunflower cultivation	1	2	5	-	15	20
60	Agronomy	April	Integrated Farming	Importance of IFS for higher Income	1	2	5	-	15	20
61	Agronomy	May	Nursery Management	Nursery management for higher Paddy cultivation.	1	2	5	-	15	20
62	Agronomy	June	Weed management	Integrated weed management in Paddy crops.	1	2	5	-	15	20
63	Agronomy	June	RCT	Direct seeding method of Rice	1	2	5	-	15	20
64	Agronomy	July	Integrated nutrient management	Importance of BGA &Azolla in paddy cultivation.	1	2	5	-	15	20
65	Agronomy	July	ICM	Scientific method of paddy cultivation	1	2	5	-	15	20
66	Agronomy	Aug	ICM	Package and practice Arhar cultivation	1	2	5	-	15	20
67	Agronomy	Aug	Weed Management	Weed management in Maize	1	2	5	-	15	20
68	Agronomy	Sep	ICM	Improved package and practices of Rapeseed &	1	2	5	-	15	20

				Mustard cultivation						
69	Agronomy	Sep	INM	Use of azotobacter & Feb in wheat	1	2	5	-	15	20
Total					**99**	**129**	**398**	**0**	**1372**	**1770**

2. Vocational Training/ Skill Development Training

Course Title	Sponsoring Agency	Course No.	Duration(Hrs)	Participants
Gardener- (RPL)	BSDM	2	160	60
Ag. Ext. Service Provider-(RPL)	BSDM	1	60	30

3. Frontline demonstration

Season	Crop (Variety)	Area (ha) /No	No. of farmer
Summer	Mushroom Cultivation (Spawn and other inputs of Milky white mushroom)	5	5
Yearly	Nutritional Garden(Seeds of seasonal vegetables & fruits plants)	25	25
Kharif	Bio-fortified Paddy (CR Dhan-315)	10	25

4. <u>On Farm Trial to be conducted</u>

OFT-1 (Plant Breeding)

1.	**Title of On farm Trial**	**Assessment of biofortified lentil cultivar for yield**
2.	Problem diagnosed	Lacking of high yielding biofortified Lentil cultivar in Lakhisarai district.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Farmers Practice**: Lentil cultivar Rubi **T.O.1**: Lentil cv. IPL-220 (Biofortified) **T.O.2:** Lentil cv. IPL-316 **T.O.3:** Lentil cv. L-4717
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Dept. of Plant Breeding & Genetics, BAU Sabour
5.	Production system and thematic area	Rain fed & Crop Production
6.	Performance of the Technology with performance indicators	Yield & B:C ratio
7.	Final recommendation for micro level situation	
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	

OFT-2(Plant Breeding)

1.	**Title of On farm Trial**	**Assessment of Gram cultivar for yield under late sown condition.**
2.	Problem diagnosed	Lacking of high yielding recent released cultivar of gram in Lakhisarai district
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Farmers Practice**: Deshi chana **T.O.1**: Gram var. Sabour Chana-2 **T.O.2:** Gram var. GNG-2299
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Dept. of Plant Breeding & Genetics, BAU Sabour
5.	Production system and thematic area	Rain fed & Crop Production
6.	Performance of the Technology with performance indicators	Yield & B:C ratio
7.	Final recommendation for micro level situation	
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	

OFT-3 (Horticulture)

1.	**Title of On farm Trial**	**Ex situ residue management in Potato cultivation**
2.	Problem diagnosed	
3.	Details of technologies selected for assessment/refinement	**Farmer Practices:** Sowing in ridge and furrow method Sowing of potato seed with FYM and paddy straw (15 cm) Sowing of potato seed with FYM and water hyacinth (15 cm) **T.O.1:** Sowing of potato seed with FYM and paddy straw (15 cm) **T.O.2:** Sowing of potato seed with FYM and water hyacinth (15 cm) (In TO1 & TO2, Foliar spray with 10:26:26, N:P:K as basal dose, 45 days after sowing spray with 19:19:19, N:P:K and thitd spray with 13:0:45, N:P:K)
4.	Source of Technology	OFT Finalization Workshop, 23-24 Sept. 2022, BAU Sabour
5.	Production system and thematic area	Paddy- Potato (small production system), RCT
6.	Performance of the Technology with performance indicators	1. Germination percentage 2. Growth performance (visual) 3.Disease incidence 4. Weed population 5. Tuber Yield 6. Economics (Rs./ha)
7.	Final recommendation for micro level situation	
8.	Constraints identified and feedback for research	
9.	Replication	10 farmers
10.	Process of farmers participation and their reaction	Through field visit and training

4. Seed and planting material production

Seed		Planting material	
Crop	**Area (ha.)/no.**	**Crop**	**Area / Number**
Mustard (RH-725)	1.5	Onion	1.0 Lakh
Paddy (R Sweta)	7.5	Tomato	1.0 Lakh
Paddy (S Sampanna)	2.5		
Finger millet (RAU-8)	0.5		

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5. Extension Activities

Sl. No.	Activity	No. of Programmes	No. of beneficiaries
1.	Field day	5	150
2.	Kishan Gosthi	5	180
3.	Kishan Choupal	18	750
4.	Exposure Visit	2	60
5.	Scientist visit to farmers field	40	120
6.	Farmers visit to KVK		600
7.	Extension Literature	3	25000
8.	Radio talk	3	Mass
9.	T.V. talk	2	Mass
10.	Help line	500	500
11.	Ex-trainees meet	2	100
12.	News Paper Coverage	18	Mass
13.	SHG Formation	1	50
14.	Diagnostic Services	20	100

KRISHI VIGYAN KENDRA, MADHEPURA

Report of 26th Extension Education Council Meeting
(From October 2023 to May 2024)

1. Achievement of Training Programme:

A. Training Programme for Practicing Farmers/Farmwomen: -

Sl. No.	Discipline	Duration (days)	Course No.	No. of Beneficiaries					
				Others		SC		Total	
				M	F	M	F	M	F
(i)	Crop Production	04	04	109	09	05	00	114	09
(ii)	Horticulture	19	19	167	07	107	282	274	289
(iii)	Plant Protection	21	21	616	82	74	26	690	108
(iv)	Animal Science	09	09	93	01	21	89	114	90
(v)	Home Sci.	02	02	25	05	00	00	25	05
	Total	**55**	**55**	**1010**	**104**	**207**	**397**	**1217**	**501**

B. Training Programme for Rural Youth: -

Sl. No.	Discipline	Duration (days)	Course No.	No. of Beneficiaries					
				Others		SC		Total	
				M	F	M	F	M	F
(i)	Crop Production	00	00	00	00	00	00	00	00
(ii)	Horticulture	00	00	00	00	00	00	00	00
(iii)	Plant Protection	04	12	112	31	17	5	129	36
(iv)	Animal Science	05	25	107	12	28	30	135	42
(v)	Home Sci.	00	00	00	00	00	00	00	00
	Total	**09**	**37**	**219**	**43**	**45**	**35**	**264**	**78**

C. Training Programme for Extension Functionaries: -

Sl. No.	Discipline	Duration (days)	Course No.	No. of Beneficiaries					
				Others		SC/ST		Total	
				M	F	M	F	M	F
(i)	Crop Production	00	00	00	00	00	00	00	00
(ii)	Horticulture	00	00	00	00	00	00	00	00
(iii)	Plant Protection	01	01	24	00	00	00	24	00
(iv)	Animal Science	01	01	17	04	00	00	17	04
(v)	Home Sci.	00	00	00	00	00	00	00	00
	Total	**02**	**02**	**41**	**04**	**00**	**00**	**41**	**04**

D. Sponsored Training programme:

S.N.	Topic	Participants	Duration	Date	Sponsoring Agency
1	Goat farming and feeding management	30	03 days	03-05.10.2023	BKBDP, Deptt GoB
2	Silage making & production	30	03 days	09-11.10.2023	
3	Poultry farming & management	30	03 days	16-18.10.2023	
4	Goat farming & feeding management	30	03 days	30.10.2023-01.11.2023	
5	Silage making & production	30	03 days	02-04.11.2023	

6	Silage making & production	30	03 days	06-08.11.2023	
7	Silage making & production	30	03 days	22-24.11.2023	
8	Energy conservation in agriculture	53	01	30.12.2023	BREDA, Patna

2. Details of On Farm Trial (OFT):

OFT-1 (Entomology)

1.	**Title of the OFT**	**Assessment of fungicides for the management of Sheath blight of Rice**
2.	**Problem diagnosed**	Low yield of rice due to heavy infestation of Sheath blight
3.	**Details of Technology**	**Farmers Practice:** Spray of hexaconazole 5 EC@2ml/lit when symptom appear **T.O I:** Spray of propiconazole 13.9% +difenoconazole 13.9EC @500ml/ha. **T.O II:** Spray of thifluzamide 24 SC@1 ml/lit water (45 days after transplanting)

Table 1: Effect of fungicides on disease parameter in sheath blight of rice during Kharif 2023

Technological options		**Diseases Severity %**	**Diseases Incidence %**	**Per cent disease control over FP**	**Yield (q/ha)**	**Per cent increase in yield over FP (average)**
FP	Spray of hexaconazole 5 EC@ 2ml / L	75.97	94.39	-	34.25	-
T1	Spray of propiconazole 13.9% +Difenoconazole 13.9% EC @ 500 ml/ha.	40.76	63.08	31.51	37.72	10.13
T2	Spray of Thifluzamide 24 SC @ 1 ml/ L of water (45 days after transplanting).	43.69	66.97	29.04	36.28	5.92

Table 2: Effect of fungicides on disease parameter in sheath blight of rice during Kharif 2023

Technological options		**Mean grain yield (q/ha)**	**Gross cost (Rs)**	**Gross return (Rs.)**	**Net return (Rs.)**	**BCR**
FP	Spray of hexaconazole 5 EC@ 2ml / L	34.25	33234	74768	71364	2.24
T1	Spray of propiconazole 13.9% +Difenoconazole 13.9% EC @ 500 ml/ha.	37.72	34130	82343	98873	2.41
T2	Spray of Thifluzamide 24 SC @ 1 ml/ L of water (45 days after transplanting).	36.28	34118	79199	93558	2.32

- Support price Rs.2183

Result: Sheath blight per cent disease severity and per cent disease incidence recorded 40.76 per cent and 63.08 per cent, respectively which was realized minimum among all treatments maximum yield and BC ratio recorded 37.72 q/ha and 2.41 respectively in T1. The highest yield increase over

farmers practice calculated 10.13 per cent in crop treated with propiconazole 13.9% +Difenoconazole 13.9% EC @ 500 ml/ha.

OFT-2(Entomology)

1.	**Title of on farm Trial (OFT)**	Assessment of management practices for Red banded caterpillar in Mango (2nd Year)
2.	**Problem diagnosed**	Red banded caterpillar appeared as a major insect pest of mango which generally appear on the stage of marble size fruit and bore the fruits resulted rotting and fruit drops. It causes heavy losses to growing fruits resulted premature falling and hence poor fruiting of orchards.
3.	**Details of Technology**	**Farmers Practice –** Spray of Chlorpyriphos as and when symptom appear **T.O I:** • Collection and distraction of all fallen fruits. • Spray deltamethrin 0.0028% (deltamethrin 2.8 EC@ 1 ml/ lit) at marble size and repeat after two weeks. **T.O II –** • Two Spray of thiacloprid 21.7SC 0.04%@2 ml/lit at 25-30 days interval. Note: - All spray during morning hours.

Result: Awaited

OFT-3 (Horticulture)

Title of the OFT	Assessment of bio control agent farm management of Panama wilt in Banana
Problem diagnosed	Low yield due to wilting
Treatments	**Farmers practice-** Tissue culture plant **T.O I-** ICAR Fusicont **T.O II-** Sabour Trichoderma - 1

Title: Assessment of bio control agent for management of Panama wilt in banana.

Treatment	**Initial plant population**	**1st wilting incidence**	**Wilting % 75 DAP**	**Bunch wt per plant**	**yield q/ha**	**COC (Rs.)**	**GR (Rs.)**	**NR (Rs.)**	**B:C Ratio**
PF- Use of tissue culture plant	250	37	27	25.6	467.20	94600	373760	279160	2.95
TO_1 – ICAR Fuesicont	250	46	11	26.4	587.40	102000	469920	367920	3.60
TO_2 Sabour Trichoderma -1	250	43	14.8	26.2	558.06	99500	446448	346948	3.48

Result: The result show that TO_1 use of ICAR fusicant reduces the wilting percent (11%)& higher in yield (587 q) than the other treatment. The TO_2 – Sabour trichoderma show significantly to TO_1. B: C ratio of TO_1 is 3.60.

OFT-4 (Horticulture)

Title of the OFT	Assessment of biomass mulching in mango
Problem diagnosed	Low fruit yield
Treatments	**Farmers practice-** No mulching/Litter fall of tree **TO1**- Taphrosia 1 kg Dry biomass/m^2 canopy (plant spread) **TO2**- Grass/Paddy straw/Any local available mulching 15 cm thick (plant spread)+ Greece band 30 cm from GL.

Table: Assessment of biomass mulching in mango

Technology option	**Panicle/ plant**	**Panicle length (cm)**	**No of pedicel/ panicle**	**Weed count %**		
				1st	**2nd**	**3rd**
FP- No Mulching	398	28.19	17.98	28.96	37.99	46.95
TO1- Tephrosia 1kg dry biomass/ m^2 canopy	568	32.80	25.90	18.01	24.99	32.04
TO2- Grass/paddy straw/ Any local available mulching 15 cm thick (plant spread) +Greece band 30 cm from GL	472	30.32	23.04	24.01	28.02	38.96
CD @ 5%	2.41	0.64	1.77	0.47	0.57	0.81
SEM±	0.80	0.21	0.59	0.15	0.19	0.27
CV%	4.92	2.24	8.41	2.12	1.99	2.19

Table: Soil Parameter

Treatment	**Soil moisture %**		**pH**		**OC%**		**N Kg/ha**		**P_2O_5 Kg/ha**		**K_2O Kg/ha**	
	Before	**After**	**Before**	**After**	**Before**	**After**	**Before**	**After**	**Before**	**After**	**Before**	**After**
FP	9.44	7.7	7.2	7.1	0.69	0.69	313	318	33.7	34.3	135	137
TO1	11.11	8.87		6.6		0.72		341		40.8		148.4
TO2	10.95	8.42		6.8		0.71		338		39.1		145.2

Result: To be continue….

OFT-5 (Animal Sc.)

Title of on farm Trial	Assessment of feeding and local application of herbal medicine on clinical and sub-clinical mastitis
Problem diagnosed	Heavy milker cow suffer from mastitis result in reduction in milk production
Details of Technologies	All animal dewormed before starting trial **Farmers Practice :** Hot fermentation(Washing of udder by warm water). **Technology Option I :** Herbal gel application (Lactomusti gel) five times/day for 5 days. **Technology Option II :** Herbal gel application (Lactomusti gel) five times/day for 5 days + oral herbal (Lactomust free) 80 ml orally daily for three days. **Herbal gel composition :** Aloevera Paste 250 gm + lemon juice (6 No.)+Neem leaf (50 gm) + Garlic paste(50 gm)+Turmeric powder (50 gm) **Oral Herbal Composition :** Aloevera pulp(250gm)+Lemon juice(2 No.)+Moringa leaf(50 gm)+Satavari (50gm)+Jiwanti(20gm)

Table I: Effect of herbal medicine on clinical and sub-clinical mastitis.

Particular	Treatment Gruop		
	F.P	**T.O I**	**T.O II**
No. of animal in each Trial	7	7	7
Udder condition (Inflammation and hardness)	6	2	0
Milk Colour (Straw Colour milk)	5	2	0
Normal milk consistency	1	4	6
Percent normal milk consistency	14.28	57.12	85.68
Milk PH	6.9	6.7	6.6
CMT test (+ve cow)	5	2	1
No. of day required for recovery	17	13	7

Table II: Economics of mastitis effected cow after herbal medicine treatment

Particulars	Treatment		
	F. P	**T.O I**	**T.O II**
Total milk yield (Upto 120 days during trial)	643.57±10.54	962.57±11.08	1070.42±8.92
Average daily milk production (Kg/day)	5.36±0.18	8.02±0.16	8.92±0.19
Cost of feeding during trial (Rs)	21000	21000	21000
Cost of medicine (Rs)	0	600	1000
Gross Return/cow (Rs)	25742.8	38502.8	42816.8
Net Return (Rs)	4742.8	16902.8	20816.8
B:C Ratio	1.22	1.78	1.94

Result: The result of this experiment indicated that T.O II is maximum normal milk consistency (85.68%) than T.O I (87.12%) and minimum in F.P (14.28%). In respect of net profit and B:C ratio also highest in T.O II(Rs 20816.8 and 1.94) than T.O I (Rs 16902.8 and 1.78) lowest in F.P (Rs4742.8 and 1.22).

OFT-6 (Animal Sc.)

Title of On farm Trial	Assessment of effect of herbal mixtures on Repeat breeding in dairy animals
Problem diagnosed	Repeat breeding is a major problem in dairy animals in cases of major financial losses to dairy farmers
Details of Technologies	**Farmers Practice:** Dewormer and mineral mixture 50 daily for 20 days. **Technology Option I:** F.P + First injection of buserelin 20 micro gm (5 ml) I.M. 6 hrs before the A.I. and on day 12 hrs after last insemination. **Technology Option II:** F.P.+ Herbal mixture (Lacto navjiwan) 100ml twice daily for 5 days orally. **Herbal mixture composition:** Curry leaf (50gm) +Turmeric powder (5 gm) +Reddish (1) +Moringa leaf (100 gm) +Aloevera pulp (100 gm) +Cissus stem (100gm) +Jaggery (100gm) and Salt (25 gm).

Table 1 : The conception rate under different Technology option in repeat breeding cross breed cow.

Technology Option	No. of cows	No. of animal conceive	Conception %
F.P	**7**	**1**	**14.28**
T.O I	**7**	**4**	**57.14**
T.O II	**7**	**5**	**71.14**

Result: After conducting trials result observed that maximum cow Conceive in T.O II 71.14% than T.O I and II (57.14%) and least in F.P (14.28%).

Front Line Demonstration (FLD):

A. Performance of Cereals:

Crop	Season	Name of the technology demonstrated	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	B:C	
					Demo.	Check		Demo.	Check
Cucurbits	Rabi 2023-24	Management of fruit fly through pheromone traps in cucurbits	50	10	332.50	279.23	19.08	2.97	2.61
Maize	Rabi 2023-24	Management of Fall army worm in maize	25	10	75.15	65.70	14.38	2.49	2.18
Brinjal	Rabi 2023-24	Use of streptocycline in brinjal	10	1	320.0	242.8	31.79	3.79	2.90
Banana	Rabi 2023-24	PPV bag in banana	10	0.4	422.8	335.5	26.02	4.50	4.12
Potato	Rabi 2023-24	Use of Trichoderma virdae & PSB as tuber treatment in potato	10	1	295.6	248.5	18.95	2.48	2.14

FLD on Livestock:

Category	Thematic Area	Name of the technology demonstrated	No. of Farmer	Unit	Days of conception after parturition		% Change	Cost of feeding up to conception		% of Save money
					Check	Demonstration		Demo.	Check	
Goat	Feeding Management	Feeding of Hydroponic fodder of Oat @250 gram/day in goat	10	30 goats	90.3	77.8	13.84	733.00	840.19	12.75

- Exposure visits under CRA Programme at different blocks (Madhepura, Chausa, Murlignj, Kumrkhand, Bihariganj, Singheshwar, Shankarpur, Alamnagar, Udakishungaj) of Madhepura district with 900 participants.

- Exposure visits under CRA programme at different district (Supaul & Purnea) of Madhepura farmers with 100 participants.150 CRA village farmers visited BAU, Kisan Mela at 18.02.2024.

CSISA (Cereal systems initiative for South Asia):

The following trials have been conducted during Rabi 2023-24 :-

KVK-1: Performance of timely sown (TSWVs) and late sown wheat varieties (LSWVs) under different sowing schedules across ecologies.

KVK-2: Assessing the effect of irrigation intensification on productivity of early and late planted wheat under conventional (CT-Broadcast and CT-Line Sowing) and zero tillage (ZT)

KVK-3: Rice-Wheat system optimization through crop establishment with DSR

The following trials have been conducted during Kharif 2023 :-

KVK 1 : Demonstrating the performance of DSR under dust mulch (presowing irrigation or equivalent pre-monsoon rain)

KVK 2: Rice-Wheat system optimization through crop establishment with DSR

KVK 3: Reducing seed rate of rice through rice nursery enterprise. Field day conducted at Tuniyahi village of Madhepura district of 110 farmers on Dated 30.03.2024.

SCSCP Project at KVK :-

- Five trainings conducted on different thematic areas (Dated 01.02.2024, 02.02.2024, 11.03.2024, 20.03.2024 & 21.03.2024) with 159 beneficiaries benefitted.

- Distribution of Moong, Goat and okra + Imidacloprid under Frontline Line Demonstration of 63 beneficiaries.

NARI Project at KVK

- Distribution of mango plants to 100 farmers.

Cluster Frontline Demonstration:

Crop	Technology Demonstration	No. of Farmer	Area (ha)	Farmers Plot		Demonstration Plot	
				Net Return	B:C Ratio	Net Return	B:C Ratio
Linseed	Seed Var. Sabour Tisi-1+Sulphur+ Biofertilizer	**47**	**10**	13950	2.1	14575	2.13
Mustard	Seed (RH 725)+ Sulpher + Biofertilizer	**242**	**70**	30678	2.9	40287	3.35

Seed Material Production Programme :-

S.N.	Crop	Variety	Category	Area (ha)	Production(qt.)
1	Paddy	R.Mansoori 1	CS	5.5	236.0
2		S.Sampann	CS	3.5	109.0
3		S.Deep	FS	0.8	23.0
4		S.Sona	TL		1.35
5	Finger Millet	VLM 379	TL		0.25
6		Bakula	TL		1.86
7	Barnyard Millet	RAU 5	TL		0.99

8	Wheat	HD 2967	CS	6.0	225.0
9		S.Shreshtha	CS	3.0	51.0
10	Maize (Fodder)	Poineer 3526		0.2	12.0
11	Rajma (CRA)	PDR 114	TL		0.48
12	Rye (CRA)	RH 725	TL		0.37
13	Lentil (CRA)				0.45
		Total			661.75

Extension Activities: -

S. No.	Activity	No.	Beneficiaries
2.	Scientist visit to farmers field	128	1340
3.	Farmers visit to KVK	3928	3928
4.	Consultancy through mobile	4407	4407
5.	Newspaper coverage	30	Mass
6.	Diagnostic visit	287	1989
7.	Literature delivered as a resource person	464	4110

Other Extension Activity: -

S.N.	Date	Venue	Name of Programme attended	Organized by	No. of Beneficiaries
	09.10.2023	KVK	Swachhta Programme	KVK	40
	15.10.2023	KVK	Swachhta Programme	KVK	42
	15.11.2023	KVK	PM Live telecast prog.	KVK	30
	15.03.2024	KVK,	SAC Meeting	KVK,	40
	03.04.2024	Sripur	Health checkup camp	KVK	50

Proposed Action Plan
(June 2024 to September 2024)

1. PROPOSED TRAINING PROGRAMME:

A. TRAINING OF PRACTICING FARMERS/FARM WOMEN: -

Sl. No.	Discipline	Course No.	No. of Participants			
			Other	SC	ST	Total
(i)	Crop Production	08	216	24	00	240
(ii)	Horticulture	08	216	24	00	240
(iii)	Plant Protection	08	216	24	00	240
(iv)	Animal Science	08	216	24	00	240
(v)	Home Sci.	08	216	24	00	240
	Total	**40**	**1080**	**120**	**00**	**1200**

B. RURAL YOUTH:-

Sl. No.	Discipline	Course No.	No. of Participants			
			Other	SC	ST	Total
(i)	Crop Production	01	25	05	00	30
(ii)	Horticulture	01	25	05	00	30
(iii)	Plant Protection	01	25	05	00	30
(iv)	Animal Science	01	25	05	00	30
(v)	Home Sci.	01	25	05	00	30
	Total	**05**	**125**	**25**	**00**	**150**

C. EXTENSION FUNCTIONARIES :-

Sl. No.	Discipline	Course No.	No. of Participants			
			Other	SC	ST	Total
(i)	Crop Production	01	25	05	00	30
(ii)	Horticulture	01	25	05	00	30
(iii)	Plant Protection	01	25	05	00	30
(iv)	Animal Science	01	25	05	00	30
(v)	Home Sci.	01	25	05	00	30
	Total	**05**	**125**	**25**	**00**	**150**

2. OFT TO BE CONDUCTED: -

S. N.	Title	Treatment	No. of Farmers
1	Management of weed in transplanted finger Millet.	**Farmers Practice:** Hand weeding **T.O. I:** Control (No Herbicide application) **T.O.II:** Post emergence application of bispyribac sodium @20gm a.i/ha **T.O III:** Pre-emergence application of pendimethalin@750gm a.i/ha f.b PoE bispyribac sodium @20gm a.i/ha	**10**

		T.O IV: Pre-emergence application of pretilachlor@1kg a.i/ha f.b PoE bispyribac sodium @20gm a.i/ha	
2	Assessment of fungicides for the management of Sheath blight of Rice (2nd Year)	**Farmers Practice:** Spray of hexaconazole 5 EC@2ml/lit when symptom appear **T.O. I:** Spray of propiconazole 13.9% +difenoconazole 13.9EC 500ml/ha. **T.O. II:** Spray of thifluzamide 24 SC@1 ml/lit water (45 days after transplanting)	**10**
3	Assessment of bio control agent farm management of Panama wilt in Banana	**Farmers practice-** Tissue culture plant **T.O I-** ICAR Fusicont **T.O II-** Sabour Trichoderma - 1	**10**
4	Assessment of biomass mulching in mango	**Farmers practice-** No mulching/Litter fall of tree **TO1-** Taphrosia 1 kg Dry biomass/m^2 canopy (plant spread) **TO2-** Grass/Paddy straw/Any local available mulching 15 cm thick (plant spread)+ Greece band 30 cm from GL.	**10**
5	Effect of herbal mixture on Repeat breeding in dairy animals	**Farmers Practice:** Dewormer and mineral mixture 50 daily for 20 days. **Technology Option I:** F.P + First injection of buserelin 20 micro gm (5 ml) I.M. 6 hrs before the A.I. and on day 12 hrs after last insemination. **Technology Option II:** F.P.+ Herbal mixture (Lacto navjiwan) 100ml twice daily for 5 days orally. **Herbal mixture composition:** Curry leaf (50gm) +Turmeric powder (5 gm) +Reddish (1) +Moringa leaf (100 gm) +Aloevera pulp (100 gm) +Cissus stem (100gm) +Jaggery (100gm) and Salt (25 gm).	10
6	Effect of supplementation of Lime stone powder and Dicalcium phosphate on milk production of straw based fed indigenous dairy animal.	**All animals were dewormed before starting trial.** **Farmers Practice:** Paddy straw feeding+2kg homemade concentrate **Technology Option I:** Farmers Practice + 30 gm Lime stone powder/day **Technology Option II:** Farmers Practice + 30 gm DCP/day	10 in each group
7	Effect of processing on the quality and acceptability of Mixed pickle	**Farmers Practice:** Processing of vegetables not available. **Technology Option I:** Acetic acid@7ml/2.5 kg of mixed pickle. **Technology Option II:** Acetic acid@75ml and 2.5 gm of sodium benzoate/2.5kg of mixed pickles.	10

3. FRONTLINE DEMONSTRATION: -

S. N	Season	Crop/ Enterprise	Technology/Variety	No. of Demonstration /Farmers	Area (ha) /Units
1	Kharif 2024	Paddy	Pyrazosulfuron Ethyl 10% WP@20 g.ai/ha as PE + Bispyribac sodium 10 SC @ 20 g.ai/ha as PoE at 15-25 DAT.	15	6.0
2	Kharif 2024	Banana	PPV Bag	10	1.0
3	Rabi 2024-25	Potato	Kufri Neelkanth	10	0.5

4	Kharif/Pre Rabi 2024-25	Mango	Management of Red banded caterpillar in Mango	05	20

Livestock

Category	**Thematic Area**	**Technology Demonstrated**	**No. of Farmers**	**No. of Cow**	**No. of Day**	**Cost**
Goat	Feeding Management	Feeding of Hydroponic fodder of Oat @250 gram/day in goat	10	30	60	12000.00
Milch cow	Disease Management	Assessment of feeding and local application of herbal medicine on clinical and sub-clinical mastitis in cow	12	15	30	16000.00

4. Cluster Frontline Demonstration:

Season	**Crop**	**Variety**	**Area (ha)**	**Beneficiary**
Oilseed				
Rabi 2024-25	Rapeseed Mustard	RGN 73/RH 725	200	500

3. Seed Material Production Programme :-

S.N.	**Crop**	**Variety**	**Category**	**Area (ha)**	**Remarks**
1.	Paddy	R.M 1	FS	6.0	
2.		R. Shweta	FS	4.0	
		Total		**10.0**	

4. Extension Activities: -

S. No.	**Activities**	**No.**	**Participant**
1.	Field days	02	100
2.	KisanGosthi/Chaupal	02	100
3.	Farmer's Fair	01	1000
4.	Scientist visit to farmers field	20	400
5.	Farmers visit to KVK farm	200	200
6.	Help Line	1000	1000
7.	Farm Science club/SHG	01	50
8.	Farmers Meeting	01	50
9.	Newspaper coverage	04	Mass
10.	Popular articles	04	Mass
11.	Extension Literature	04	Mass
Total			

KRISHI VIGYAN KENDRA, MUNGER

Report of 26th Extension Education Council Meeting
(From October 2023 to May 2024)

1. Achievement of Training Programme :

A. Training Programme for Practicing Farmers/Farm women

Sl. No.	Discipline	Duration (days)	Course No.	No. of Beneficiaries					
				Others		SC/ST		Total	
				M	F	M	F	M	F
(i)	Crop Production	35	35	535	343	95	62	630	405
(ii)	Horticulture	34	34	490	327	122	68	612	395
(iii)	Agri. Engg.	34	34	489	319	126	82	615	401
(iv)	Agril. Extension	35	35	514	426	101	76	615	502
(v)	Home Science	10	10	133	82	32	87	165	169
(vi)	Soil Science	06	06	84	60	26	12	110	72
(vii)	Others	05	05	79	56	11	14	90	70
	Total	**159**	**159**	**2324**	**1613**	**513**	**401**	**2837**	**2014**

B. Training Programme for Rural Youth

Sl. No.	Discipline	Duration (days)	Course No.	No. of Beneficiaries					
				Others		SC/ST		Total	
				M	F	M	F	M	F
(i)	Crop Production	16	07	140	18	28	04	168	22
(ii)	Horticulture	20	08	163	10	32	05	195	15
(iii)	Agri. Engg.	21	09	211	13	41	03	252	16
(iv)	Agril. Extension	20	09	114	65	21	79	135	144
(v)	Home Science	02	01	0	50	0	24	0	74
(vi)	Soil Science	02	01	20	03	05	02	25	5
(vii)	Others	03	01	0	04	0	24	0	28
	Total	**84**	**36**	**648**	**163**	**127**	**141**	**775**	**304**

C. Training Programme for Extension Functionaries

Sl. No.	Discipline	Duration (days)	Course No.	No. of Beneficiaries					
				Others		SC/ST		Total	
				M	F	M	F	M	F
(i)	Crop Production	9	9	174	54	35	9	209	63
(ii)	Horticulture	8	8	153	23	33	8	186	31
(iii)	Agri. Engg.	8	8	151	39	28	13	179	52
(iv)	Agril. Extension	9	9	160	63	36	12	196	75
(v)	Home Science	1	1	0	5	2	21	2	26
(vi)	Soil Science	1	1	19	4	4	1	23	5
(vii)	Others	3	3	62	17	8	4	70	21
	Total	**39**	**39**	**719**	**205**	**146**	**68**	**865**	**273**

D. Vocational training for Rural Youth

Crop / Enterprise	Training title	Duration (days)	No. of Participants		
			Male	Female	Total
Malnutrition	Millet cultivation to eradicate	06	65	15	80

	malnutrition.				
Farm Machinery	Operation & care maintenance of farm machinery.	49	28	02	30
Water management	Details about micro irrigation	05	25	0	25
Vermicompost	Methods of vermicompost Production & its application.	15	30	25	55
Nursery Raising	Methods of plant propagation	10	22	8	30
Mushroom Production	Methods of Mushroom Production	12	5	25	30
Bee Keeping	Scientific method of bee keeping	10	18	12	30
	Total	**107**	**193**	**87**	**280**

E. Sponsored Training programme

Sl. No	Title	Duration (days)	Client PF/RY/EF*	No. of courses	No. of Participants				Sponsoring Agency
					Others	SC	ST	Total	
01	District & Block level Kharif Mahotsav	10	PF	10	385	125	23	533	ATMA & DAO,Munger
02	Jaivik Kheti	6	PF	6	212	27	16	255	DAO, Munger
03	CCINM Training Programme	12	RY	12	28	5	2	35	ATMA, Munger
04	Service Maintenance and technician Farm machinery	49	RY	49	25	5	0	30	BSDM
05	Scientific method of fish rearing	3	PF	3	26	4	0	30	BAO,DAO & ATMA,Munger
06	Mushroom production as entrepreneur	3	PF+EF	1	28	9	3	40	ADH,Munger
07	Promotion of millet cultivation & its value addition	3	PF	2	02	5	28	35	ICEC,Munger
08	Training under Diploma in Agril. Extension services for input dealers(DAESI)	7	RY	7	35	5	5	45	ATMA,Munger
09	Vermicompost production & its use	3	RY	3	32	6	2	40	UCo Rseti, Munger
Total		**96**	**0**	**93**	**773**	**191**	**79**	**1043**	

PF- Progressive Farmer /RY- Rural Youth/EF- Extension Functionaries

2. Front Line Demonstration :

Details of FLDs implemented during **October 2023 to May 2024**

Crop	Thematic Area	Variety	Season	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
						Demonstration	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Broccoli	Vegetable cultivation	Destiny	Rabi 23-24	10	0.016	120	95	26.3	75000	240000	165000	3.2	70000	190000	120000	2.71
Maize	Water Management (agril engg)	Irrigation applied at 0.9 CPE	Rabi 23-24	11	4.4	75	56	33.92	57400	155000	97600	2.70	59200	117300	58100	1.98

Crop	Thematic Area	Variety	Season	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
						Demons ration	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Sorghum	Cropping System	CSH-24	Kharif 2023	45	6	27.1	22.6	19.9	27840	67750	39910	2.43	29220	56500	27280	1.93
Bajra	Cropping System	BAIF1	Kharif 2023	47	6	28.3	22.7	23.58	26890	70750	43860	2.63	28320	57250	28930	2.02
Barnyarn millet	Cropping System	DHBM-93-2	Kharif 2023	6	1	10.6	8.8	20.45	18700	42400	23700	2.27	20600	35200	14600	1.71
Foxtail millet	Cropping System	SIA - 3156	Kharif 2023	29	4	11.6	9.7	19.59	19910	46400	26490	2.33	20900	38800	17900	1.86
Finger millet	RCT	GPU28/ Vankula /CFMV 1	Kharif 2023	42	10	24.6	21.4	14.9	25620	61500	35880	2.4	26820	53500	26680	1.99

Sorghum	RCT	CSV-15	Kharif 2023	15	3	26.3	22.6	16.4	27320	65750	38430	2.41	28320	56500	28180	2.0
Pigeonpea	RCT	IPA 203	Kharif 2023	101	7	12.79	10.49	20.87	26600.00	89553.33	62953.33	3.14	25659.17	73418.33	47759.17	2.67
Wheat fortified	Cropping System	BHU31	Rabi2023-24	20	2	36.2	29.6	18.23	38400	92310	53910	2.4	35650	75480	39830	2.11
Lentil CFLD	Cropping System	IPL220	Rabi2023-24	56	20	11.2	14.9	23.4	25480	101120	75640	2.97	23620	72960	49340	2.09
Mustard CFLD	Cropping System	RH725	Rabi2023-24	60	173	11.6	17.5	44.63	24680	98875	74195	3.01	26750	75710	48960	2.83
Linseed CFLD	Cropping System	Sabour Tisi1	Rabi2023-24	20	63	6.7	8.8	31.34	17820	50050	32230	2.81	19860	37950	18090	1.91

CRA FLD(2023-24)

Crop	Technology	Variety	Season	No. of Farmer	Area(ha)	Yield(q/ha)		% change in yield	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
						Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Paddy	DSR	Arize 6129	Kharif 23	35	14	42.8	37.5	14.13	32600	70620	38020	2.17	36850	61875	25025	1.68
Paddy	DSR	Arize 6444	Kharif 23	100	40	56.2	47	19.57	32400	92743	60343	2.86	36650	77550	40900	2.12
Paddy	DSR	BB-11	Kharif 23	40	16	44.3	39.2	13.01	32450	73148	40698	2.25	36700	64680	27980	1.76
Paddy	DSR	MTU-7029	Kharif 23	60	24	55.3	44	25.68	32450	91212	58762	2.81	36700	72600	35900	1.98
Paddy	DSR	Pioneer-27 P 37	Kharif 23	60	24	46.1	41.4	11.35	32700	76032	43332	2.33	36950	68310	31360	1.85
Paddy	DSR	Sabour Sampan	Kharif 23	60	24	36.1	30.8	17.21	36850	54483	17633	1.48	38700	48530	9830	1.15
Paddy	Drum Seeder	Arize 6444	Kharif 23	44	17.6	47	41.7	12.71	36450	77468	41018	2.13	38800	66867	28067	1.72

Paddy	Drum Seeder	Pioneer-27 P 37	Kharif 23	40	16	38.8	33.6	15.48	36950	64086	27136	1.73	38900	53862	14962	1.38
Paddy	Drum Seeder	Sabour Surbhit	Kharif 23	25	10	33	27.8	18.71	36850	55341	18491	1.5	38700	51680	12980	1.18
Paddy	PTR	Pioneer-27 P 37	Kharif 23	20	8	38.8	33.6	15.48	36950	64086	27136	1.73	38900	53862	14962	1.38
Paddy	PTR	Sabour Sampan	Kharif 23	25	10	36.1	30.8	17.21	37150	75950	38800	1.6	22399	33052	10653	1.27
Paddy	PTR	Arize 6444	Kharif 23	5	2	47	41.7	12.71	36450	75250	38800	2.13	41018	69085	28067	1.72
Paddy	INM	Sabour Ardhjal	Kharif 23	10	4	34.24	30.15	13.57	36850	75550	38700	1.56	20801	29965	9164	1.24
Maize	RBP	P3378	Kharif 23	26	10.4	57.4	47.3	21.35	27646	60752	33106	2.97	54506	88130	33624	2.02
Pigeon Pea	RBP	P9	Kharif 23	10	4	16.7	14.8	12.84	24265	52115	27850	2.5	36414	55465	19051	1.68
Sorghum	ZT	CSV15	Kharif 23	10	4	33.4	25.7	29.96	21620	45745	24125	2.08	23261	34385	11124	1.46
Millets	ZT	VAKULA	Kharif 23	25	10	17.3	14.2	21.83	16366	34260	17894	1.57	9381	14578	5197	1.12

Crop	Technology	Variety	Season	No. of Farmer	Area(ha)	Yield(q/ha)		% change in yield	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
						Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Wheat	Sown by ZT	HD 2967	Rabi 23-24	150	60	46.3	36.577	26.58	38180	130610	92430	2.42	45240	102705	57464.8	1.27
Wheat	Sown by ZT	DBW 187	Rabi 23-24	100	40	44.8	36.288	23.46	38410	125965	87555	2.28	44610	101224	56614.1	1.27
Wheat	Sown by ZT	DBW 303	Rabi 23-24	50	20	43.1	35.2	22.44	38280	121025	82745	2.16	43950	98116	54166	1.23
Wheat	Sown by ZT	Sabour Samridhi	Rabi 23-24	100	40	43.6	35.752	21.95	38770	122620	83850	2.16	44360	98404.6	54044.6	1.22

Mustard	Sown by ZT	RH 749	Rabi 23-24	39	15.4	11.2	9.072	23.46	18920	71610	52690	2.78	22130	58070.3	35940.3	1.62
Mustard	Sown by ZT	Pusa Gold	Rabi 23-24	36	14.2	12.6	10.206	23.46	18520	78925	60405	3.26	21780	63848.9	42068.9	1.93
Lentil	Sown by ZT	IPL 316	Rabi 23-24	69	27.6	11.8	9.794	20.48	19160	79270	60110	3.14	22540	65209.2	42669.2	1.89
Chekpea	Sown by ZT	Sabour Chana 1	Rabi 23-24	54	21.4	12.4	9.92	25	20900	80880	59980	2.87	25300	64581.9	39281.9	1.55
Potato	Sown by RBP	Kufari Khaiti	Rabi 23-24	1	0.2	239.4	191.5	25.01	88580	179550	90970	1.03	95140	143625	48485	0.51
Potato	Sown by RBP	Bari Aalu	Rabi 23-24	3	1	253.6	205.3	23.53	87450	190200	102750	1.17	95100	153975	58875	0.62
Maize	Sown by RBP	DKC 9081	Rabi 23-24	14	5.4	89.6	76.7	14.4	47980	187264	139284	3.9029596	55410	160303	104893	2.89
Maize	Sown by RBP	P 3355	Rabi 23-24	10	4	84.1	75.2	10.58	47660	175769	128109	3.6879773	54990	157168	102178	2.86
Mungbean	Sown by ZT	MH421	Summer 24	31	12	Result awaited										
Mungbean	Sown by ZT	VIRAT	Summer 24	79	35											
Mungbean	Sown by ZT	Shikha	Summer 24	105	38											
Mungbean	Sown by ZT	Samrat	Summer 24	36	14											
Sunflower	Sown by ZT	PAC334	Summer 24	7	1											
Cowpea	Sown by ZT	Kasi anmol	Summer 24	6	4											
Dhaincha	Sown by ZT	Local	Summer 24	7	4											

Farm implements and machinery

Name of the implement	Crop	Name of the technology demonstrated	No. of Farmer	Area (ha)	Filed observation (output/man hour)		% change in major parameter	Labor reduction (man days)	Cost reduction (Rs./ha or Rs./Unit)
					Demon.	Check			
Zero tillage	Wheat, Lentil & Mungbean	Line sowing by zero tillage	280	112	Less seed , less irrigation water and less environment pollution	Low yield with high input	15-20 % more yield	10-15 man days/ ha	Rs 5500-6000 /ha
Raised bed planter	Maize & Potato	Line sowing by raised bed planter	72	28.8	15-20% more yield with saving of 25-30% irrigation water. Low mortality & high sprouting in rainy seasons due to no water logging in root zone.	Low yield with high input	10-12 days less crop span	22-28 man days/ha	Rs. 3000-4000/ha
Happy Seeder	Wheat & Mungbean	Sowing of Wheat & Moong by happy seeder for crop residue management	10	11	15-20 % more yield . Crop residue managed to improve carbon content in soil to enhance its soil fertility and soil moisture availability.	Environment pollution and spoilage of plant nutrient due to burning of crop residue.	Better Vegetative growth and yield of Mungbean and other crops	20-25 man days/ha	Rs.5000-6000/ha
Potato Planter	Potato	Potato planted by potato planter	2	0.4	Less time & less planting cost. It plants potato at proper spacing & Depth	Intensive labour consuming & takes more time. Not planted precisely	10-12% more yield with 10-15 % less input	20-25 man days/ha	Rs 3500-5000/ha

Self propelled reaper	Wheat	Reaping by self propelled reaper	10	8	Less harvesting cost in less time with low scattering loss	Intensive labour consuming & takes more time	72 % less labour & 5-10 % more yield	18-20 man days/ha	Rs 8000-10000/ha
Tractor operated sprayer	Redgram	Spraying chemical by tractor operated boom sprayer	10	4	Less labour consumed & sprayed efficiently with more capacity	Intensive labour consuming with low efficacy of chemical	72 % less labour & 5-10 % more yield	4-6 man days/ha	Rs 2500-3500/ha
Drone Sprayer	Wheat & Pulse	Spraying chemical by drone technology	30	14	Sprayed efficiently in less time(Spray 1 ha in 15 min with less chemical & 75 %less water)	Intensive labour & time consuming with high risk in adverse climate situation and land topography	75-80 % time saving	15-20 man days/ha	Rs 3000-4000/ha
Hadamba Thresher	Paddy, Lentil , Gram & Red gram	Threshing of crops by Hadamba thresher	12	10	High capacity with less cost & in less time	Intensive labour & time consuming	5-10 % more yield in less time	72-75 % labour saving	Rs 3000-4000/ha
Potato Digger	Potato	Potato harvested by potato digger	02	0.4	Less labour consumed in less time	Intensive labour & time consuming	10-12 % more yield in less time	25-30 man days/ha	Rs 6000-8000/ha

3. Detail of OFT conducted

Title of On farm Trial Assessment of Integration of fertilizer in different form on yield of lentil

Problem diagnose Injudicious use of chemical fertilizer
Technological Options: Farmer Practice: Seed Treatment + RDF(25:40:0NPK kg/ha)
Technology Details Technological Option1:50% of RDF +WS 18:18:18 @5 gm./ltr water (Single spray at pre flowering stage)
Technological Option2: Seed treatment with PSB + Rhizobium, 50% of RDF + WS 18:18:18 @5 gm. /ltr water (Single spray at pre flowering stage)
(RDF, concerned SAU/ICAR recommendation)

Table: Effect of Integration of fertilizer in different form on yield of lentil during 2023-24

Treatments	No. of trial	Plant Height (cm)	1000 grain wt.(g)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return(Rs./ha)	BC ratio
T1	07	43.7	13.9	10.1	23860	69024	41124	2.72
T2		45.6	14.9	12.3	20850	83831	58091	3.75
T3		47.4	15.8	14.6	21120	99273	72863	4.49
			CD	1.41				
			SEm	0.45				
			CV	9.67				

Results: The table shows that T3 is the best in terms of yield (14.6 q/ha)as well as BC ratio (4.49) in comparison to T2& T1. respectively.

Title : Assessment of Diversification of rice-based cropping systems with other cropping system

Thematic area : crop diversification

Problem definition: low profitability of existing cropping system

Table: Effect of Diversification of rice-based cropping systems with other cropping system & cost economics

Treat-ments	No. of Trials	Rice Yied (q/ha)	Wheat Yield (q/ha)	Mungbean Yield (q/ha)	Inter Cropping Yield (q/ha)			System Yield (q/ha) & equivalent yield	System Cost of cultivation (Rs./ha)	System Gross return (Rs/ha)	System Net return (Rs./ ha)	System BC ratio
					Maize	Potato	Vegetable Pea					
T1	6	40.5	35.4	-	0	0	0	75.9	78760	157650	78890	2.00

T2		42.4	-	-	84.5	259.6	0	386.5	135850	464520	328670	3.42
T3		43.1	-	-	86.1	0	67.5	196.7	132660	440830	308160	3.32
T4		44.2	42.3	8.7	0	0	0	94.7	95840	226720	130880	2.37

Result of OFT shows that 386.5 q/ha productivity of T2: Rice- Maize + Potato cropping system , followed by 196.7q/ha productivity of T3: Rice-Maize + Vegetable Pea cropping system, 94.7 q/ha productivity of T4: Rice-wheat –Green gram over 75.9 q/ha productivity of T1 **:Farmer Practice:** Rice – Wheat prominent cropping system. The system productivity was increased from 100 to 409.22% over farmers practice. Net return was recorded Rs 328670 per hectare with B;C ratio 3.42, Rs 308160 per hectare with B;C ratio 3.32, Rs 130880 per hectare with B;C ratio 2.37, Rs 78890 per hectare with B;C ratio 2.0 from T2,T3,T4 & T1 respectively

Title : Assessment of fruit bagging in Guava for quality improvement.
Thematic area: Cultivation of fruits

Problem definition: Insect infestation detoriate fruit quality

Table: **Assessment of fruit bagging in Guava for quality improvement.**

Thematic Area	**Technology options with detailed treatments**	**Area(ha)**		**Yield (q/ha)**	**Cost of cultivation (Rs./ha)**	**Gross return (Rs/ha)**	**Net return (Rs./ha)**	**BC ratio**
		Proposed	**Actual**					
Cultivation of fruits	Farmers Practice – No bagging	2	2	55.29	56000	110580	54580	1.97
	T.O.1– Cellophane bag cover			88.29	74000	441450	367450	5.96
	T.O.2– Paper bagging			76.71	67000	306840	239840	4.56

Results: The table shows that T.O.1 is the best in terms of yield/ha(88.29)as well as BC ratio (5.96) in comparison to TO-2 & F.P. respectively.

Title : Assessment of effect of different types of low cost mulching in vegetable production

Thematic area: Water management (Agril. Engg.)

Problem definition: Low yield of vegetable with deteriorated quality by applying more quantity of water & agril. inputs

Table: Effect of low cost mulching in vegetable (bottle guard) production

Technology option	**No. of trials**	**Irrigation water applied (cm.)**	**% water saving**	**No. of weeds/m^2**	**Flower Initiation time(Days after Planting)**	**Fruiting (DAP)**	Yield (q/ha)	**% increased in yield in comparison to control**	**Water use efficiency (q/ha–cm.)**
Farmer practice	09	49	-	87	53	70	405	-	8.27
Tech Option – 1		42	14.3	48	41	57	440	8.6	10.48
Tech Option – 2		43	10.16	51	44	61	460	13.58	10.69

Cost economics of different technological options of different mulching in bottle guard production.

Thematic area	Technology options with detailed treatments	Area(ha)		Yield (q/ha)	Cost of cultivation(Rs./ha)	Gross return (Rs/ha)	Net return(Rs./ha)	BC ratio
		Proposed	Proposed					
Water management	**FP:** No mulch	0.5	0.5	405	205000	324000	119000	1.58
	TO1: Mulching with banana dry leaf			440	192340	352000	159660	1.83
	TO2: Mulching with crop residue (husk, Straw, dry leaves or Stem)			460	195400	368000	172600	1.88
			CD@ 5 %	8.55				
			SEM	1.58				
			Cv %	8.35				

Technological option	**No. of trials**	**Soil Type**		**EC**		**PH**		**OC(%)**		**N(kg/Ha)**		**P(kg/Ha)**		**K(kg/Ha)**	
		Before	**After**	**Before**	**After**	**Before**	**After**	**Before**	**After**	**Before**	**After**	**Before**	**After**	**Before**	**After**
Farmer practice	**09**	Alkaline	Alkaline	0.274	0.275	7.4	7.5	0.394	0.401	220.56	221.2	57.33	57.8	137.37	138.3
Tech Option – 1		Alkaline	Alkaline	0.274	0.265	7.4	7.3	0.394	0.416	220.56	222.6	57.33	58.3	137.37	143.8
Tech Option		Alkaline	Alkaline	0.274	0.262	7.4	7.1	0.394	0.421	220.56	224.3	57.33	59.4	137.37	139.4

– 2															

Results: The data pertaining in tables reveal that Technological option 2 (Mulching with crop residue, wheat husk) was found the best T.O. in terms of max. yield (460 q/ha), water use efficiency (10.69 q/ha-cm), and B:C ratio (1.88) followed by T.O.1 and F.P. respectively. Flower initiation & fruit maturity takes less time in TO1 followed by TO2 & FP respectively. Moisture conservation & suitable temperature is observed in rhyzosphere in mulching with wheat huskT.O.2. On the basis of soil testing, more carbon content is increased in TO-2 and More moisture content is also found maximum in TO2. Maximum increased in Potassium content is found in TO1 & more weed control is also found in TO1 followed by TO2 & FP respectively.

Title : Assessment of different irrigation methods on productivity of tomato in medium land
Thematic area: Water Management (agril. Engg)

Problem definition: Less yield with high amount of water application and high input cost. The product is also found with deteriorated quality
Table: Effect of different irrigation methods applied on yield and its cost economics

Thematic area	**Technology options with detailed treatments**	**Area(ha)**		**Yield (q/ha)**	**Cost of cultivation(Rs./ha)**	**Gross return (Rs/ha)**	**Net return(Rs./ha)**	**BC ratio**
		Proposed	**Actual**					
Water Management	**FP:** Traditional furrow/ bed irrigation	0.5	0.5	188	70620	188000	117380	2.66
	TO1: Alternate furrow irrigation			209	68300	20900	140700	3.06
	TO2: Drip irrigation plus plastic mulch			221	71200	265200	194000	3.72
			CD@ 5 %	5.89				
			SEM	1.09				
			Cv %	12.10				

Results: The Technical option (T2) Drip irrigation with plastic mulch was found the best technical option in term of maximum yield (221 q/ha), maximum net profit (Rs 194000 /ha) ,maximum BC ratio (3.72) followed by TO1 & FP respectively

Title : Assessing the Extension Education Methods for Awareness & use of Soil Health Card (SHC)
Thematic area : Assessment Analysis
Problem definition: Farmers awareness towards use of Soil Health Card

Table:1 Distribution of respondent according to Level of Knowledge

Thematic area	Technology options with detailed treatments	Low (0-14 marks)		Medium (15-29 marks)		High (30-44 marks)	
		Frequency	%	Frequency	%	Frequency	%
Assessment Analysis	**FP:** Farmers not using any extension method.	18	90	2	10	0	0
	TO1: Farmers having Soil Health Card with training literature**.**	4	20	9	45	7	35
	TO2: Farmers having Soil Health Card & using social media.	4	10	6	30	10	50
	TO3: Farmers having Soil Health Card, training literature & using social media	1	05	5	25	14	70

Table:2 Distribution of respondent according to Extent of Adoption

Technology Option	Low (0-16 marks)		Medium (17-33 marks)		High (34-50 marks)	
	Frequency	%	Frequency	%	Frequency	%
F.P	17	85	3	15	0	0
TO1	4	20	14	70	2	10
TO2	3	15	11	55	6	30
TO3	2	10	5	25	13	65

Table:3 Distribution of respondent according to Awareness towards SHC & its Use

Technology Option	Fully Aware (41-60 marks)		Aware (21-40 marks)		Unaware (0-20 marks)		Use of SHC	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%
F.P	2	10	4	20	14	70	2	10
TO1	4	20	9	45	7	35	3	15
TO2	7	35	8	40	5	25	6	30
TO3	13	65	6	30	1	5	8	40

Result : On the basis of result depicted in above table it was concluded that farmers having Soil Health Card along with training literature & using social media was found more knowledge (70 %) their extent of adoption of SHC recommendation (65 %) and 40 % of the farmers by Use of SHC followed TO2. Hence TO3 was found most effective technology option.

5. Seed material produced at KVK, farm :

Crop	variety	Quantity of seed (q)	Value (Rs)
A. SEED Arhar	IPA203	15.40	238700
	IPA 15-2	0.99	15345.00
B. Potato	BARI ALOO	29.50	73750.00
	Khufri Mohan	19.00	47500
	Rajencdra Aalloo1	1.59	3975
		66.48	3,79,270

B. Seed Available for Sale under Seed Hub

Crop	**Variety**	**Seed category (FS/CS)**	**Seed Procured in (q)**	**Quantity of seed available for sale (quintal)**
Chickpea	Chickpea	Sabour chana1	70	8,05,000
	Chickpea	GNG2299	20	2,30,000
Lentil	Lentil	IPL220	350	43,75,000
	Lentil	L4717	90	11,25,000
Total			**530**	**65,35,000**

6. Performance of demonstration units (other than instructional farm) –

Sl. No.	**Name of demo Unit**	**Year of estd**	**Area**	**Details of production**			**Amount (Rs.)**	
				Variety	**Produce**	**Qty.(kg)**	**Cost of inputs**	**Gross income**
1	Vermi compost Unit	2018	810 CFT	Eisenia fetida	Vermi compost	10076	22500	100768
2	Mushroom Production	2020		Oyster Mushroom		-	-	-
3	Mushroom Spawn Production			Spawn Production		-	-	142340
4	Vegetable Nursery (cucurbits)	2023	In Protay	Hybrid , Rajendra nenua-1, Pusa Barkha, Narendra rashmi-	Vegetable plantlets	1780 plantlet	1780	8375
5.	Fruit Plant (Mango,Guava,Litchi, Lemon, Pomegranate)	2005		Mango-Maldah, Amrapali,	Plants	522	5220	33960

KRISHI VIGYAN KENDRA, NALANDA

Report of 26th Extension Education Council Meeting (From October 2023 to May 2024)

1.Achievement of Training (Including the sponsored and FLD)

I. Practicing Farmers:

Thematic Area	No. of Courses	No. of Participants								
		Others			SC			Grand Total		
		M	F	T	M	F	T	M	F	T
Home Science										
Minimization of storage loss	02	11	51	62	03	11	14	14	62	76
Storage techniques	03	34	40	74	11	13	24	45	53	98
Nutrition Garden	05	24	67	91	05	41	46	108	103	211
Women and Child care Management	02	-	39	39	-	13	13	-	52	52
Processing and Value addition	05	-	87	87	-	33	33	-	120	120
Mushroom Production	02	09	49	85	03	37	40	12	86	98
Supplimentary food preparation	01	-	18	18	-	06	06	-	24	24
Drudgery reduction technique	02	-	41	41	-	32	32	-	73	73
Design & development of low cost diet	03	-	48	48	-	13	13	-	61	61
House Hold Food Security	01	-	20	20	-	03	03	-	23	23
High nutrient efficient diet	03	-	47	47	-	16	16	-	63	63
Total	**29**	**78**	**507**	**612**	**22**	**218**	**240**	**179**	**720**	**899**
Soil Science										
Soil fertility management	12	406	142	548	159	50	209	565	192	757
Integrated nutrient management	07	116	98	214	28	39	67	136	137	273
Soil & water testing	03	85	23	108	15	08	23	88	27	115
Resource Conservation technology	03	50	14	64	12	05	17	62	19	81
Integrated Crop Management	05	67	13	80	15	02	17	82	15	97
Water Management	02	14	19	33	05	06	11	19	25	44
Total	**32**	**738**	**309**	**1047**	**234**	**110**	**244**	**952**	**415**	**1367**

Horticulture

Vegetables Cultivation	11	176	78	248	59	18	77	235	96	331
Orchard Management	09	103	80	183	28	13	41	131	93	224
Crop residue management	02	33	10	43	10	03	13	43	13	56
Bulb and tuber cultivation	01	262	43	305	107	31	138	369	74	443
High value crop cultivation	01	20	03	23	06	-	06	26	03	29
Nursery Raising techniques	02	16	30	46	-	06	06	16	36	52
Post Harvest technology	01	11	08	19	05	02	07	16	10	26
Organic farming	01	15	-	15	04	-	04	19	-	19
Total	**28**	**636**	**252**	**882**	**219**	**73**	**292**	**855**	**325**	**1180**
Plant Protection										
Biological control	01	-	23	23	-	09	09	-	32	32
Integrated Pest Management	13	156	116	272	29	16	45	185	132	317
Integrated Disease Management	02	20	25	45	01	-	01	21	25	46
Total	**16**	**176**	**164**	**340**	**30**	**25**	**55**	**206**	**189**	**395**
Veterinary Science										
Fodder Production	03	41	05	46	03	03	06	44	08	52
Dairy Management	0**3**	48	04	52	07	-	0**7**	55	04	59
Feed Management	03	07	61	68	-	-	-	07	61	68
Total	09	96	70	166	10	03	13	106	73	179
Grand Total	**114**	**1724**	**1302**	**3047**	**515**	**429**	**844**	**2298**	**1722**	**4020**

II.RURAL YOUTH

Thematic Area	**No. of Courses**	**No. of Participants**								
		Others			**SC**			**Grand Total**		
		M	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**
Mushroom production and its Processing	02	41	20	61	05	03	08	46	23	69
Dairy Management	01	30	-	30	-	-	-	30	-	30
Goat Rearing	01	19	05	24	02	02	04	21	07	28
Methodologies of use of bio-inputs for plant disease management	01	04	17	21	-	03	03	04	20	24
Total	**05**	**94**	**42**	**136**	**07**	**08**	**15**	**101**	**50**	**151**

III.Extension Personnel

Thematic Area	**No. of Courses**	**No. of Participants**								
		Others			**SC**			**Grand Total**		
		M	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**
Integrated Nutrient Management	03	223	33	256	52	18	70	275	51	326
Nutrition Garden	03	42	30	72	13	11	24	55	41	96
Total	**06**	**265**	**63**	**328**	**65**	**29**	**94**	**330**	**92**	**422**

IV. **Vocational Training**

Thematic Area	No. of Courses	No. of Participants								
		Others			SC			Grand Total		
		M	F	T	M	F	T	M	F	T
Tailoring and Stitching	01	-	15	15	-	14	14	-	29	29
Total	**01**	**-**	**15**	**15**	**-**	**14**	**14**	**-**	**29**	**29**

V. BSDM & RPL Training

Thematic Area	No. of Courses	No. of Participants								
		Others			SC			Grand Total		
		M	F	T	M	F	T	M	F	T
Gardener(BSDM)	01	15	09	24	02	-	02	17	09	26
Bee Keeper (RPL)	01	26	-	26	04	-	04	30	-	30
Total	**02**	**41**	**09**	**50**	**06**	**-**	**06**	**47**	**09**	**56**

OFT-1 Soil Science

1.	Title of On farm Trial	Improvement of nitrogen use efficiency in rice.
2.	Problem diagnosed	Excessive use of chemical fertilizer and spiraling price of urea leads to increase in cost of cultivation
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Technology options:** FP: RDF (100:40:20) kg/ha T.O.1: 50% of RDN & 100%IK+nano urea@40ml/lt.water (Single spray at pre flowering stage) T.O.2: 50% of RDN & 100% PK+2 sprays of Nano Urea at (25 to 30 days) and (60-65 days) @ 4 ml/lt water.
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	B.A.U., Sabour, Bhagalpur
5.	Production system and thematic area	Soil Fertility Management
6.	Performance of the Technology with performance indicators	1) No of Plant or Hills / m^2 2) No of effective tillers/ m^2 3) 1000 grain weight 4) Grain/Straw yield (q/ha) 6) Available nutrients in pre and post harvest soil. 7) Cost of Intervention 8) Net Return 9) Cost benefit ratio
7.	Final recommendation for micro level situation	Application of 50% of RDN & 100 PK + 2 Spry of Nano Urea at 25 to 30 Days) and (60 To 65 Days) @ 4ml per liter of water gives better yield and improves soil health
8.	Constraints identified and feedback for research	-.

9.	Process of farmers participation and their reaction	Training and Field Visit

Thematic area: Integrated Nutrient Management

Problem definition: Excessive use of chemical fertilizer and spiraling price of urea leads to increase in cost of cultivation

Technology assessed: Improvement of nitrogen use efficiency in rice.

Table: Initial soil properties

pH	EC(dSm^{-1})	Organic Carbon (%)	Available nutrients (kg/ha)		
			N	P_2O_5	K_2O
7.23	**0.118**	**0.578**	**266**	**32.21**	**166**

Table: Effect of fertilizer on post soil properties

Technology option	pH	EC (dsm-1)	Organic carbon	Available nutrients (kg/ha)		
				N	P_2O_5	K_2O
Farmers Practices:- RDF (100:40:20) kg/ha	7.25	0.112	0.592	271	33.25	171
T.O. 1 50% of RDN & 100%IK+nanourea@4ml/lt.water (Single spray at pre flowering stage)	7.20	0.119	0.571	268	33.32	268
T.O.2: 50% of RDN & 100% PK+2 sprays of Nano Urea at (25 to 30 days) and (60-65 days) @ 4 ml/lt water.	7.21	0.115	0.578	271	33.46	170

Table: Effect of fertilizers in different form on yield and economics of Rice

Thematic area	Technology options with detailed treatments	Area (ha in crop & Fodder)/ Nos (in livestock)		Yield (q/ha)	Cost of cultivation(Rs./ha)	Gross return (Rs/ha)	Net return(Rs./ha)	BC ratio
		Proposed	Actual					
Soil fertility management	**Farmers Practices:-**Seeed treatment +RDF (NPK::20:40:0kg/ ha	0.08	0.08	46.5	37800	101510	63700	2.69
	T.O.1:-50% of RDN & 100%IK+nano urea@4ml/lt.water (Single spray at pre flowering stage)	0.08	0.08	45	37200	98235	61035	2.64
	T.O.2:-50% of RDN & 100% PK+2 sprays of Nano Urea at (25 to 30 days) and (60-65 days) @ 4 ml/lt water	0.08	0.08	47.5	37500	103693	66193	2.76

Result: The highest yield of rice was recorded in 47.5 q/ha and BC ratio 2.76 in T.O.2 receiving 50% of RDN & 100% PK+2 sprays of Nano Urea at (25 to 30 days) and (60-65 days) @ 4 ml/lt water

OFT-2 Soil Science

1.	Title of On farm Trial	Organic cultivation package in cauliflower cultivation
2.	Problem diagnosed	Excessive use of pesticides in cauliflower cultivation
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Technology options:** Farmers Practices**:-** Application of 5 MT FYM/ha+32kgN+23kgP_2O_5 +15kg K_2O/ha through inorganic source T.O.1:- Application of 5 MT FYM+25% of RDF (NPK) through organic source T.O.2:- Seed and seedling treatment with Beejaamrit+3 spray of Jeevaamrit at 21 days interval+ application Ghanjeevaamrit @ 1q/ha as basal application and 30DAS
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Ram Krishna Mission, KVK, Ranchi& National Centre on organic farming Ghaziabad
5.	Production system and thematic area	Rice - Cauliflower - Moong & Integrated Nutrient Management
6.	Performance of the Technology with performance indicators	1) Plant height 2) Weight of curd/plant 3) Yield (q/ha) 4) Available nutrients in pre and post harvest soil. 5) Cost of Cultivation 6) Net Return 7) Cost benefit ratio
7.	Final recommendation for micro level situation	Application of seed and seedling treatment with Beejamrit +3 spray of Jeevaamrit at 21 days interval + application of Ghanjeevamrit @1.0q/ha as basal application and 30DAS
8.	Constraints identified and feedback for research	Problem in availability of organic inputs
9.	Process of farmers participation and their reaction	Trainings and field visits

Thematic area: Integrated Nutrient Management

Problem definition: Excessive use pesticides in cauliflower cultivation

Technology assessed: Table: Initial soil properties

pH	**EC(dSm^{-1})**	**Organic Carbon (%)**	**Available nutrients (kg/ha)**		
			N	**P_2O_5**	**K_2O**
7.27	**0.258**	**0.598**	**254**	**29.62**	**161.0**

Table: Effect of pesticide on post soil properties

Technology option	pH	EC (dsm-1)	Organic carbon	Available nutrients (kg/ha)		
				N	P_2O_5	K_2O
Farmers Practices:- Application of 5 MT FYM/ha+32kgN+23kgP_2O_5 +15kg K_2O/ha through inorganic source	*7.28*	*0.*259	*0.*603	*257*	29.85	156.5
T.O.1:-Application of 5 MT FYM+25% of RDF (NPK) through organic source	*7.26*	*0.262*	*0.*608	*264*	*34.21*	164.5
T.O.2:-Seed and seedling treatment with Beejaamrit+3 spray of Jeevaamrit at 21 days interval+ application of Ghanjeevaamrit @ 1q/ha as basal application and 30DAS	*7.24*	*0.263*	*0.625*	*261.5*	*33.72*	*167.5*

Table: Effect of Organic cultivation package in cauliflower on yield and economics.

Thematic area	Technology options with detailed treatments	Yield component		Yield (q/ha)	Cost of cultivation(Rs./ha)	Gross return (Rs/ha)	Net return(Rs./ha)	BC ratio
		Plant Height (cm)	Test wt. (wt. of curd/ plant)					
INM	**Farmers Practices:-** Application of 5 MT FYM/ha+32kgN+23 kgP_2O_5 +15kg K_2O/ha through inorganic source	47.5	635	162	54,250	1,53,900	99,650	2.83
	T.O.1:-Application of 5 MT FYM+25% of RDF (NPK) through organic source	45.0	687	174	57,300	1,65,300	10,8000	2.88
	T.O.2:-Seed and seedling treatment with Beejaamrit+3 spray of Jeevaamrit at 21 days interval+ application of Ghanjeevaamrit @ 1q/ha as basal application and 30DAS	51.0	725	186	49,200	1,76,700	1,27500	3.59

Result: Highest yield of cauliflower 186.0q/ha and BC ratio 3.59 was recorded in T.O-2

OFT 3– Horticulture

1.	Title of On farm Trial (OFT)	Ex situ residue management in potato cultivation.
2.	Problem diagnosed	Low yield due to late sowing of potato in low land area
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Technology options:** **F.P**: Sowing in ridge and furrow method. **T.O.1:-**Sowing of Potato seed with FYM and paddy straw (15cm) **T.O.2:-** Sowing of potato seed with FYM and water hyacinth (15cm)
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	CSSRI,West Bengal
5.	Production system and thematic area	Resource conservation technology
6.	Performance of the Technology with performance indicators	1) Germination percentage ii) No. of tuber per plant iii) Yield (q/ha) iv) Cost of cultivation. v) Net return. vi) Cost –Benefit Ratio
7.	Final recommendation for micro level situation	-
8.	Constraints identified and feedback for research	Labour problem in initial collection of water hyacinth
9.	Process of farmers participation and their reaction	Discussion with farmers during training programs and field visit

B. Results with Table and good quality photographs in jpg.

Thematic area	**Technology options with detailed treatments**	**Area (ha in crop & Fodder)/ Nos (in livestock)**	
		Proposed	**Actual**
Resource conservation technology	**F.P**:Sowing in ridge and furrow method.	0.08	0.08
	T.O.1:-Sowing of Potato seed with FYM and paddy straw (15cm)	0.08	0.08
	T.O.2:- Sowing of potato seed with FYM and water hyacinth (15cm)	0.08	0.08

Thematic area	**Technology options with detailed treatments**	**Yield (q/ha)**	**Cost of cultivation(Rs. /ha)**	**Gross return (Rs/ha)**	**Net return (Rs./ha)**	**BC ratio**
Resource conservation technology	**F.P**:Sowing in ridge and furrow method.	237.18	1,02,000	1,89,744	87,744	1.86
	T.O.1:-Sowing of Potato seed with FYM and paddy straw (15cm)	290.08	1,13,700	2,32,064	1,18,364	2.04

	T.O.2:- Sowing of potato seed with FYM and water hyacinth (15cm)	260.60	1,11,350	2,08,480	1,05,130	1.98

Result: The maximum yield 290.08Q/ha with minimum disease incidence 7% and weed population 45/m^2 is recorded in T.O-1

OFT-4. Horticulture

1.	Title of On farm Trial (OFT)	Assessment of microbial against wilting in Tomato crops
2.	Problem diagnosed	Wilt disease in tomato
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Technology options:** **F.P** Use of Chemical pesticides **T.O-1** Use of IIHR consortia (arka microbial consortia) **T.O-2** Use of NRC Litchi consortia
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	B.A.U., Sabour, Bhagalpur
5.	Production system and thematic area	Integrated Disease Management
6.	Performance of the Technology with performance indicators	i) Initial plant population ii) First wilt incidence (DAT) iii) Wilting percentage at 15, 30, 45,60 and 75 DAT iv) Yield (q/ha) v) Cost of cultivation. vi) Net return vii) Cost –Benefit Ratio
7.	Final recommendation for micro level situation	IIHR consortia is most effective in controlling wilt disease of tomato
8.	Constraints identified and feedback for research	It is not easily available in local market
9.	Process of farmers participation and their reaction	Farmers actively participated in trail

B. Results with Table and good quality photographs in jpg.

Thematic area	**Technology options with detailed treatments**	**Area (ha in crop & Fodder)/ Nos (in livestock)**		**Yield (q/ha)**	**Cost of cultivation(Rs./ ha)**	**Gross return (Rs/ha)**	**Net return(Rs./ ha)**	**BC ratio**
		Proposed	**Actual**					
Integrated Disease Management	**Farmers Practices** Use of Chemical pesticides	0.08	0.08	280.0	59,000	1,64,400	1,05,400	2.78
	T.O.1:- Use of IIHR	0.08	0.08	335.0	63,100	2,01,700	1,38,600	3.19

	consortia(Arka microbial consortia)							
	T.O.2:- Use of NRC Litchi consortia	0.08	0.08	315.0	62,500	1,95,300	1,32,800	3.12

Result: The maximum yield 335.0Q/ha is recorded in application of IIHR consortia (T.O-1) with minimum wilting percentage 13.6% after 75 days of transplanting as compared to other treatments.

OFT 5: Home Science

1.	Title of On farm Trial	Impact of Ready to use infant Food on anthropometric parameters of malnourished children (age 6 months to 3years)
2.	Problem diagnosed	Unawareness of benefits of nutri-cereals. No inclusion of nutria-cereals in diet.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Technology options:** **F.P. :-** Normal homemade food (The children are not being provided nutrient rich food. No ready to eat food is being practiced by majority of the children) **T.O.1 :-**Standard ingredients : Ragi (85:15) Standard combination of Ragi-150g +peanut-200g+ Sugar - 300g+ milk powder -250g and ghee-100g **T.O.2 :-**Standard ingredients : Wheat (85:15) Standard combination of Wheat-150g + peanut-200g+Sugar:-300g + milk powder -250g and ghee-100g
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	DRP CAU, PUSA
5.	Production system and thematic area	Development of weaning food for children (6 months - 2 years), low cost malted, ready to eat (RTE) high nutrient efficient diet
6.	Performance of the Technology with performance indicators	(i)Sensory Analysis: (ii)Body weight at monthly interval (iii)Height at monthly interval (iv) Stomach discomfort if noticed
7.	Final recommendation for micro level situation	Ragi based supplementary feed ((Malted + roasted) Ragi-150g +peanut-200g+ Sugar - 300g+ milk powder -250g and ghee-100g is recommended due to highest weight gain.
8.	Constraints identified and feedback for research	Hesitation in adopting Ragi. Supplementary food was well accepted by children, adoption of Ragi based food has been initiated well.

9.	Process of farmers participation and their reaction	Individual contact and awareness created regarding child health care and nutrition. The recommendation was well accepted by the rural households.

Table: Assessment of Impact of Ready to use infant Food on anthropometric parameters of malnourished children (6 months to 3 years)

Technology Option	**No. of Trials**	**Initial reading**		**Final reading wt in kg**		**Differences (av.)**		**Differences in %**	
F.P. **:-** Normal homemade food (The children are not being provided nutrient rich food. No ready to eat food is being practiced by majority of the children)	10	Wt.(kg)	Ht. (Cm)	Wt.(kg)	Ht. (Cm)	Wt.(kg)	Ht. (Cm)	Wt.(kg)	Ht. (Cm)
		9.73	77.72	10.11	80.18	0.38	2.23	3.90	2.86
T.O.1 **:-** Standard ingredients : Ragi (85:15)Standard combination of Ragi-150g +peanut-200g+ Sugar - 300g+ milk powder -250g and ghee-100g		8.74	72.38	9.25	74.94	0.51	2.42	5.83	3.53
T.O.2 **:-** Standard ingredients : Wheat (85:15) Standard combination of Wheat-150g + peanut-200g+Sugar-300g + milk powder -250g and ghee-100g		8.47	76.75	8.92	79.24	0.45	2.36	5.31	3.07

Result :. Overall T.O. **1** performed better in average height and weight measurements. Though T.O. 2 also found better as compared to F.P.in height and weight parameters

OFT-6

1.	Title of On farm Trial	Assessment of preparation of herbal gulal from local food materials for income generation
2.	Problem diagnosed	Natural colour from vegetable/flowers has no harmful effect. There is no concept of using harmless, chemical free colours for different trees.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Technology options: **F.P. :-** :Use of locally available colours in market **T.O.2:-**Arrowroot Powder + Extract of Turmeric/Beet Root **T.O-3:-**Arrowroot Powder + Extract of marigold flower
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	DR RPCAU., Pusa, Samastipur
5.	Production system and thematic area	Waste to Wealth, Income Generation

6.	Performance of the Technology with performance indicators	1) 5 pointAcceptability scale 2) B:C Ratio
7.	Final recommendation for micro level situation	Extract of turmeric had brightest colour which was more acceptable
8.	Constraints identified and feedback for research	No
9.	Process of farmers participation and their reaction	Farmers were actively participated

Result:
Table: Sensory analysis

Technology option	No. of trials	Gross cost	Gross Return	Net Return	B:C Ratio	Avg Overall Acceptability(0day) *
F.P:	10	30	-	-	-	3.4
T.O- 1		110	250	140	2.27	4.88
T.O-2		95	220	80	2.31	4.6

Acceptability Table:

Technology option	No. of trials	Colour	Texture (Smoothness)	Aroma	Touch Feel	Acceptability	AvgOverall Acceptability(0day)
F.P:	*10*	*5.0*	*3.5*	*2.5*	*2.5*	*3.5*	3.4
T.O 1		*4.8*	*4.8*	4.8	*5.0*	*4.8*	4.88
T.O-2		*4.0*	*4.8*	*5.0*	*5.0*	*4.6*	4.6

**5 Point hedonic scale Extreme dislike (1) ⟶ Extreme like (5)*

Result*:*Gulal made from kacchi haldi (Fresh Turmeric) TO 1 was found highly acceptable having 4.88 score at 5 Point, whereas T.O- 2 (colored with marigold)was rated 4.6 lower than T.O- 1 because of tint of colour acceptability but aroma found better rating 4.8.

2. Performance of Front Line Demonstration:
Rabi (2023)

Sl. No.	Crop	Season and year	Area (ha)		No. of farmers/ Demonstration		
			Proposed	Actual	SC/ST	Others	Total
1	Nutri Garden Kit (Mixed Vegetable, 12 types)	Kharif 2023	30	41 Units	10	31	41
2.	Tomato		1.0	2.0	08	21	29

3. Cluster Front Line Demonstration Programme

Sl.No	Crop	Season and year	Area (ha)		No. of farmers/ Demonstration		
			Proposed	Actual	SC/ST	Others	Total
1.	Mustard (Pant Sweta**)**	Rabi 2023-24	20	20	07	45	52
2.	Lentil (IPL-316)	Rabi	20	20	05	45	50

4. NICRA

Sl. No.	Crop	Season and year	Area (ha)		No. of farmers/ Demonstration		
			Proposed	Actual	SC/ST	Others	Total
1.	Wheat (DBW-187)	Rabi 2023-24	16	16	05	30	35
2.	Mustard (Pant Sweta)		12	12	-	44	44
3.	Chickpea (Sabour Chana-1)		04	04	02	35	37
4.	Lentil (IPL-220)		12	12	08	38	46
5.	Moong (Shikha)	Summer-2024	15	15	09	65	74
6.	Sorghum (Anant)		3.5	3.5	07	66	73

5. Soil Samples Analyzed

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized(Rs.)
Soil Sample	217	217	26	47640=00

6. Seed production Programme on KVK Farm (2023-24):

i) Seed Sale by KVK :

Crop	Variety	Weight (Q.)	Amount (Rs)
Lentil	IPL-316	3.0	34,500=00
Wheat	DBW-187	92.0	4,41,600.00
Moong	Shikha	3.0	54,000=00

ii) Seed Production, (Kharif & Rabi 2023-24)

Crop	Variety	Types of seed	Yield (Q)
Paddy	R.Shweta	F/S	134.0
	Sabour Harshit	F/S	67.0
	Sabour Sampann	F/S	48.0
Wheat	DBW-187	C/S	80.5

iii) Planting Material produced

Type of Plants	No. of Plants/ Seedling
Tomato	1,06,000
Papaya	100
Brinjal	5000

7. Extension Activities (including activities of FLD Programme):

Nature of Extension Activity	No. of activities	Participants		
		S.C.	Others	Total
Field Day	02	35	46	81
Kisan Mela	01	699	995	1694
Kisan Ghosthi	01	123	425	548
Lectures delivered as resource persons	04	24	75	99
Newspaper coverage	72	Mass Circulated		
TV talks	00	Mass Circulated		
Radio talk	03	Mass Circulated		
Popular articles	02	Mass Circulated		
Extension Literature	05	Mass Circulated		
Scientific visit to farmers field	42	29	82	111
Farmers visit to KVK	1095	445	650	1095
Exposure visits (ICAR, Patna, BAU., Sabour,)	02	15	34	49
Celebration of important days (specify) Gandhi Jayanti, 26th Jan.	02	21	25	46
Kisaano ki warta-Krishi Mantri ke Saath	01	25	76	101
Mahila Kisan Diwas (15/10/2023)	01	26	39	65
Pradhan Mantri Krishi Samman Nidhi (15/11/2023)	01	26	39	65
World Soil day (05/12/2023)	03	21	64	85
Pradhan Mantri Krishi Samman Nidhi (28/02/2024)	01	22	46	85
International Women's Day (08/03/2024)	01	16	23	39

Proposed Action Plan
(June 2024 to September 2024)

1. Training programme :

Sl.No.	Discipline	Practicing Farmers		Rural Youth		Extension Functionaries	
		Total No. of courses	Total No. of Trainees	Total No. of courses	Total No. of Trainees	Total No. of courses	Total No. of Trainees
1.	Home Science	12	300	02	50	0**2**	5**0**
2.	Soil Science	12	300	02	50	02	50
3.	Horticulture	12	300	02	50	02	50
4.	Plant Protection	12	300	02	50	02	50
5.	Veterinary Science	12	300	03	75	02	50
Total		**60**	**1500**	**11**	**275**	**10**	**250**

2. ON FARM TRIAL(2023-24)

Thematic area	Title	Treatments	No. of farmers
Soil Science			
Soil Fertility Management	Improvement of nitrogen use efficiency in rice.	**F.P:** RDF (100:40:20) kg/ha **T.O.1:** 50% of RDN & 100%IK+nano urea@40ml/lt.water (Single spray at pre flowering stage) **T.O.2:** 50% of RDN & 100% PK+2 sprays of Nano Urea at (25 to 30 days) and (60-65 days) @ 4 ml/lt water.	**10**
Home Science			
Nutrition Upliftment	Assessment of seasonal variation on Hb level of rural women by intake of greens/vegetable	**F.P-** Food intake & Hb reading of rural(NPNL) women (15ys-59ys) without nutrigarden **T.O-1** Food intake & Hb reading of rural) NPNL) women (15ys-59ys) during kharif season with nutrigarden **T.O-2** Food intake & Hb reading of rural (NPNL) women (15ys-59ys) during Rabi season with nutrigarden	10
Value addition	Assessment of acceptability and shelf life of Nutrient Dense Millet Chocolate Bar	**F.P:** Chocolate available in local market **T.O-1 :** Nutrient Dense Millet chocolate Bar Ragi flakes, Groundnuts , Sesame seeds, Flax seeds, Dates, Soya granules, Cocoa powder, Skimmed milk powder, Jaggery **T.O-2:** Nutrient Dense chocolate Bar with local grains Puffed rice, rice flakes, roasted bengal gram, roasted groundnuts , Sesame seeds, Flax seeds, Dates,Skimmed milk powder, Jaggery	10

Wealth from Waste	Assessment of preparation of herbal gulal from local vegetable colours	**F.P**: Use of locally available colours in market **T.O- 1** Arrowroot Powder + Extract of marigold flower **T.O- 2** Arrowroot powder + Turmeric	**10**
Horticulture			
Integrated Pest Management	Assessment of fruit bagging in guava for quality improvement	**F.P:-** No use of Bags **T.O-1** Use of cellophane bag cover **T.O-2** Use of paper bag cover	10
Plant Protection			
Integrated Disease Management	Assessment of the effect of Trichoderma based bioformulation on fusarium wilt disease in lentil	**F.P:-** Foliar spray with carbendazim @2g/L of water at 30 DAS **T.O-1** Seed treatment with carbendazim @2g/kg of seed+soil drenching with carbendazim @2g/L of water + Foliar spray with carbendazim @2g/L of water at 30DAS **T.O-2** Seed treatment with trichoderma @ 5g/kg of seed + application of trichoderma enriched vermicompost (40g/kg of vermicompost) @ 5.0 L/ha + Foliar spray with trichoderma @ 10g/l of water at 30 DAS.	**10**
Integrated Disease Management	Assessment of the effect of different chemicals on False smut of Rice	**F.P:-** one Foliar spray with carbendazim @2g/L of water **T.O-1**:-Foliar spray with Picoxystrobin+propiconazole 2ml/L of water at Boot stage of crop **T.O-2** Seed treatment with carbendazim @2g/kg of seed+ 2 spray of propiconazole @ 1.0ml/L of water at Boot leaf and 50% flowering stage	**10**
Veterinary Science			
Post partum infertility in cattle	Comparative assessment of hormone (GnRH) and mineral mixture supplement for improving postpartum anestrus in cattle	**F.P** :- Traditional method and no use of minerals and vitamins. **T.O.1**:- Dewormer (3gm) + mineral mixture @ 50 gm for 20 days **T.O.2**:- Dewormer (3gm) + mineral mixture @ 50 gm for 20 days + Inorganic phosphorous Inj + vitamin AD_3E Inj @ 10 ml alternate day for 3 days + micro minerals 1Bolus for 28 days **T.O.3**:- Dewormer (3gm) + mineral mixture @ 50 gm for 20 days + Inorganic phosphorous Inj + vitamin AD_3E Inj @ 10 ml alternate day for 3 days + micro minerals 1Bolus for 28 days+ GnRH Inj @ 5ml at the time of A.I	

Milk production and Dairy management	Efficacy of double injection buserelin in improving pregnancy rate oestrus repeat breeding in crossbred cows	**F.P** :- Traditional method of feeding **T.O.1** :- Dewormer (Fenbenadazole 3g) and mineral mixture @50 gm/day/animal for 20 days **T.O.2** :- Dewormer (Fenbenadazole 3g) and mineral mixture @50gm/day/animal for 20 days + (Single Injetion)Injection of Buserelin 20 µg-5ml I/M 6 hr. before the A.I **T.O.3**:- Dewormer (Fenbenadazole 3g) and mineral mixture @50 gm/day/animal for 20 days +(Double Injection) 1st Injection of Buserelin 20 µg-5ml I/M 6 hr. before the A.I and 2nd on day 12 after last insemination	

3. Front Line Demonstration conducted (2024) :

Sl. No.	Crop	Variety	No. of farmers / Demo.	Area (ha)
1.	Brinjal	Pusa Purple Long	20	01
2.	Goundnut Decorticator	-	40	04 Group
3.	Nutrigarden Kit	Mixed Vegetables	20	20
4.	Area specific mineral mixture	Area specific mineral mixture	50	50
5.	Dewormer	Fenbendazole + Ivermectin preparation	50	50
6.	Yellow and blue sticky trap(Mustard)	Yellow and blue sticky trap(Mustard)	40	40
7.	Fruit fly Trap	Fruit fly Trap	20	20

4. Cluster Frontline Demonstration (CFLD)

Sl. No.	Crop	Variety	No. of farmers / Demo.	Area (ha)
1.	Groundnut	K-1812	50	20

5. NICRA

Sl. No.	Crop	Variety	No. of farmers / Demo.	Area (ha)
1.	Sorghum	HYV, Anant	74	15
2.	Green Gram	Shikha	73	3.5
3.	Paddy	Swarna Sub-1	40	16

6. Seed Production Programme (Kharif 2024)and Planting Material

A. KVK Farm :

	Seed			Planting material	
Crop	**Variety**	**Category**	**Area**	**Types of Plant**	**No. of Plants**
Paddy	R.sweta	B/S	6.0ha	Papaya	1500
	Sabour Harshit	B/S	2.0ha	Brinjal	50,000
Arhar	IPA-203	B/S	3.0ha	Tomato	70,000 Seedling
				Mango	500
				Guava	500

B. Soil Sample Analysis :

S.N.	Particulars	No. of Samples to be analyzed
1.	Soil	600
2.	Plant	10
3.	Manures	05

C. Extension activities:

Activities	No.	Participants
Filed Day	05	225
Kisan Ghosti	04	250
Kisan Mela	02	1400
Kisan Chaupal	25	750
Exposer Visit	02	100
Farmer's Science Club	03	50
Farmer's Meeting	08	105
Scientist Visit to Farmer's filed	35	150
Farmer's Visit to KVK	700	700
Radio Talk	10	Mass benefited
TV Talk	06	Mass benefited
Help Line	1000	1000
News Paper Coverage	35	Mass benefited

KRISHI VIGYAN KENDRA, NAWADA

Report of 26th Extension Education Council Meeting
(From October 2023 to May 2024)

1. SALIENT ACHIEVEMENT

A. Krishi Vigyan Kendra, Nawada, succeeded in achieving 4th position out of 731 KVKs in India on the Portal - KRISHI VIGYAN KENDRA GYANTANTRA.

B. Established Seed Processing Unit (Capacity- 2.0 tonnes/hr, on wheat basis) at KVK farm for providing quality seed to the farmers.

C. With the efforts of KVK the Natural farming technology JEEVAMRIT spread among the farmers, which covered more than 17-22 % area of the district.

D. Method demonstration of Drone technology was implemented for spraying nutrients in 84.2 ha area in the district.

E. Four Entrepreneurship were developed in the field of Backyard poultry & Goatery (NOs. 04).

E. More than 6600 farmers are directly connected with KVK through social platform, where KVK provide technical guidance within 24 hours as per their quarries/problems in the field of agriculture and allied sector.

F. Seed sales – 553.0 q of wheat (var. HD-2733, DBW-87), green gram (var. HUM-16) and Rice (var. Rajendra Sweta) seed was provided to more than 1800 farmers.

G. Participatory Seed production– Seed production was done in cluster basis for cereal and pulses in 03 blocks (Akbarpur, Warisaliganj & Nawada Sadar) in 7.0 ha of the district.

H. Under ATMA sponsored training programme- total 145 farmers were trained at KVK, Nawada.

I. More than **1,80,250** farmers are benefited through different extension activities during the reporting period.

1. ACHIEVEMENT OF TRAINING PROGRAMME :

A. Training programmes of Practicing Farmer /Farm Women (ON/Off Campus)

Sl. No.	Discipline	Duration	Course No	No. of Beneficiaries					
				Other		SC		Total	
				M	F	M	F	M	F
1	Agronomy	06	06	150	30	0	0	150	30
2	Horticulture	31	31	572	136	155	65	727	201
3	Plant Protection	25	25	442	129	65	111	507	240
4	Home Science	11	11	22	259	12	58	34	293
5	Animal Science	22	22	247	125	56	47	303	172
6	Extension	20	20	419	155	15	45	434	200
			A. Total	**1852**	**834**	**303**	**326**	**2155**	**1160**

B. Training programme of Rural Youth (ON/Off Campus)

Sl. No.	Discipline	Duration	Course No	No. of Beneficiaries					
				Other		SC		Total	
				M	F	M	F	M	F
1	Agronomy	0	0	0	0	0	0	0	0
2	Horticulture	1	1	30	0	0	0	30	0
3	Plant Protection	2	2	50	2	6	2	56	4
4	Home Science	2	2	0	60	0	0	0	60
5	Animal Science	1	1	36	0	10	4	46	4
6	Extension	0	0	0	0	0	0	0	0
			B. Total	**116**	**62**	**16**	**06**	**132**	**68**

C. **Training programme of Extension Functionaries** (ON/Off Campus)

Sl. No.	Discipline	Duration	Course No	No. of Beneficiaries					
				Other		SC		Total	
				M	F	M	F	M	F
1	Agronomy	-	-	-	-	-	-	-	-
2	Horticulture	-	-	-	-	-	-	-	-
3	Plant Protection	-	-	-	-	-	-	-	-
4	Home Science	-	-	-	-	-	-	-	-
5	Animal Science	-	-	-	-	-	-	-	-
6	Extension	-	-	-	-	-	-	-	-
			C. Total	-	-	-	-	-	-

D. Residential Training Programme

Sl. No.	Discipline	Duration	Course No	No. of Beneficiaries					
				Other		SC		Total	
				M	F	M	F	M	F
1	Agronomy	-	-	-	-	-	-	-	-
2	Horticulture	-	-	-	-	-	-	-	-
3	Plant Protection	-	-	-	-	-	-	-	-
4	Home Science	02	02	0	30	0	0	0	30
5	Animal Science	01	01	36	0	10	4	46	4
6	Extension	-	-	-	-	-	-	-	-
			D. Total	36	30	10	4	46	34

E. Skill Development Training (Agriculture Skill Council of INDIA)

Sl. No.	Discipline	Duration (hours)	Course No/Code	No. of Beneficiaries					
				Other		SC		Total	
				M	F	M	F	M	F
1	Garden Keeper (RPL)	24	-	34	1	5	0	39	1
E. Total				**34**	**1**	**5**	**0**	**39**	**1**

F. **Celebration of Important Days**

Celebration of Important Days	No. of activities	Farmers				Extension Officials			Total		
		M	F	Total	SC/ ST (%)	M	F	Total	M	F	Total
Gandhi Jayanti (2nd Oct.)	1	12	5	17	2	16	2	18	28	7	35
Mahila Kisan Diwas (15th Oct.)	1	11	39	50	4	2	5	7	13	44	57
National Constitution Day (26th Nov.)	1	30	0	30	3	20	5	27	50	5	55
World Soil Day (5th Dec.)	1	114	2	116	6	5	2	7	119	4	123
Kisan Diwas (23rd Dec.)	1	38	12	50	2	5	0	5	43	12	55
World water Day (22nd March)	1	0	52	52	2	16	2	18	16	70	86
Total	06	205	110	315		64	16	82	269	142	411

G. Extension Activities (including activities of FLD programmes)

Nature of Extension Activity	No. of activities	Farmers				Extension Officials			Total		
		M	F	T	SC/ ST (%)	Male	Female	Total	Male	Female	Total
Kisan Mela	3	656	613	1269	72	24	2	26	680	615	1295
Field Day	5	75	62	137	0	5	0	5	80	62	75
Film Show	10	256	51	307	2	10	0	10	266	51	317
Agriculture Method demonstration	4	35	27	62	0	1	0	1	36	27	63
Kisan Gosthi	12	216	174	390	52	10	5	15	226	179	405
Lectures delivered as resource persons	31	805	265	1070	2	28	5	33	833	270	1103
Advisory Services	49	4200	300	4700	13	32	12	44	4232	312	4544
Scientific visit to farmers field	29	317	147	464	3	11	2	13	328	149	477
Farmers visit to KVK	188	3613	1272	4885	7	30	0	30	3643	1272	4915

Diagnostic visits	16	87	5	92	2	14	3	17	101	8	109
Soil health camp	1	114	5	119	2	5	0	5	119	5	124
Animal health camp	4	195	126	321	43	7	2	9	202	127	329
Swatchhta Hi Seva	25	354	55	409	7	25	10	35	379	65	444
Others	150	102318	6006	108324	11	142	26	168	102460	6032	108492
Total	**527**	**113241**	**9108**	**122549**		**344**	**67**	**411**	**113585**	**9174**	**122692**

2. Front Line Demonstration

a. Cereals

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Rice	Conservation Agriculture System	Decrease of cost cultivation by Sowing Technology and Weed management practice.	10	5.0	48.13	42.35	12.00	39477.00	105067.79	65.590.79	2.66	43590.00	92450.05	48860.05	2.12
Rice	Yield maximization	Management of Yellow stem borer (*Scirpophaga incertula* Walker) in Rice with Application of Chlorantraniliprole (0.4 GR) spray @ 10 kg/ha- 30 to 35 DAT + Chlorantraniliprole (20 SC) @ 100 ml/ha at booting or panicle initiation stage.	10	2.0	49.53	41.58	16.05	30428.00	89154.00	58726.00	2.93	35811.00	74844.00	39,033.00	2.09
Potato	Crop loss and yield reduction	Management of Late blight of potato (*Phytophthora infestans* (Mont.) de Bary with the Application of Seed treatment with *T. viride* (0.70%) + *B. subtilis* (0.25%) + Single spray of Fenamidone 10% + Mancozeb 50% WG (0.3%) at onset of the disease	10	2.0	20.70	15.80	31.01	106832.00	165600.00	58768.00	1.55	85792.00	126400.00	40608.00	1.47

b. Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Dairy Cow	Ecto-parasitic management	Topical application of Amitraz-12.5% @ 2.5 ml/lit. of water at weekly interval for three weeks.	40	40	Milk Yield-7.80 lit/day	Milk Yield-5.90 lit/day	Milk Yield-32.20 %	1. Efficacy of drug - 98.50 %, 2. Re-infestation of ticks after application of drug (days)- seen after 90 days, 3. Skin coat- Fine and smooth 4.Conjunctival mucous membrane - Light pink (Normal)	1. Efficacy of drug- 75% , 2. Re-infestation of ticks after application of drug (days)- seen after 50 days, 3. Skin coat- Rough and coarse, 4.Conjunctival mucous membrane - Icteric (pale watery)	190	312.	122	1.64	170	236	66	1.38

Dairy Cow	Reproductive Health Management	Management of repeat breeding in dairy cow. (Balance ration for 90 days + Intra uterine wash with Ciprofloxacin & Tinidazol combination @ 30 ml daily for 5 day + GPG (Ovsynch) Protocol (D91: GnRH (Buserelin)10microgram, D98-PGF2α-500microgram, D99-GnRH(Buserelin) 10 microgram of therapeutic trial and D100: fixed time Artificial Insemination)	15	15	Body Score By visual observation of behavioral symptoms of oestrous, Reoccurrence of heat after treatments The pregnancy diagnosis on 90 days after post inseminat ion	Body Score By visual observation of behavioral symptoms of oestrous, Reoccurrence of heat after treatments The pregnancy diagnosis on 90 days after post inseminat ion	-	-	-	

Parameters	Demonstration	Check
Body score	04 (Four)	03 (Three)
Visual observation of oestrus after treatment	Ten days (10 days)	Seventy Five (75 days)
Nos. of animal shown heat	13 (Thirteen) (86.58%)	05 (Five) (33.30%)
Nos. of cow repeat after treatment	03 (Three) (19.98%)	05 (Five) (33.30%)
Nos. of cow conceive	10 (Ten) (66.60%)	00

C. Pulses

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Lentil	Cropping system	Rice - ZT lentil Variety IPL 220	10	5.0	17.85	13.75	22.96	23540.00	107100.00	83560.00	4.59	25630.00	82500.00	56870.00	3.21
	Total		10	5.0											

3. ON FARM TRIAL (OFT) CONDUCTED DURING REPORTING PERIOD

Discipline	Title of On Farm Trial	Problem diagnosed	Details of technologies selected for assessment/refinement	Source of Technology	Results:
Agronomy	Improvement of Nitrogen Use Efficiency in Wheat.	Excessive use of chemical fertilizer and spiraling price of urea leads to increase in cost of cultivation.	Farmers practice = RDF (100:40:20) Technical option 1 = 50% RDN & 100% PK + Nano urea @ 4ml /lt. water (Single spray at 35 DAS). Technical option 2 = 50% RDN & 100% PK + 2 spray of Nano- urea at (35 DAS) & (60-65 DAS) @ 4 ml /lt water.	ICAR-ATARI, Patna	Submitted
	Integration of fertilizer in different form on yield of lentil.	Injudicious use of chemical fertilizer	Farmers practice = Seed Treatment + RDF Technical option 1 = 50% of RDF +WS 18:18:18 @5 gm./ltr water (Single spray at pre-flowering stage) Technical option 2 = Seed treatment with PSB + Rhizobium, 50% of RDF + WS 18:18:18 @ 5 gm./ lit water (Single spray at pre-flowering stage)	ICAR-ATARI, Patna	Submitted
	Improvement of Nitrogen use efficiency in Rice.	Excessive use of chemical fertilizer and spiraling price of urea leads to increase in cost of cultivation	**T_0 : Farmer's practice-** RDF (100:40:20) Kg/ha **T_{01} :**50% of RDN & 100% PK + nano urea @4ml/lt. water (Single spray at pre flowering stage). **T_{02}:** 50% of RDN & 100% PK + 2 sprays of Nano Urea at (25 to 30 days) and (60-65 days) @ 4 ml/lt water	ICAR-ATARI, Patna	Submitted
Animal Science	Effect of Different management practices on body weight gain in goat.	Low body weight gain is a major problem in these locations are malnutrition, worm infestations, micronutrient deficiency which causes huge economic loss to livestock	**Farmer's Practice (FP):** Feeding practices: Grazing 5-6 hrs + Small amount of grains like broken rice, wheat, pulses husk etc. @ 50-100 gm per day. **TO1**: FP + Deworming with Albendazole @ 7.5 mg/kg body weight, (Dewormer after 3 months of age repeat at the interval of 1 month) **TO2**: FP + Deworming + mineral mixture supplementation @ 10-15 gm per day after 3 months (4^{th}, 5^{th} & 6^{th} months)	BVC- Patna	Submitted

		owners			
	Nutritional and therapeutic management of post-partum anoestrous in lactating dairy cow.	Post-partum anoestrous is one of the most economically important problems of cross breed dairy cows. The main reason of the post-partum anoestrous in these locations are malnutrition due to worm infestations and deficiency micronutrient and hormonal imbalance resulted in to increase inter-calving period and low milk yield per lactation, causes huge economic loss to livestock owners.	**Farmer's Practice (FP):** Feeding practices: The farmers give 1.5-2.0 kg sprouted wheat for 5-6 days + Traditional feeding of some amount of green fodder, dry fodder and concentrate mixture. **TO1**: Deworming with Fenbendazole @ 7.5 mg/kg body weight, twice in a year + Balance ration* @ 1.0 kg of concentrate mixture/ 2.5 lit of milk + 0.5 kg for body maintenance per day for 90 days + Herbal heat inducer: 4 bolus on 90, 91, 92 and 93rd days of the trial. **TO2**: Deworming with Fenbendazole @ 7.5 mg/kg body weight, twice in a year + Balance ration* @ 1.0 kg of concentrate mixture / 2.5 lit of milk + 0.5 kg for body maintenance per day for 90 days + GPG (Ovsynch) Protocol (D91: GnRH (Buserelin) 10 microgram, D98-PGF2α-500 microgram, D99 GnRH (Buserelin) 10 microgram of therapeutic trial and D100: Fixed time A.I. (Artificial Insemination). ***Composition of Balance ration:** Balance ration is homemade and prepared from local available materials. The ingredients used for making concentrate mixture are maize- 42%, wheat bran-15%, rice bran-5.0%, gaggery-4.0%, mustard oil cake-20%, chuny-10%, mineral mixture-2.0% and salt-2.0%.	IVRI, Bareilly (UP)	Submitted
Agriculture Extension	Assessing the Extension Education Methods for Awareness and Use of Soil Health Card.	Lack of Knowledge of soil health card	Farmers Practice: without Extension Education Methods TO1: Farmers having SHC with Training Literature TO2: Farmers having SHC with Customized Social Media Advisory TO3: Farmers having SHC with Training Literature and Customized Social Media Advisory	ICAR-ATARI, Patna	Submitted

Horticulture	Assessment of microbial consortia against wilting in solanaceous crops (Tomato).	Low return from tomato due to heavy incidence of wilt disease infection in Nawada district.	**Farmers' practice:** Use of chemical fungicides (Carbendazim or Mancozeb) **Technology option 1:** IIHR Consortia (Arka Microbial) **Technology option 2:** NRC Lichi Consortia/*Tricoderma*	ICAR-ATARI, Patna	Submitted
	Assessment of Fruit Bagging in Guava for Quality Improvement.	Loss of yield and deterioration of quality due to infestation by insect /fruit fly in Guava.	**Farmers' practice:** No use of guava fruit bagging **Technology Option 1:** Cellophane bagging **Technology Option 2:** Paper bagging (brown paper)	ICAR-ATARI, Patna	Submitted
Home Science	Assessment of preparation method of sprouted green gram flakes for anaemia prevention and income generation	Anaemia is highly prevalent in this area. Green gram (whole) is rich in iron and sprouting increases their ascorbic acid content that helps in better absorption of iron and prevention of anaemia.	**F. P.:** Local people consume green gram in form of dhal or sell to processors at very low cost **T.O.1:** Preparation of sprouted green gram flakes **Formulation:** Green gram whole (250 gms), Salt - as per the taste **Method:** Washing – Soaked for 6 hr – Sprouting (24 hr at 30 degree C) – Dried – Baking – Flakes preparation – Toasted in open pan for 5 - min **T.O.2:** Preparation of sprouted green gram flakes with spices **Formulation:** Green gram whole (250 gms), Salt - as per the taste, Spices (chat masala – 1 teaspoon, turmeric powder – 1 teaspoon, black salt – 1 pinch) **Method:** Washing – Soaked for 6 hr – Sprouting (24 hr at 30 degree C) – Dried – Baking – Flakes preparation – Toasted in open pan for 5 - min. – addition of spices	CIPHET, Ludhiana, Punjab	
	Assessment of value-added product of tomato for value addition	Lacking of value addition in tomato and unemployment in rural women	F. P.: Local people consume fresh tomatoes in vegetables, salad or in form of chutney T.O.1: Preparation of tomato puree Formulation: Fresh ripe tomatoes, salt (1%), Sodium benzoate – 0.3 gm per 10 kg pulp Concentrated to 12 - 15 degree Brix T.O.2: Preparation of tomato paste	Indian Institute of Food Processing Technology, Thanjavur, Tamil Nadu	Submitted

			Formulation: Fresh ripe tomatoes, Lemon juice, salt (2.5%), Sodium benzoate – 0.3 gm per 10 kg pulp Concentrated to 25 degree Brix		
Plant Protection	Management of Sucking Pests of Okra (*Abelmoschus esculentus* L.)	The sucking pest complex consisting of white flies, jassids, aphids, and thrips are major pests and cause 17.46 per cent yield loss in okra.	**TO (FP):** Pronephros 50 EC @ 2.0 gm/L water **TO_1:** Thiamethoxam 25 wg @ 0.35 gm/L at 20 Days after sowing (three times application at 10 days interval). **TO_2**: Imidacloprid 70 WG @ 0.3 gm/L at 20 Days after sowing (three times at 10 days interval).	Bihar Agricultural University, Sabour, Bihar	Submitted
	Efficacy of Bio-fungicide Against Disease Complex in Betel vine.	Heavy losses is caused by diseases complex in betel vine starting from its cultivation.	**TO (FP)**: Spray of carbendazim 50WP **TO_1**: Application of *Trichoderma viride* with FYM (1:10) and keep for seven days after covering with gunny bag. Then the mixture applied in row and cover with soil. **TO_2**: Drenching of *Trichoderma viride* four times + four spray of *Trichoderma viride* @ 5.0 ml/lit water in the months of December to January after 10 days interval.	ICAR-DMAPR, Anand, Gujarat	Submitted

5. SEED AND PLANTING MATERIAL PRODUCED AT KVK FARM :

Crop	Variety	Quantity of seed (q)	Crop/ Planting Material	Quantity/ No.
Wheat	HD-2733, DBW-187 and HD-2829	40.0	Rice	106.0
Green gram	HUM-16	2.66	Fruits plants	4250
Grand Total	---			-

6. Other production at KVK

Particular	Variety	Quantity (No./q)	Particular	Quantity (No.)
Egg	Duck	450 Nos.	Fruits	Guava- 5.0 q
Chicks	Backyard Poultry bird breed: Sonali	210 Nos.	Azola	1.0 q
Meat	Sonali and Kadaknath	31.14 Kg.	Mushroom	Oyster & Milky- 26 kg
Goat	Goat breed: Black Bengal	25 Nos.	Vegetable	Solanaceous & Cruciferous- 2.5 q
Fish	Fish var.- Rohu, Katla, Grass Carp	2.10 q	Vermicompost	Compost- 105.0 q
Milk	Cow breed: Cross Friesian & Gir	4500 lit.		

7. PERFORMANCE OF THE DEMONSTRATION UNDER CFLD ON PULSE AND OILSEED CROPS DURING *KHARIF* AND *RABI*:

Sl. No.	Crop demonstrated	Existing (Farmer's) variety name	Existing yield (q/ha)	Yield gap Q/ha) w.r.to			Name of Variety + Technology demonstrated	Number of farmers	Area in ha	Yield obtained (q/ha)			Yield gap minimized (%)		
				District yield (D)	State yield (S)	Potential yield (P)				Max.	Min.	Av.	D	S	P
1	Lentil	Titki Masur	10.30	5.22	3.55	6.60	IPL-220	87	24	16.90	9.90	13.40	63.81	36.04	33.0
2	Mustard	Desi	10.05	5.90	1.10	10.80	RH-0749	165	50	17.10	11.30	14.20	41.54	7.74	43.20

8. SOIL SAMPLES ANALYSED:

Details	No. of Samples	No of soil health card distributed	No. of Villages
Macro- and micro-nutrients analysed	155	241	3

9. RESOURCE GENERATION:

Sl. No.	Name of the programme	Purpose of the programme	Sources of fund	Amount (Rs. lakhs)	Infrastructure created
1	Training & Exposure visit	Capacity building & demonstration	ATMA, Rohtas	0.90	-
2	Training & Exposure visit	Capacity building & demonstration	ATMA, Nalanda	1.60	-
3	Training & Exposure visit	Capacity building & demonstration	ATMA, Sheikhpura	0.90	-

10. STATUS OF REVOLVING FUND (RS. IN LAKH) FOR LAST THREE YEARS

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year (Kind + cash)
2021	1,21,77,211.37	21,01,940.48	18,65,047.64	1,24,14,104.21
2022	1,24,14,104.21	38,86,198.00	34,03,860.00	1,28,96,442.21
2023	1,28,96,442.21	81,73,993.79	55,68,156.00	1,55,02,280.24

11. Project /Programme running under KVK

(A) Gramin Krishi Mausam Seva

Sl. No.	Activities	No. of Activities	Total No. of Farmers attended
1.	No. of Blocks for which Agromet Advisory is Prepared	14	4600
2.	Farmers Awareness Programme (FAP)	03	95
3.	Training for Progressive Farmers	02	60
4	News paper coverage	55	-

(B) Natural Farming

Particular	Number	SC/ST		Others		Total
		M	F	M	F	
Farmer Awareness Programme	05	22	41	222	84	369
Total						**369**

(C) NARI

Name of Nutri-Smart Village	Title of Activity	No. of activities	No. of beneficiaries
Sokhodeora	Awareness Camp	6	180
Bijho	Training	2	60
Anganbari	Seed Distribution	12	240

	Total	20	480

(D) Schedule Cast Sub Plan (SCSP)

Sl.	**Activities**	**Physical Achievement**	
1).	Training	No. of Training / Demos.	No. of beneficiaries
a.	Farmer	10	296
b	Mobile agro-advisory to farmers	No. of advisory	No. of beneficiaries
		48	250
2).	Other activities		
a.	Participants in extension activities (No.)	13	
b.	Vermi-compost (Quintal)	17q. (35 farm women)	
c.	Distribution of Sewing Machine	5 Nos. (01 Sewing machine per farm women)	
d.	Distribution of Poultry bird	04 (210 bird)	
e.	Distribution of Goat	04 Men (20 Nos.)	
f.	Deworming of Ruminants	488 Goat and 150 Cattle, 70 farmers benefited	
g.	Critical input distribution: Medicine	15 farmers for poultry & goat	
h.	Small Farm implement	353 farmers	
i.	FLD: Seed distribution of Green gram var. HUM-16	75 farmers (22.0 ha)	
j.	Wire fencing (Size- 100x110') for poultry, gaotary & dairy farming	01 farmer (Entrepreneurship development)	
k.	FLD – Potato	55 Farmer (Nilkanth kufari 5000 Kg)	
l.	FLD Moong	77 Farmer , 11.64 hac	
m.	Mango plant	30 farmer / 10 plant	
n.	Animal Health Camp	02 (Farmer 168, Animal 1112)	

(E) Climate resilient Agriculture

Name of Intervention	**Crop**	**Target (Acre)**	**Achievement (Acre)**
Zero Tillage/ Happy Seeder	Wheat	500.0	500.0
Zero Tillage	Lentil	40.0	40.0
Zero Tillage	Mustard	34.0	34.0
Zero Tillage	Chickpea	40.0	40.0
Raised Bed Planting	Maize	6.0	6.0
Potato Planter	Potato	3.0	3.0
Zero Tillage	Green gram	170.0	170.0
Zero Tillage/ line Sowing	Millets	48.0	48.0
Zero tillage	Cowpea	17.0	17.0
Green Manuring	Dhaincha	10.0	10.0
Line Sowing	Groundnut	5.0	5.0
Laser Land Levelling	Land Levelling	100.0	10.0
	Total	**973.0**	**883.0**

Proposed Action Plan
(June 2024 to September 2024)

1. TRAINING

Item	No of courses /Programmes	No of Participants
	Achievement	**Achievement**
Training of Practicing farmer		
Agronomy	18	540
Horticulture	18	540
Plant Protection	18	540
Home Science	18	540
Animal Science	18	540
Total	**90**	**2700**
Training of Rural youth		
Agronomy	06	150
Horticulture	06	150
Plant Protection	06	150
Home Science	06	150
Animal Science	06	150
Total	**30**	**750**
Training of Extension functionaries	06	150
Total	**06**	**150**
Vocational training	05	140
Skill Development Training	-	-
Sponsored Training	02	100
Exposure visit	01	40
Other Extension Activities (Field Day, Group meeting, Kisan Gosthi, Diagnostic visit, *etc*.)	200	85000
Celebration of important days	06	180
Grand Total	**340**	**89060**

2. FRONTLINE DEMONSTRATION

Sl. No.	Crops	Thematic area	Technology Demonstrated	Target Area (ha)
1	Rice (*Oryza sativa* L.)	Weed management	Pyrazosulfuron at 20 g ha^{-1} (pre-emergence) fb Bispyribac sodium at 25 g ha^{-1} (post-emergence) 25 DAS	1.0
2	Rice (*Oryza sativa* L.)	Integrated Pest Management (IPM)	Management of Yellow stem borer (*Scirpophaga incertula* Walker) in Rice with Application of Chlorantraniliprole (0.4 GR) spray @ 10 kg/ha- 30 to 35 DAT + Chlorantraniliprole (20 SC) @ 100 ml/ha at booting or panicle initiation stage..	1.0
3	Papaya	Source of second Income Generation	Gynodioecious Variety – Red glow	1.0
4	Livestock (Cattle)	Ecto-parasitic Management	Topical application of Amitraz-12.5% @ 2.5 ml/lit. of water at weekly interval for	40 Farmer

			three weeks	

3. SEED AND PLANTING MATERIAL PRODUCED AT KVK FARM :

Crop	Variety	Quantity of seed (q)	Planting Material	Quantity (No.)
			Type of Plant	
Green gram	HUM-16	150	Vegetable seedling	150000.00
Rice	R. Sweta	300	Fruits plants	10000.00
Grand Total	**---**	**450**		**160000**

4. SAMPLES ANALYSED :

Details	No. of Samples	No of soil health cards	No. of Villages
Macro- and micro-nutrients	150	150	03

5. **ON-FARM TRIALS TO be CONDUCTED:** Under process of finalization in OFT Finalization Workshop, 2024

KRISHI VIGYAN KENDRA, PATNA

Report of 26th Extension Education Council Meeting
(From October 2023 to May 2024)

1. (A). Achievement of training program for Farmer (ON/OFF)

S. No.	Discipline	Course no.	No. of Beneficiaries					
			Others		SC/ST		Total	
			M	F	M	F	M	F
i	Home Science	13	442	414	140	289	582	703
ii	Agril. Engineering	10	256	04	25	0	281	04
iii	Soil Science	25	899	398	231	458	1130	856
Iv	Horticulture	18	136	168	54	138	190	306
	Total	**66**	**1733**	**984**	**450**	**885**	**2183**	**1869**

(B). Training Program for Rural Youth (ON/OFF)

S. No.	Discipline	Course no.	No. of Beneficiaries					
			Others		SC/ST		Total	
			M	F	M	F	M	F
i	Home Science	05	96	04	27	02	123	06
ii	Agril. Engineering	02	46	08	06	04	52	12
iii	Soil Science	04	101	03	17	0	118	03
iv	Horticulture	02	29	01	17	03	46	04
	Total	**13**	**272**	**16**	**67**	**09**	**339**	**25**

(C). Training Program for Extension Functionaries (ON/OFF)

S. No.	Discipline	Course no.	No. of Beneficiaries					
			Others		SC/ST		Total	
			M	F	M	F	M	F
i	Home Science	01	24	06	04	0	28	10
ii	Agril. Engineering	02	78	17	19	11	97	28
iii	Soil Science	01	28	11	07	07	35	18
iv	Horticulture	01	0	0	12	11	12	11
	Total	**05**	**130**	**34**	**42**	**29**	**172**	**67**

(D). Sponsored training program (ON/OFF)

S. No.	Discipline	Course no.	No. of Beneficiaries					
			Others		SC/ST		Total	
			M	F	M	F	M	F
i	Home Science	02	29	13	05	03	34	16
ii	Agril. Engineering	03	307	67	23	02	330	69
iii	Soil Science	02	61	20	15	12	76	32
iv	Horticulture	05	141	54	36	12	177	66
	Total	**12**	**538**	**154**	**79**	**29**	**617**	**183**

(E) Skill Development Training Programme 2023-24

No of training	Name of QP/Job role	Title of the training	Duration (in hrs.)	No. of participants								
				SC		ST		Other		Total		
				M	F	M	F	M	F	M	F	T
01	Mushroom Grower	Mushroom Grower	80	4	1	0	0	21	4	25	5	30
01	Vermicompost (RPL)	Vermicompost (RPL)	80	0	0	0	0	22	7	22	7	29
01	Garden Keeper (RKVY)	Garden Keeper (RKVY)	210	10	3	0	0	11	1	21	4	25

(F). Special Program (October 2023 to May 2024)

i. PM Live telecast

S. No	Name of Program	Date of Program	Place of Program	No. of Participant	Visit of VIPs.
1.	PM Live telecast (Kisan Samman Sammelan)	15.11.2023	KVK, Barh, Patna	61	Sri Rajesh Singh Raju BJP, Barh
2.	PM Live telecast	28.02.2043		178	

ii. Sawal Jabab

S. No	Name of Program	Date of Program	Place of Program	No. of Participant	Visit of VIPs.
1.	Sawal Jabab (Pryogshala Se Khet Tak)	01.11.2023	KVK, Barh, Patna (Online)	10	-
2.	Sawal Jabab (Pryogshala Se Khet Tak)	03.02.2024		09	-

iii. Kisan Mela

S. No	Name of Program	Date of Program	Place of Program	No. of Participant	Visit of VIPs.
1.	Kisan Mela	17-19.02.2024	BAU Sabour	275	-
2.	Kisan Mela under SCSP Prog.	12-13.03.2024	KVK, Barh, Patna	1208	Dr. Amrendra Kumar, Pr. Sci. ATATI, Patna Dr M D Ojha, RD, ARI, Patna

iv. Special Day Celebration

S. No	Name of Program	Date of Program	Place of Program	No. of Participant	Visit of VIPs.
1.	World Soil Day	05.12.2023	KVK, Barh, Patna	42	-
2.	Kisan Diwas	23.12.2023	KVK, Barh, Patna	53	-
3.	National Science Day	28.02.2024	KVK, Barh, Patna	96	Sri Rajesh Singh Raju BJP, Barh
4.	World Pulses Day	10.02.2024	PRC, Mokama	67	-
5.	International Woman Day	08.03.2024	KVK, Barh, Patna	28	Smt. Pinki Devi, Sarpanch, Bedhna
6.	World Earth Day	22.04.2024	KVK, Barh, Patna	16	-

3. (A) Front Line Demonstration, 2023-24

Crop	Thematic Area	Technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs./ ha)				*Economics of check (Rs./ha)			
					Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Barley (DWRB-137)	Crop Production	Line sowing	07	02	43.47	35.56	22.47	32466.67	80413.67	47946.67	1.47	32483.33	65798.33	33315	1.02
Pearl millet (MPMH-21)	Crop Production	Line sowing	27	5.0	12.14	-	-	17048.2	43425.9	26377.8	2.55	-	-	-	-
Sorghum (CSV-41)	Crop Production	Line sowing	24	1.75	17.83	-	-	17160.87	39236.5	22075.65	2.29	-	-	-	-
Foxtail (SIA-3156)	Crop Production	Line sowing	28	1.4	9.38	-	-	17166.7	26268.2	9101.5	1.53	-	-	-	-
Kodo (JK-41)	Crop Production	Line sowing	08	1.3	9.80	-	-	17142.86	24500.0	7357.1	1.43	-	-	-	-
Finger millet (A-404)	Crop Production	Line sowing	05	2.0	17.28	-	-	21800.0	44915.0	23115.0	2.06	-	-	-	-
Barnyard millet (DHBM-93-2)	Crop Production	Line sowing	04	0.8	11.40	-	-	16600.0	29640.0	13040.0	1.78	-	-	-	-
Kutki (OLM-203)	Crop Production	Line sowing	07	3.5	9.65	-	-	17316.7	27020.0	9703.3	1.56	-	-	-	-

3. (B) Cluster Front Line Demonstration, 2023-24

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs./ ha)				*Economics of check (Rs./ha)			
					Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Mustard (RH 725)	Crop Production	Line sowing	175	70	17.19	14.97	15.09	31106	97175	66069	2.12	30041	84599	54558	1.82
Lentil (IPL 316)	Crop Production	Line sowing	60	24	15.83	13.70	15.88	30545	106729	76184	2.49	28046	93054	65008	2.32

4. Climate Resilient Agriculture Programme

(A) CRA Result (Rabi 2023-24)

Crop	Variety	Technical Intervention	Grain yield (q/ha)		% Increase	Economics of demo				Economics of check			
			Demo	Check		Cost of cultivation	Gross return	Net Return	B:C ratio	Cost of cultivation	Gross return	Net Return	B:C ratio
Mustard	RH 725	Line sowing	17.59	15.67	10.91	29572.76	99362.65	69789.89	2.36	33880.95	88522.05	54641.10	1.61
Wheat	DBW 187	ZTD	49.29	40.13	18.58	33287.75	104735.91	71448.16	2.15	35794.82	85274.30	49479.48	1.38
Wheat	HD2967	ZTD	39.11	33.62	14.04	27882.08	83112.73	55230.65	1.98	29782.50	71447.81	41665.31	1.40
Lentil	IPL 316	ZTD	14.99	13.73	8.40	26300.00	89942.22	63642.22	2.42	27888.89	82386.67	54497.78	1.95
Chickpea	S. chana 1	ZTD	15.76	13.84	12.18	26575.71	84076.55	57500.84	2.16	26691.43	69198.57	42507.14	1.59
Lathyrus	Ratan	ZTD	8.83	7.29	17.46	16035.00	45926.40	29891.40	1.86	17020.00	36450.00	19430.00	1.14
Potato	Badi Aaloo	Raised Bed	258.24	218.68	15.32	81861.15	309890.77	228029.62	2.79	95876.92	262420.62	166543.69	1.74
Potato	Pukhraj	Raised Bed	244.47	211.28	13.58	81413.75	293360.00	211946.25	2.60	95386.67	253533.00	158146.33	1.66
Potato	UC map	Raised Bed	258.42	229.81	11.07	81607.14	310100.57	228493.43	2.80	95088.57	275773.71	180685.14	1.90

(B) Physical Target and Achievement (Summer, 2023-24)

Intervention	Target (acre)	Achievement (acre)
Green Gram (ZTD)	260	260
Total	**260**	**260**

5. SCSP Programme

(A) Capacity Building Programme 2023-24

Date	Place	Male	Female	Total
16.01.2024	Indranagar, Mokama	07	14	21
28.02.2024	Fulelpur, Athmalgola	12	24	36
30.03.2024	KVK	0	19	19
20.04.2024	KVK	12	12	24
24.04.2024	KVK	02	23	25
Total		**33**	**92**	**125**

(B) Performance of Demonstration

Crop	Variety	No./Area (acre)	Village & Block	Beneficiary SC	
				Male	Female
Chicks	Kadaknath, Sonali, Banraja	840 864 250	Indiranagar, Mokama Kamrapar, Athmalgola Agwanpur, Barh	08 12 02	13 12 23
Mushroom Spawn	Oyster	72 kg	Fulelpur, Athmalgola	11	25

6. Natural Farming

S.No.	Programme	Physical Achievement		Financial Target	Financial Achievement
		No. of Programme	Beneficiary		
1	Awareness Program	18	10623	164404.0	159728.0
2	Training cum Awareness	01	825	-	-
3	Training Programme	8	1366	400000.0	267231.0
4	Demonstration	12	12	48000.0	43840.0

7. Malnutrition Eradication

(A). Particulars about the Adopted Village

Sr. No.	Particulars	Value/s
1	Name of the village	Agwanpur
2	Block name	Barh
3	Total Geographical Area	159 ha.
4	Total Population	3916
5	Literacy Rate (%)	55.03%
6	Number of Household	633
7	Number of SC population	821
8	Distance from KVK	1 km
9	Major Crops Grown	Wheat, Rice
10	Animal Husbandry i. Cattle population ii. Poultry population	45

(B) Interventions taken towards Malnutrition Eradication, 2023-24

Sr. No	Name of the activity	Number of Activities	Number of Participants
1.	Awareness program	02	69
2.	Training Program	06	152

3.	Demonstration (Nutri-kit, Mushroom production)	03, 01	107, 25
4.	Nutri-garden Unit developed	32	47
5.	Health Camp organized	03	68
6.	Value Added products/ Recipe Contest	01	15
7.	Nutrition related pamphlets	01	47

8. Community Radio Station (91.2 FM)

Name of CR:	Community Radio Station, Barh, Patna
Frequency:	91.2 Mhz
Establishment Date:	31st May 2011
Total hours of transmission in a day:	07 hrs
Coverage Area:	20 km Ariel distance

Programme Broadcast

Programme	**Broadcast Duration**	**Broadcast Time**
Krishak Manch	60	Morning
Mahila Jagat	60	
Swasthya Charcha	45	
Bal Manch	15	
Lok Rang	30	
Krishak Manch	60	Afternoon
Santulit Urwark or Swasthy Mitti	30	Evening
Swasthya Charcha	60	
Mahila Jagat	30	
Lok Rang Swasthya Baan	30	

9. Resource Generation

S.No.	**Name of the programme**	**Amount**
1	Kisan Ghar/ Training Hall	1,06,000.00
2	Bank Interest	5,22,613.00
3	CRS Smart, New Delhi	29,400.00
4	CRS Vermmillion Communication Pvt. Ltd.	48,620.00
5	CRS Hindustan Urwark & Rasayan Ltd.	2,40,000.00
6	CRS Natural Farming	1,20,000.00
	Total	**10,66,633.00**

10. Revenue Generation

S.No.	**Name of Head**	**Income(Rs.)**
1.	Sale of Straw	1,05,600.00
2.	Sale of Marua Seed	10,140.00
3.	Cock Sale	30,650.00
4.	Sale of Fish	2,625.00
5.	2nd Edition of Poshan Vatika Book	87,500.00
6.	Sale of Paddy Seed	3,93,618.00
7.	Kisan Ghar/Training Hall	4,63,499.00
8.	Sale of Spawn	17,540.00
9.	Soil Testing	4,24,720.00
10.	Sale of News Paper	2,380.00
11.	Sale of Onion	6,624.00
12.	Sale of Potato	10,800.00

S.No.	Name of Head	Income(Rs.)
13.	Sale of Vegetable	1,290.00
14.	Sale of Mango Plant	15,600.00
15.	Sale of Guava plant	250.00
16.	Guava Auction	5,000.00
17.	Sale of Non-Seed	5,22,700.00
18.	Sale of Rai Seed	1,30,440.00
19.	Sale of Lentil Seed	2,05,000.00
20.	Bolero Auction	1,27,000.00
21.	Sale of Chick-pea Seed	90,200.00
22.	Sale of Wheat Seed	6,86,280.00
23.	Sale of Potato Seed	51,120.00
24.	Sale of Lathyrus Seed	8,400
25.	Sale of Field-pea Seed	800.00
26.	Sale of Mushroom Fruit	4,366.00
27.	Sale of Egg	1,890.00
28.	Sale of Vermicompost	156.00
29.	Sale of Linseed Seed	1,620.00
30.	Sale of Ragi Seed	810.00
31.	Milk	47,538.00
32.	Sale of Moong Seed	3,06,000.00
33.	Interest	2,36,167.00
34.	Mango Auction	3,31,000.00
	Total	**43,29,323.00**

11. Revolving Fund

Opening balance as on 01.04.2023	Fund generated	Expenditure	Fund Available 31.03.2024	
			Cash	Kind
69,77,206.05	43,29,323.00	13,02,922.50	1,00,03,606.55	22,00,000.00

12. Award received by Farmers from the KVK district

Sl.	Name of the Award	Name of the Farmer	Address	Contact No.	Amount	Purpose	Conferring Authority
1.	Best Farmers Award	Sri Anand Murari Singh	Mokama	7004489682	Certificate	Best Farmer of Patna District	BAU, Sabour
2.	District Millionaire Farmer of India Award 2023	Sri Amarjit Kumar Sinha	Lodipur, Danapur	9934713788	Certificate	District Millionaire Farmer	Mahindra Tractors
3.	Best Farmer Award	Sri Ravi Prakash	Murtazapur, Belchi	8292928903	Certificate	Best Farmer award	ATARI , Patna

13. Seed Production (Rabi- 2023-24)

Crop	Variety	Area (ha)	Class	Production (q)
Gram	S. Chana-1	3.5	F/S	8.90
Rai	RH-725	1.7	T/L	17.20
Wheat	HD-2967	3.5	C/S	129.80
Lentil	IPL-316	4.51	C/S	17.02

Potato	UC Map	0.2	T/L	33.20
Potato	K. Neelkanth	0.07	T/L	12.0
Moong	Shikha	4.5	C/S	Crop Standing
Paddy	S. Sampann	3.7	C/S	170.40
Paddy	R. Sweta	1.7	C/S	66.60
Arhar	IPA-203	0.68	F/S	4.75

14. On Farm Trial 2023-24

A. OFT Result -I Agril. Engg. (2023-24)

1. Assessment of Happy Seeder for Wheat Sowing under Crop Residue Management.

Problem: In combine, harvested paddy plot sowing of wheat requires heavy amount in residue removal leading to increased cost of cultivation

Technology Assessed:

1. **FP**- Broadcasting (variety HD 2967)
2. **TO-I**- Sowing of wheat by Happy Seeder incorporating the crop residue (variety HD 2967)
3. **TO- II**- Removal of crop residue and sowing by Zero Till drill (variety HD 2967)

Different parameter observed in the trial is as follows

Table-1 Methodology

Sl No	Treatment	Seed rate (kg/ha)	Plant population/m^2	No of irrigation
1	Broadcasting (in tilled condition)	120	229	3
2	Removal of crop residue and sowing by Zero Till drill	100	243	3
3	Sowing of wheat by Happy Seeder incorporating the crop residue	100	251	3

Table-2 Economic parameter

Treatment	Grain yield (q/ha)	Straw Yield (q/ha)	HI (%)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
Farmer Practice (FP)	35.42	45.93	43.54	44,189	84,457	40,268	0.91
Sowing of Wheat by ZTD after removing crop residue mannualy	45.74	57.43	44.34	35,343	1,08,684	73,342	2.08
Sowing of Wheat by Happy seeder after incorporating crop residue	48.78	59.41	45.09	36,340	1,15,539	79,199	2.18
SEm±	1.14	1.35	0.55	-	2620	2620	0.19
CD (P=0.05)	3.45	4.01	1.65	-	7865	7865	0.56
CV (%)	9.90	10.20	6.76	-	13.70	12.80	10.21

The result revealed that the cost of cultivation is more in case of broadcasting (Rs 44189.00 per ha) followed by sowing by zero till drill (Rs 35343.00 per ha) due to additional labour required for the removal of crop residue. In case of wheat sown by happy seeder, the cost of cultivation (Rs 36340.00 per ha) .The net return (Rs 79199.00/ha) and B:C ratio (2.18) in case of wheat sown by happy seeder incorporating crop residue is higher than other two methods

Conclusion:

From the above result, it is concluded that in the area where paddy is harvested by combine harvester happy seeder may be a good option for crop residue management and to avoid burning of crop residue.

B. OFT Result -II Agril. Engg. (2023-24)

Assessment of Multi Crop Planter for sowing of pulses in different field condition

Technology Assessed:

1. Farmers Practice – Broadcasting of lentil(IPL 316) in tilled condition

2. Technological option I - Sowing by Multicrop Planter (No Tilled Condition)

3. Technological option II - Sowing with Multicrop Planter (Tilled condition)

Table-1 Methodology

Sl No	Treatment	Seed rate (kg/ha)	Plant population/m^2
1	Broadcasting in tilled condition	40	74
2	Sowing by Multi Crop Planter (No Tilled Condition)	30	85
3	Sowing with Multi Crop Planter (Tilled condition)	30	85

Table-2 Economic parameter

Treatment	Grain yield (q/ha)	Straw Yield (q/ha)	HI (%)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
Farmer Practice(FP)	13.49	34.76	27.96	34,298	89,656	55,358	1.61
Sowing with Multi Crop Planter (Tilled condition)	16.28	39.76	28.80	29,223	1,07,773	78,550	2.69
Sowing by Multi Crop Planter (No Tilled Condition)	16.48	40.27	29.30	29,030	1,08,811	79,781	2.75
SEm±	0.37	0.67	0.50	-	783	783	0.18
CD (P=0.05)	1.13	2.01	1.46	-	2348	2348	0.55
CV (%)	8.6	9.2	7.30	-	13.4	12.8	10.60

The result revealed that the cost of cultivation of lentil is more in case of broadcasting (Rs 34,298.00 per ha) and sowing by Multi Crop Planter in tilled condition (Rs 29223.00 per ha). In case of lentil sown by Multi Crop Planter in no tilled condition, the cost of cultivation (Rs 29030.00 per ha) .The net return (Rs108811.00/ha) and B:C ratio (2.75) in case of lentil sown by Multi Crop Planter in no tilled condition is higher than other two methods

Conclusion:

From the above result, it is concluded that in the area where lentil is sown by the method of broadcasting in tilled condition use of machine may be a good option for sowing lentil in either tilled or no tilled condition.

C. OFT Result III 2023-24 (Soil Science)

Problem definition: Excessive use of chemical fertilizer and spiraling price of urea leads to increase in cost of cultivation

Technology assessed:

Farmers practice : RDF (N:P: K: 100:40:20 Kg/ha)

Technological option I : 50% RDN and 100%PK + Nano urea @4 ml/lit water (single spray at pre flowering stage)

Technological option II : 50% RDN and 100%PK +2 spray of Nano urea at (25-30 days) and (60-65 days) @4 ml/lit water

Paddy is an important crop of Patna district which is cultivated in around 135000.0 ha area and their productivity is around 31.72 q/ha which is low in comparison to Punjab and Haryana where the farmer harvesting higher yield. In Bihar there is a potential of attaining higher yield as there is

good availability of quality irrigation water and soil. In order to address the excessive use of chemical fertilizer and to increase the farmers profitability KVK Patna conducted on farm trial in Kharif 2023 at seven farmers field and assessed two technology with existing farmers practice -

1. 50% RDN and 100%PK + Nano urea @4 ml/lit water (single spray at pre flowering stage)
2. 50% RDN and 100%PK +2 spray of Nano urea at (25-30 days) and (60-65 days) @4 ml/lit water

Result of the assessment shows that Application of nano urea either one or two spray does not increase the yield level up to application of recommended dose of fertilizer and the yield reduction is about 14.62 and 8.95 respectively in single and double application of nano-urea. It is therefore recommended that before large-scale recommendation it must be tested on the experimental stations.

Technological options	No. of trials	Grain yield (q/ha)	Straw yield (q/ha)	% decrease in Yield	Gross cost (Rs/ha)	Gross Return (Rs/ha)	Net Return (Rs/ha)	B:C Ratio
Farmers practice (RDF i.e N:P:K::100:40:20 Kg/ha)	7	48.43	58.12	_	43600.0	107124.5	63524.5	2.46
50% RDN and 100%PK + Nano urea @4 ml/lit water(single spray at pre flowering stage)		42.25	50.7	14.62	42400.0	93837.5	51437.5	2.21
50% RDN and 100%PK +2 spray of Nano urea at (25-30 days) and (60-65 days) @4 ml/lit water		44.45	53.34	8.95	42700.0	98567.50	55867.5	2.31

15. Other extension activities

Nature of Extension Activity	No. of activities	Total		
		Male	Female	Total
Field Day	13	212	19	231
Field Visit	03	18	07	25
Viksit Bharat Sankalp Yatra	160	48132	51303	99435
Kisan Mela	01	546	660	1208
Kisan Ghosthi	02	42	12	54
Awareness Programme on Natural Farming	01	267	569	836
Lectures delivered as resource persons	21	1025	77	1102
Advisory Services	56	680	0	680
Scientific visit to farmers field	27	157	37	194
Diagnostic visits	07	45	06	51
Exposure visits	03	649	89	738
Health Camp	01	02	30	32
Farmers visit to KVK	08	1464	1318	2782
Workshop	01	26	09	35

16. Special Initiatives/Innovation

- ✓ Potato cultivation through Zero-Tillage method (Best way of crop residue management)
- ✓ Introduction of Soybean production as a diversification in kharif.
- ✓ Promotion of Nutri-Cereals (Millets) through Awareness, Training & Demonstrations.
- ✓ Promotion of Moringa in daily diet and popularization of among Angawadi Women's

17. Training program to be organized (June 2024 to September 2024)

Home Science

Thematic Area	Title of Training	Qr. No.	Duration	Venue OFF/ On	Participants/Trainees								
					SC		ST		Other		Total		
					M	F	M	F	M	F	M	F	T
Practicing Farmer													
Income generation	Milky Mushroom production	June-Sept.	01	ON/ OFF	0	5	0	0	0	15	0	20	20
Value addition	Different value added products of green and	June-Sept.	01	ON/ OFF	0	5	0	0	0	15	0	20	20
Rural Youth													
PHT	Millets Production and its different recipes preparation	June-Sept.	01	ON/ OFF	5	0	0	0	15	0	20	0	20
Income Generation activities for woman	Different income and employment generation activities for women employment	Do	01	ON/ OFF	0	5	0	0	0	15	0	20	20
Extension Functionaries													
Capacity building	Capacity building of Aanganwari workers related to Nutri-Garden and nutria cereals (Millets)	June-Sept.	01	ON/ OFF	5	0	0	0	15	0	20	0	20
Crop Residue Management	Crop Residue Management through Mushroom Production	June-Sept.	01	ON/ OFF	5	0	0	0	15	0	20	0	20

Agricultural Engineering

Thematic Area	Title of Training	Period	Duration	Venue OFF/ On	Participants/Trainees								
					SC		ST		Other		Total		
					M	F	M	F	M	F	M	F	T
Practicing Farmer													
Farm Machinery	Advantages of summer ploughing	June-Sept.	2	ON/ OFF	3	0	0	0	17	0	20	0	20
Other	Land preparation for summer crops	-Do-	2	ON/ OFF	3	0	0	0	17	0	20	0	20
Other	Transplanting of Ragi.	Do	1	ON/ OFF	3	0	0	0	17	0	20	0	20
Farm Machinery	Direct seeding of rice by DSR planter	Do-	1	ON/ OFF	5	0	0	0	15	0	20	0	20
Resource conservation Technique	Use and advantages of Self Propelled rice transplanter	Do-	2	ON/ OFF	5	0	0	0	15	0	20	0	20
Farm Machinery	Use & advantages of super seeder in combine harvested paddy field.	-Do-	1	ON/ OFF	3	0	0	0	17	0	20	0	20
Rural Youth													
Repair and maintenance of farm implements	Repair and maintenance of different farm machinery	June-Sept.	5	ON/ OFF	3	0	0	0	17	0	20	0	20
Protected cultivation	Resource conservation techniques for vegetable crop.	-Do-	2	ON/ OFF	2	0	0	0	18	0	20	0	20
Repair & maintenance of farm implements	Custom hiring of agricultural machinery	-Do-	2	ON/ OFF	5	0	0	0	15	0	20	0	20
Extension Functionaries													
Repair & maintenance of	Zero tillage technology and use of different machineries	June-Sept.	1	ON/ OFF	0	0	0	0	15	0	15	0	15

farm implements													

Soil Science

Thematic area	Title of Training	Period	Duration	Venue	Participants								
					SC		ST		Other		Total		
					M	F	M	F	M	F	M	F	T
Practicing Farmer													
Soil fertility management	Nutrient management in maize	June-Sept.	2	OFF	5	0	0	0	18	2	23	2	25
Soil and water conservation	Importance of BGA application in water conservation in paddy	-Do-	2	OFF	5	0	0	0	18	2	23	2	25
Integrated nutrient management	Integrated nutrient management in paddy	-Do-	2	OFF	5	0	0	0	18	2	23	2	25
Nutrient use efficiency	Importance of PSB application in enhancing P use efficiency	-Do-	2	OFF	4	1	0	0	18	2	22	3	25
Management of problematic soil	Reclamation of usar land	-Do-	2	OFF	5	0	0	0	18	2	23	2	25
Micronutrient deficiency in crop	Role and deficiency symptoms of zinc in paddy	-Do-	2	OFF	5	0	0	0	18	2	23	2	25
Soil fertility management	Importance of balanced fertilizer application in vegetable crop	June-Sept.	2	OFF	5	0	0	0	18	2	23	2	25
Soil and water testing	Importance of soil testing for better crop production	-Do-	2	OFF	5	0	0	0	18	2	23	2	25
Integrated nutrient management	Integrated nutrient management in pulses	-Do-	2	OFF	5	0	0	0	18	2	23	2	25
Management of problematic soil	Reclamation of usar land	-Do-	2	OFF	5	0	0	0	18	2	23	2	25

Micronutrient deficiency in crop	Importance of boron nutrition in managing hollow heart and browning of cauliflower	-Do-	2	OFF	5	0	0	0	18	2	23	2	25
Nutrient use efficiency	Importance of PSB culture in improving P use efficiency	-Do-	2	OFF	5	0	0	0	18	2	23	2	25
Nutrient use efficiency	Importance of using neem and sulphur coated urea in improving N use efficiency	-Do-	2	OFF	5	0	0	0	18	2	23	2	25
Soil and water testing	Scientific cultivation of millets (Ragi, Bajara & China)	June-Sept.	2	OFF	5	0	0	0	18	2	23	2	25
Rural Youth													
Production and use of organic inputs	Vermicompost production and their marketing	June-Sept.	3	ON	5	0	0	0	16	4	21	4	25
Production and use of organic inputs	Blue green algae production technique	-Do-	3	ON	5	0	0	0	16	4	21	4	25
Production and use of organic inputs	Practical hand on soil testing using soil testing kit	-Do-	3	ON	5	0	0	0	16	4	21	4	25
Production and use of organic inputs	Vermicompost production and their marketing	-Do-	3	ON	5	0	0	0	16	4	21	4	25
Extension functionaries													
Micronutrient deficiency in crops	Fertilizer recommendation for rice through crop manager (webapp)	June-Sept.	1	ON	2	0	0	0	16	2	18	2	20
Integrated nutrient management	Role of green manuring in soil fertility management	-Do-	1	OFF	2	0	0	0	16	2	18	2	20
Integrated nutrient management	Integrated nutrient management in pulses	-Do-	1	OFF	2	0	0	0	16	2	18	2	20

Micronutrient deficiency in crops	Fertilizer recommendation for wheat through crop manager (webapp)	-Do-	1	OFF	2	0	0	0	16	2	18	2	20

Horticulture

Thematicarea	Title of Training	Period	Duration (Days)	Venue On/ Off	No. of Participants								
					SC		ST		Other		Total		
					M	F	M	F	M	F	M	F	T
Practicing Farmers													
Yield increment	Scientific cultivation ofelephant foot yam	June-Sept.	2	Off/ On	4	1	0	0	18	2	22	3	25
Cultivationof fruits	Scientific cultivation of Banana	Do	2	Off/ On	4	1	0	0	18	2	22	3	25
Cultivationof fruits	Production management of guava orchards	Do	2	Off/ On	4	1	0	0	18	2	22	3	25
Plant propagation technique	Methods of plant propagation techniques of fruits	Do	2	Off/ On	4	1	0	0	18	2	22	3	25
Rural Youth													
Commercial fruit production	Management of Mango orchard	June-Sept.	2	Off/ On	5	0	0	0	16	4	21	4	25
Commercial fruit production	Management of litchi	Do	3	Off/ On	5	0	0	0	16	4	21	4	25
Layout andmanagement methods	High densityplanting system for fruit crops	Do	3	Off/ On	5	0	0	0	16	4	21	4	25
Extension Functionaries													
Protected cultivation	Production technology for growingoff seasonvegetables and flowers.	June-Sept.	2	Off/ On	2	0	0	0	16	2	18	2	20
Rejuvenation of old orchards	Management of old orchard	Do	2	Off/ On	2	0	0	0	16	2	18	2	20

18. (A) Frontline demonstration to be conducted 2024 (Kharif)

Sl. No	Season	Crop	Variety	Area (ha)	No. of Demo
1	Kharif	Fodder Crop	Napier	02	10
2	Kharif	Mushroom	Oyster	20	40
	Kharif	Mushroom	Milky	20	40
3	Kharif	Paddy	Zine Sulphate	10	10
4	Kharif	Vegetable Seed	Nutri-kit	100 pkt	100
5	Kharif	Early Cauliflower	S. Agrim	01 acre	08
6	Kharif	Bitter Gourd	Pusa do Mausami	1.0	40

(C) Cluster Frontline demonstration to be conducted 2024 (Rabi)

Crop	Variety	Session	Area (ha)	No. of Farmer
Mustard	RH-725	Rabi	350	875

19. Seed to be produced at KVK, farm 2023 (Kharif)

S. No.	Crop	Variety	Class	Area (ha)
1.	Paddy	R. Sweta	C/S	3.5
2.	Soyabean	P1241	C/S	0.68
3.	Urd	IP13-1	C/S	2.0

KRISHI VIGYAN KENDRA, PURNEA

Report of 26th Extension Education Council Meeting

(From October 2023 to May 2024)

1. Achievement of Training programme:

A. Practicing Farming Training Report from October 2023 to May 2024													
Discipline	**No. of Courses**	**No. of Participants**									**Grand Total**		
		Other			**SC**			**ST**					
		M	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**
Agronomy	16	401	53	454	49	277	326	0	120	120	450	450	900
Horticulture	40	82	100	182	18	205	223	49	658	707	149	963	1112
Soil Science	11	182	107	289	33	67	100	0	23	23	215	197	412
Agri. Engg.	9	190	64	254	41	16	57	10	37	47	241	117	358
Others (GKMS)	9	285	120	405	57	16	73	13	13	26	355	149	504
Total	**85**	**1140**	**444**	**1584**	**198**	**581**	**779**	**72**	**851**	**923**	**1410**	**1876**	**3286**

B. Rural Youth Training Report from October 2023 to May 2024													
Discipline	**No. of Courses**	**No. of Participants**									**Grand Total**		
		Other			**SC**			**ST**					
		M	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**
Agronomy	1	2	14	16	8	5	13	0	0	0	10	19	29
Horticulture	6	9	10	19	7	79	86	5	62	67	21	151	172
Vet. Sc.	1	27	2	29	0	0	0	0	0	0	27	2	29
Total	**8**	**38**	**26**	**64**	**15**	**84**	**99**	**5**	**62**	**67**	**58**	**172**	**230**

C. Extension Functionaries Training Report from October 2023 to May 2024													
Discipline	**No. of Courses**	**No. of Participants**									**Grand Total**		
		Other			**SC**			**ST**					
		M	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**
Agronomy	5	139	11	150	0	0	0	0	0	0	139	11	150
Horticulture	8	51	197	248	3	16	19	0	7	7	54	220	274
Agri. Engg.	1	20	1	21	6	0	6	0	0	0	26	1	27
Total	**14**	**210**	**209**	**419**	**9**	**16**	**25**	**0**	**7**	**7**	**219**	**232**	**451**
GT (A+B+C)	**107**	**1388**	**679**	**2067**	**222**	**681**	**903**	**77**	**920**	**997**	**1687**	**2280**	**3967**

2. Sponsored training programmes:

Sponsored Training Report from October 2023 to May 2024												
		No. of Participants										
		Other			SC			ST			Grand Total	
Sponsored By	No. of Courses	M	F	T	M	F	T	M	F	T	M	F	T
ERADA Araria	1	54	8	62	5	2	7	3	1	4	62	11	73
BREDA, Patna	1	34	7	41	4	14	18	2	6	8	40	27	67
ATMA Purnea	2	20	55	75	0	0	0	0	0	0	20	55	75
BPSAC Purnea	1	29	1	30	0	0	0	0	0	0	29	1	30
ATMA Katihar	1	36	0	36	4	0	4	0	0	0	40	0	40
Total	**6**	**173**	**71**	**244**	**13**	**16**	**29**	**5**	**7**	**12**	**191**	**94**	**285**

3. Skill Development Training Programme

S. No.	Name of Training	No. of Participants	Status
1	Vermicompost Producer (BSDM RPL)	30	Training completed and assessment is rest
2	Tropical Sub-Tropical Fruit Grower (BSDM RPL)	28	Training completed and assessment is rest

4. Achievements of Front Line Demonstrations (October 2023 – May 2024):

Crop	Technology demonstrated	Variety	Area (ha.)	No. of farmers	Check yield (q/ha)	Demo yield (q/ha)	% increase	Gross Cost	Gross Return	Net Return	B:C ratio
Jute	Varietal	JBO 2003 H	10.0	25	26.70	22.80	17.10	34270	114810	80540	3.35
Finger Millet	Varietal	RAU 8	4.0	10	15.50	12.50	16.00	22500	55449	32959	2.46
Paddy	Varietal	Sabour Deep	5.0	25	41.20	36.70	12.26	34080	81780	47700	2.40
Paddy	Bio fertilizer	BGA	10.0	25	44.50	39.90	11.52	35110	83600	48490	2.38
Wheat	Varietal	Biofortifid Var.-DBW 187	3.00	15	33.50	38.60	15.22	34960	95710	60750	2.74
Okra	Varietal	Kashi Kranti	1.00	15	Crop Standing						
Jute	Varietal	JBO 2003 H	10.0	25	Crop Standing						

Cluster Front Line Demonstration: Kharif / Rabi 2023-24

Crop	Technology demonstrated	Area (ha.)	No. of farmers	Check yield (q/ha)	Demo yield (q/ha)	% increase	Gross Cost	Gross Return	Net Return	B:C ratio
Sesame (CFLD, Kharif 2023-24)	HYV (Krishna), Weed management, IPM	20	50	3.30	4.80	45.45	14630	52800	38170	3.60
Rapeseed & Mustard	Var.-Uttara, Weed management, IPM	20	50	7.30	9.50	30.14	21470	61750	40280	2.87

5. On Farm Trial:

OFT-1

- **Thematic area: INM**
- **Problem definition/Name of OFT:** Improvement of Nitrogen use efficiency in paddy through Nano urea

1.	**Title of On farm Trial**	**Improvement of Nitrogen use efficiency in paddy through Nano urea**
2.	Problem diagnosed	Excessive use of chemical fertilizers and spiraling price in urea leads to increase in cost of cultivation
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Farmers' Practice:-** RDF (120:60:40 kg $N:P_2O_5:K_2O$/ha) **Technical Option I:-** 50 % RDN and 100 % P & K + Nano urea @ 4 ml per lit. water (Single Spray at 35 DAS) **Technical Option II:-** 50 % RDN and 100 % P & K + Nano urea @ 4 ml per lit. water (Two Spray at 35 and 60- 65 DAS)
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	In House, OFT Finalization workshop on Agronomy & Soil Science (1- 3, Sept. 2022) at BAU Sabour, Bhagalpur
5.	Production system and thematic area	Rice-Wheat / Integrated Nutrient Management
6.	Performance of the Technology with performance indicators	Initial and final soil nutrient status (pH, OC, NPK) **Yield data**-No. of effective tillers / sq m**,** 1000 grain wt (g)**,** Yield (Q/ha)**,** Economics
7.	Final Recommendation	Under process
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	Good

B. Results with Table

Thematic area	**Technology options with detailed treatments**	**Area (ha in crop & Fodder)/ Nos (in livestock)**		**Yield (q/ha)**	**Cost of cultivation (Rs./ha)**	**Gross return (Rs/ha)**	**Net return (Rs./ha)**	**BC ratio**
		Proposed	**Actual**					
INM	**Farmers' Practice:-** RDF (120:60:40 kg $N:P_2O_5:K_2O$/ha)	0.8	0.8	36.70	34500	74868	40368	2.17
	Technical Option I:- 50 % RDN and 100 % P & K + Nano urea @ 4 ml per lit. water (Single Spray at 35 DAT)			41.20	34578	84048	49470	2.43
	Technical Option II:- 50 % RDN			45.50	35140	92820	57680	2.64

	and 100 % P & K + Nano urea @ 4 ml per lit. water. (Two Spray at 35 and 60- 65 DAT)							

Result:- The on farm trial conducted on farmers field during Kharif 2023-24 to assess the improvement of Nitrogen use efficiency in paddy through Nano urea among 8 farmers of Purnea district revealed that the application of 50 % RDN and 100 % P & K + Nano urea @ 4 ml per lit. water. (Two Spray at 35 and 60-65 DAS) recorded the higher grain yield of paddy (45.50 q/ha) in comparison to farmers' practice of RDF (36.70 q/ha) due to balanced nutrition of the Nitrogen through the application of Nano Urea @ 4 ml / ltr. Of water twice at 35 DAT and 60-65 DAT. The economic study of the trial shows higher Net Return Rs. 57680/- and BC ratio 2.64.

OFT-2

- **Thematic area: ICM**
- **Problem definition/Name of OFT:** Improvement of Nitrogen use efficiency in wheat through Nano Urea

1.	Title of On farm Trial (OFT)	Assessment of yield in wheat through use of Nano Urea
2.	Problem diagnosed	Low yield in wheat due to poor N management. (Excessive use of chemical fertilizers and spiraling price in urea leads to increase in cost of cultivation)
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**TO I (Farmers' Practice) :-** RDF (150:60:40 kg $N:P_2O_5:K_2O$/ha) **T O II:-**50 % RDN and 100 % P & K + Nano urea @ 4 ml per lit. water (Single Spray at 35 DAT) **T O III:-** 50 % RDN and 100 % P & K + Nano urea @ 4 ml per lit. water (Two Spray at 35 and 60- 65 DAT) In timely Sown Variety of Wheat
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	ICAR-RCER Patna (2021)
5.	Production system and thematic area	Rice-Wheat cropping system /ICM
6.	Performance of the Technology with performance indicators	
7.	Final recommendation for micro level situation	Under process
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	Good

B. Results with Table and good quality photographs in jpg.

Thematic area	Technology options with detailed treatments	Area (ha in crop & Fodder)/ Nos (in livestock)		Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Proposed	Actual					
ICM	**TO I (Farmers' Practice) :-** RDF (150:60:40 kg	1.0	1.0	37.70	34430	93595	59165	2.71

	N:P_2O_5:K_2O/ha)							
	T O II:-50 % RDN and 100 % P & K + Nano urea @ 4 ml per lit. water (Single Spray at 35 DAT)			39.80	34890	98530	63640	2.82
	T O III:- 50 % RDN and 100 % P & K + Nano urea @ 4 ml per lit. water (Two Spray at 35 and 60- 65 DAT) In timely Sown Variety of Wheat			42.30	35740	104405	68665	2.92

Table 2. Soil nutrient status before and after harvest of Experimental Soils

Technology options	**PH**		**EC (dsm -1)**		**OC (%)**		**Avl. N (Kg/ ha)**		**Avl. P (kg/ha)**		**Avl. K (Kg/ ha)**	
	I	F	I	F	I	F	I	F	I	F	I	F
TO I (FP)	6.38	6.40	0.036	0.037	0.46	0.47	221	223	30.20	31.35	225	226
TO II	6.37	6.38	0.037	0.038	0.48	0.48	224	230	31.11	33.43	227	229
TO III	6.38	6.39	0.036	0.036	0.47	0.49	223	231	31.32	33.56	228	230

Table 3. Effect of different technological option on yield and yield attributes of wheat.

Technology options	**Plant height (cm)**	**No. of effective tillers/sq. m**	**Panicle length (cm)**	**1000 grain wt. (gm)**	**Yield (Q/ha)**
TO I (FP)	102	328	14.80	35.80	37.70
TO II	105	339	15.10	36.92	39.80
TO III	106	352	15.60	37.15	**42.30**

Result:- The results in the table clearly showed the higher yield (42.30 q/ha) recorded under TO III (50 % RDN + 100 % PK and Two spray of Nano urea @ 4 ml/ lit of water (at 35 DAS and 60- 65 DAS) when compared with other technical options under the investigation. The economic studies of the investigation also recorded higher net return (Rs. 68,665/- per hectare) and B: C ratio (2.92) under TO III in comparison to other technology option and farmer's practice. Therefore the use of nano- urea in combination can be advocated to replace about 50 percent of granular Urea for wheat production.

OFT 3

- **Thematic area: INM**
- **Problem definition/Name of OFT:**

1.	Title of On farm Trial (OFT)	Assessment of integration of fertilizers in different form on yield of lentil.
2.	Problem diagnosed	Low yield of lentil due to poor nutrient

		management (Injudicious use of chemical fertilizers that too not on suitable time, farmers still not using bio fertilizers for seed treatment to exploit potentiality)
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	TO I (Farmers' Practice):- Seed treatment + RDF (N-20,P_2O_5-50) kg/ha TO II:- 50 % RDF +WS 18:18:18 @ 5 gm /liter of water single spray at flowering stage). TO III:- Seed treatment with PSB +Rhizobium + 50 % RDF +WS 18:18:18 @ 5 gm /liter of water single spray at flowering stage).
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	ICAR –RCER Patna (2021)
5.	Production system and thematic area	Rice-Pulse cropping system / ICM
6.	Performance of the Technology with performance indicators	
7.	Final recommendation for micro level situation	Under Process
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	Good

B. Results with Table and good quality photographs in jpg.

Thematic area	**Technology options with detailed treatments**	**Area (ha in crop & Fodder)/ Nos (in livestock)**		**Yield (q/ha)**	**Cost of cultivation (Rs./ha)**	**Gross return (Rs/ha)**	**Net return (Rs./ha)**	**BC ratio**
		Proposed	**Actual**					
ICM	TO I (Farmers' Practice):- Seed treatment + RDF (N-20,P_2O_5-50) kg/ha	1.0	1.0	10.60	25360	66100	40740	2.60
	TO II:- 50 % RDF +WS 18:18:18 @ 5 gm /liter of water single spray at flowering stage).			11.70	25540	72700	47160	2.84
	TO III:- Seed treatment with PSB +Rhizobium + 50 % RDF +WS 18:18:18 @ 5 gm /liter of water single spray at flowering stage).			13.10	26480	81100	54620	3.06

Table 2. Soil nutrient status before and after harvest of Experimental Soils

Technology options	PH		EC (dsm -1)		OC (%)		Avl. N (Kg/ ha)		Avl. P (kg/ha)		Avl. K (Kg/ ha)	
	I	F	I	F	I	F	I	F	I	F	I	F
TO I (FP)	6.44	6.46	0.036	0.037	0.48	0.49	224	227	31.32	31.62	228	229
TO II	6.46	6.47	0.038	0.039	0.47	0.49	228	232	31.80	32.41	231	235
TO III	6.46	6.48	0.037	0.039	0.48	0.51	230	238	32.12	32.75	233	236

Table 3. Effect of different technological option on yield and yield attributes of Lentil.

Technology options	Plant height (cm)	No. of plants/sq. m	No. of pods /plant	1000 grain wt. (gm)	Yield (Q/ha)
TO I (FP)	39.62	68.90	52.67	22.17	10.60
TO II	39.95	73.60	56.32	22.58	11.70
TO III	40.12	75.30	58.15	23.14	13.10

Result:- The data recorded under different technological options showed higher yield of lentil (13.10 q/ha) under TO III (Seed treatment with PSB + Rhizobium, 50 % RDF + WS 18 : 18 : 18 @5 gm/lit of water - single spray at flowering stage) in comparison to TO1I and farmer's practice. The economic studies of the investigation also depicted higher net return (Rs. 54,620/- per hectare) and B: C ratio (3.06) under the same technology option TO III. Thus it may be concluded that the integration of seed treatment with PSB and Rhizobium along with application of water soluble NPK (18:18:18) @ 5 ml per liter water at flowering stage, can curtail the overall 50 % RDF in lentil crop.

OFT 4

- **Thematic area: Vegetable Cultivation**
- **Problem definition/Name of OFT:**

1.	Title of On farm Trial (OFT)	Assessment of microbial consortia against wilting in solanaceous crops (Brinjal)
2.	Problem diagnosed	Wilting problem in brinjal
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Farmers' Practice:-** Chemical pesticides **Technical Option I:-** IIHR consortia (Arka microbial consortia) **Technical Option II:-** NRC Litchi consortia
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	ICAR
5.	Production system and thematic area	Maize-Potato / Vegetable cultivation
6.	Performance of the Technology with performance indicators	Initial plant population, First wilt incidence (Days after transplanting), Wilting %, Yield (q/ha), Cost of cultivation, Gross return, Net return, B:C ratio

7.	Final recommendation for micro level situation	Crop Standing
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	

6. Other extension activities:

Extension Activities Report				
Nature of Extension Activity	**No. of activities**	**Farmer's attend**	**Extension Officials attend**	**Total**
Field Day	2	94	1	95
Exposure visits	7	616	0	616
Farmers Scientist Interactions	2	380	6	386
TV Talk	0	0	0	0
Radio Talk	5	Mass	Mass	Mass
Farmers visit to KVK	894	860	34	894
Scientist Visits to farmers field	188	1052		1052
Consultancy Through Mobile	2214	2214	0	2214
Soil & Plant analysis	149	149		149
News paper coverage	38	Mass	Mass	Mass
Crop Cutting Experiment	14	360	46	406
Animal Health Camp 17.10.2023	1	255	5	260
Participated in Rabi Mahabhiyan	8	1650	95	1745
Swachhata Hi Sewa	2	50	0	50
Kisano Ki Bat Krishi Mantri Ke sath 13.10.2023	1	25	11	36
Awareness programme of natural farming on 02.01.2024, 29,30.03,2024	4	414	0	414
15th Installment of Kisan Samman Nidhi Live Telecast 15.11.2023	1	152	1	153
Awareness programme on millets 29.11.2023, 18,21,23.12.2023	4	214	9	223
Organized World Soil Day 05.12.2023	1	110	5	115
16th Installment of Kisan Samman Nidhi Live Telecast 28.02.2024	1	29	0	29
Workshop SCSP 06-07 March 2024	1	312	8	320
Total	**3537**	**8970**	**187**	**9157**

7. Vikasit Bharat Sankalp Yatra (30 November 2024 to 26 Jan 2024)

No. of Gram Panchayat Covered	No. of Lecture Delivered on Soil Health/Natural Farming	No. of Capacity Building Programs conducted	Participants			Literature distributed (SHC, NF, Agri. Drone, etc.).
			Male	Female	Total	
116	133	116	59851	42748	102599	6000

8. Scheduled Caste Sub-Plan (SC-SP)

Name Of Activity	**No. of Activity**	**No. of Participants**
Training / Capacity building prog.	5	152
FLDs (Crop)	3	75

Awareness Camp, exposure visit etc.	5	220
Inputs Distribution		
Seeds (Field Crops)	200 Kg	10
Mushroom Spawn	100	25
Poultry Chicks	250	25
Small Equipments (Upto Rs. 2000)	10	10
Animal Fodder	25 Kg	24
Animal Medicine	300 Vile	150 Animal
Any Other (Mineral Mixture)	100 Kg	25 Animal
Service / Facilitation		
Animal Health Camp	1	50
Testing Soil Sample	50	50
Promotion of IFS, IOFS, Natural farming, Nutri garden, Kitchen garden, Orchards	50	50
Distribution of Literature	1000	1000

9. Tribal Sub-Plan (TSP)

Name Of Activity	**No. of Activity**	**No. of Participants**
Training / Capacity building prog.	6	169
FLDs (Crop)	2	50
Awareness Camp, exposure visit etc.	3	130
Inputs Distribution		
Seeds (Field Crops)	450 Kg	50
Mushroom Spawn	100	25
Poultry Chicks	750	30
Small Equipments (Upto Rs. 2000)	100	30
Animal Fodder	15 Kg	25
Animal Medicine	600 Vile	300 Animal
Any Other (Mineral Mixture)	100 Kg	25 Animal
Service / Facilitation		
Animal Health Camp	3	100
Testing Soil Sample	50	50
Promotion of IFS, IOFS, Natural farming, Nutri garden, Kitchen garden, Orchards	50	50
Distribution of Literature	2000	200

10. Natural Farming

Production at KVK, Purnea under Natural Farming Demonstration Unit

Year	**Season**	**Crop**	**Variety**	**Yield (Q/Acre)**		**Remark**
				Demo	**Check**	
2022	Kharif	Sesame	Krishna	0.37	1.2	Poor soil condition at KVK Farm
		Turmeric	Rajendra Sonia	10.2	72	Poor soil condition at KVK Farm
2022-23	Rabi	Mustard	Rajendra Suflam	0.87	2.75	Poor soil condition at KVK Farm

2023	Garma	Dhaincha	-	-	-	Incorporated in soil
2023	Kharif	Sesame	Krishna	0.73	1	Poor soil condition at KVK Farm
		Turmeric	Rajendra Sonia	5.44	56	Poor soil condition at KVK Farm
2023-24	Rabi	Toria	Uttra	3.66	4	Poor soil condition at KVK Farm
		Potato	K. Sindhuri	31.6	75	
2024	Garma	Greengram	Sikha	Standing crop	Standing crop	
2024	Kharif (Proposed)	Sesame	Krishna	To be sown in month of June		
		Turmeric	Rajendra Sonia	Sowing completed	-	

Demonstration Natural Farming on Farmers field (01 acre):

Name, Address & Mob. No.	Crop & Variety	Area (Acre)	Date of Sowing & Cutting	Date of Demo.	Yield (Q/Ha)
Jitendra Kushwaha, Dansar, Jalalgarh, 8651362509	Potato- K. Sindhuri	0.25	Oct-20 / Jan-14	13/11/2022	84.65
	Maize-P3355	0.50	Nov-21/ May-12		71.00
	Strawberry-Cemarosa	0.25	Nov-13/ March-07		150.00
Raj Kumar, Chandi Bari, Purnea East, 7903494890	Maize- P3355	0.50	Nov-17/ May-12	13/11/2022	64.00
	Cauliflower	0.25	July-17/ October-12		212.00
	Beetroot	0.25	Oct -15 / Jan-2		205.00
Mithlesh Anand, Dansar, Jalalgarh, 9886362063	Turmeric- Rajendra Sonia	0.50	June-17 /January-23	16/11/200	21.25
	Sesame- Krishna	0.50	June-14/ Nov-21		2.45
Bibhisan Sah, Hassi, Jalalgarh, 9472642048	Turmeric-Rajendra Sonia	0.25	May-23 /Jan-25	16/11/200	17.50
	Wheat-DBW 187	0.25	Nov-15 / April-05		31.00
Parmanand Mandal, Bisantha, Jalalgarh, 9572263322	Paddy-BB11	0.50	July-04 / Nov-15	12/12/2022	26.00
Anant Kr. Das, Bisantha, Jalalgarh, 9955863136	Potato-K. Sinduri	1.00	Oct-24 / Jan-18	12/12/2022	80.43
Pran Mohan Mishra, Bisantha, Jalalgarh, 6206772713	Cauliflower	0.25	July-14 / October-10	12/12/2022	215.00
	Potato- K. Sindhuri	0.25	Oct-28 / Jan-29		91.30
Sitaram Mahto, Sapa Rahika,Jalalgarh, 9934725091	Potato- K. Sindhuri	0.25	Oct-26/ Feb-07		85.30
	Mustard-Uttara	0.50	Nov -17 /March-0 6		8.00
Ramavtar Chouhan, Sima, Jalalgarh,	Maize- P3355	0.50	Nov-12 /May-14	18/12/2023	62.90

Name, Address & Mob. No.	Crop & Variety	Area (Acre)	Date of Sowing & Cutting	Date of Demo.	Yield (Q/Ha)
9162882449					
Dilip Kr. Yadav, Harchandpur, Jalalgarh, 7462940506	Wheat-DBW 187	0.25	Nov-09 / April-07	18/12/2023	30.40
	Potato- K. Sindhuri	0.25	Oct-28 / Feb-03		86.73
Sumit Kr. Biswas, SinghiaBanaili, Kasba, 8809708702	Parwal- Sabour Parwal	1.00	Oct- 13 / June-26	18/12/2023	41.25
Pradip Kr. Roy, Jalalgarh, Purnea, 7004105259	Mustard-Uttara	0.25	Nov -14 /March-10	18/12/2023	3.20
	Sesame- Krishna	0.50	June-10 /Nov-17		2.40

11. Climate Resilient Agriculture (CRA) Programme
Rabi 2023-24

Village Name	Crop	Technology intervention	Area (acres)
Dogachhi Dholbazza Basantpur Kullakhas Kullasundar	Wheat	Raised Bed	20
	Wheat	ZT	52
	Wheat	INM	08
	Lentil	ZT	05
	Mustard	RBP	15
	Potato	RBP	13
	Maize	RBP	489
Grand Total			602

12. Performance of instructional farm: Kharif 2024-25

Crop	Variety	Area (ha.) / No.	Production (qt.)
Sesame	Krishna	3.0	4.56
Planting material (Mango)	Maldah, Bambay	2500	-

Proposed Action Plan
(June 2024 to September 2024)

1. Training programme to be organized

(a) Farmers and farmwomen

Discipline	No. of Courses	Duration (Days)	No of participants			
			SC	ST	Other	Total
Agronomy (Crop Production)	8	8	48	48	144	240
Horticulture	8	8	48	48	144	240
Soil Science	8	8	48	48	144	240
Agricultural Engineering	8	8	48	48	144	240
Others (GKMS)	8	8	48	48	144	240
Grand Total	**40**	**40**	**240**	**240**	**720**	**1200**

(b) Rural Youth

Discipline	No. of Courses	Duration (Days)	No of participants			
			SC	ST	Other	Total
Agronomy (Crop Production)	4	8	24	24	72	120
Horticulture	4	8	24	24	72	120
Soil Science	4	8	24	24	72	120
Agricultural Engineering	4	8	24	24	72	120
Grand Total	**16**	**32**	**96**	**96**	**288**	**480**

(c) Extension functionaries

Discipline	No. of Courses	Duration (Days)	No of participants			
			SC	ST	Other	Total
Agronomy (Crop Production)	4	8	24	24	72	120
Horticulture	4	8	24	24	72	120
Soil Science	4	8	24	24	72	120
Agricultural Engineering	4	8	24	24	72	120
Grand Total	**16**	**32**	**96**	**96**	**288**	**480**

2. On Farm Trial

Sl No.	Thematic area	Topic	Technology Options
1.	ICM	Assessment of effect of Azolla & BGA application on rice yield and soil health	**TO I (Farmers' Practice):-** Application of (120:50:20 kg/ha N:P:K) **TO II:-** RDF with 75% N(90:60:40 kg/ha N:P:K) + BGA @ 10 kg/ha **TO III:-** RDF with 75% N(90:60:40 kg/ha N:P:K) + Azolla @ 10 t/ha
2	INM	Improvement of Nitrogen use efficiency in paddy through Nano urea	**Farmers' Practice:-** RDF (120:60:40 kg $N:P_2O_5:K_2O$/ha) **Technical Option I:-** 50 % RDN and 100 % P & K + Nano urea @ 4 ml per lit. water (Single Spray at 35 DAS) **Technical Option II:-** 50 % RDN and 100 % P & K + Nano urea @ 4 ml per lit. water (Two Spray at 35 and 60-65 DAS)
3	Vegetable cultivation	Assessment of microbial consortia against wilting in solanaceous crops (Brinjal).	**Farmers' Practice:-** Chemical pesticides **Technical Option I:-** IIHR consortia (Arka microbial consortia) **Technical Option II:-** NRC Litchi consortia
4	Application of small tools/ implements	Assessment of performance of different DSR implements in cultivation of Kharif paddy cultivation	**FP:** Transplanting of paddy seedlings **TO I:** Application of DSR Technology with a paddy drum seeder in wet field condition **TO II:** Application of DSR Technology with a paddy – wheat seeder in dry field condition
5	Varietal evaluation	Assessment of yield performance of improved aromatic rice varieties	**Farmers practice**:- BB11 **TO I:** Sabour Sampann **TO II:** Swarna Sub -1
	Integrated Nutrient Management	Organic cultivation package in Cauliflower	**Farmers Practices**: -Application of 5 MT FYM/ha + 32kg N + 23 kg P_2o5 + 15kg K_2o/ha through inorganic source **TO I**: Application of 5 MT FYM/ha +25% of RDF (NPK) through organic sources. **TO II:**Seed and seedling treatment with Beejaamrit + 2 spray of Jeevaamrit at 25 days interval + application of Ghanjeevaamrit @ 1q/ha as basal application and 30 DAS

3. (A) Frontline demonstration

Sl. No	Season	Crop	Variety	Technology	Area in ha.	No. of Demo.
1.	Kharif	Jute	JBO 2003 H	Seed + Seed Treatment	10.0	25
2.	Kharif	Paddy	Sabour Deep	Seed + Seed Treatment	5.0	25
3.	Kharif	Paddy	Sabour Surbhit	Seed + Seed Treatment	5.0	25

4.	Kharif	Paady	-	BGA	10.0	25
5.	Kharif	Vegetable	-	Seed + Seed Treatment	1.0	25
6.	Kharif	Paddy	-	Paddy direct sowing using manual rice-wheat seeder	2.0	10
7.	Kharif	Paddy	Bio fortified Paddy (Var-DRR Dhan-67)	Seed + Seed Treatment	2.0	25
8.	Kharif	Paddy	Azolla	Bio fertilizer (Azolla)	2.0	30
9.	Kharif	Paddy		Zinc application in soil	5.0	12
Total						

(B) Cluster Frontline Demonstration

Season	Crop	Variety/ Technology	Area (ha)	No. of Farmers
Kharif	Sesame	Krishna	40	100

4. Performance of instructional farm: Kharif 2024-25

Crop	Variety	Area (ha.) / No.	Production (qt.)
Sesame	Sabour Til-1	1.0	-
Sesame	Krishna / GT 5, 6	2.0	-
Groundnut	K 12-18	0.4	-

5. Other extension activities:

Nature of Extension Activity	No. of activities	Farmer's attend	Extension Officials attend	Total
Field Day	5	300	50	350
Exposure visits	10	750	80	830
TV Talk	5	-	-	Mass
Radio Talk	10	-	-	Mass
Farmers visit to KVK	500	500	0	500
Scientist Visits to farmers field	1000	1000	0	1000
Soil & Plant analysis	150	150	0	150
News paper coverage	20	-	-	Mass
SAC	1	-	-	-

KRISHI VIGYAN KENDRA, ROHTAS

Report of 26th Extension Education Council Meeting (From October 2023 to May 2024)

1 a) Training Programmes Conducted:

S.No.	Training Programme	Total No. of Courses	No. of Participants
1	Participating Farmers (PF)	89	3105
2	Rural Youth (RY)	9	226
3	Extension Functionaries (EF)	4	111
	Total	**102**	**3442**

1 b) Skill Development Training programme:

S. No.	Name of course	Duration	No. of Trainees enrolled	Status	Remarks
1.	Gardener V-3.0	16th Oct to 04th Nov. 2023	30	Completed	
2.	Vermicompost Producer V-3.0	28th Feb to 13th March, 2024	30	Assessment pending	Scheduled on 13th June
3.	Vermicompost Producer V-3.0	29th March to 16th April, 2024	30	Assessment pending	Scheduled on 19th June

02) Flagship / Special Programmes/ Projects:

S.No.	Name of Programme	No. of training/ Activities
1	Natural Farming Training	6
2	Natural Farming Awareness	20
3	NARI	7
4	Malnutrition Eradication	5
5	SCSP	14
6	Climate Resilient Agriculture (CRA)	14

03) Frontline demonstration conducted

Crop	Name of the technology demonstrated	No. of Farmer	Area (ha)
Papaya(Red Lady)	Plant	15	1.0
Wheat (Bio fortified)	BHU 31	5	2
	BHU 25	5	2
Paddy	Sabour Heera (Azolla +BGA)	10	4
Lentil/Bio-fertilizers	IPL 220/ Rhizo + PSB	10	04
Ragi	VLR 326	20	8
Sawa	DHBM-93-3	10	4
Worms	Eisenia fetida	30	30
Liquid fertilizer (Wheat)	Nano urea, Nano DAP	10	4
Cauliflower (Sabour Agrim)	Seed	20	1.0
Brinjal (Sabour Sadabahar)	Seed	10	1.0

Poultry	Chicks (Sonali)	40	-
Fish	Jayanti Rohu	04	1.0
Fish	Improved Catla	02	0.5

04) Result of Frontline demonstration

Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	Area (ha)	Yield (q/ha)		% Change in yield	B.C ratio
					Demonstration	Check		
Papaya (Red Lady)	Production management	Plant	15	1.0	2100	1600	31.25	6.15
Wheat (Bio fortified)	Crop Production	BHU 31	5	2	36.25	41.2	-12.01	2.34
		BHU 25	5	2	34.22	41.2	-16.94	2.25
Paddy	INM	Sabour Heera (Azolla +BGA)	10	4	66.58	65.52	1.62	2.85
Lentil/Bio-fertilizers	INM	IPL 220/ Rhizo + PSB	10	04	11.85	10.25	15.61	2.6
Ragi	Crop Production	VLR 326	20	8	16.28	--	--	2.05
Sawa	Crop Production	DHBM-93-3	10	4	13.36	--	--	2.02
Worms	Vermicomposting	Eisenia fetida	30	30	16	--	--	
Liquid fertilizer (Wheat)	INM (HD 2967)	Nano urea, Nano DAP	10	4	36.45	31.22	16.75	2.45
Cauliflower (Sabour Agrim)	Production management	Seed	20	1.0	216	176	22.73	3.18
Brinjal (Sabour Sadabahar)	Production management	Seed	10	1.0	205	148	38.51	3.76
Poultry	Livestock (90 days)	Chicks (Sonali)	40	-	1.3 kg	0.9 kg	44.44	5.0
Fish	Improved species	Jayanti Rohu	04	1.0	0.97 kg	0.85 Kg	14.12	3.16
Fish	Improved species	Improved Catla	02	0.5	1.11 Kg	0.95 kg	16.84	3.29

05) Demonstration under SCSP Programme

S. No.	Enterprise	Variety	Area (No./ha)	Farmers/Women
1	Backyard Poultry	Vanraja and Sonali	1800 No	80
2	Chick pea	GNG-2299	8.75 ha	35
3	Wheat (Biofortified Seed)	BHU-31	5.0 ha	20
4	Mushroom spawn	Button	80 kg	40
5	Mushroom spawn	Oyster	30 kg	15
6	Vermi Compost production	Worms (E. foetida)	30 kg	30
7	Tailoring (Stitching Machine)	-	12 Nos.	12 SHGs
8	Goat	Black Bengal	16 Nos.	8
9	Bajra	MPMH-21	50 Kg.	30

06) CFLD on Pulses (Summer 2023)

Sl. No	Crop demonstrated	No. of farmers	Area in ha	Existing yield (q/ha)	Name of Variety + Technology demonstrated	Yield obtained (q/ha)		
						Max	Min	Av.
1	Green gram	20	20	6.8	Shikha herbicide + Soil testing + Biofertilizer	9.0	7.4	8.2

07) Physical Target and Achievement of CRA (Rabi 2023-24)

Crop	***Technology***	***Target***	***Achievement***		
			Demonstration (acre)	***% Achievement***	***No. of Beneficiaries***
Wheat	Zero Tillage Technology	330	330	100	355
	Happy seeder wheat	65	65	100	72
	NE/Green seeker based NM	30	30	100	35
Maize	Raised Bed Planting	5	5	100	11
Chickpea	Zero Tillage Technology/Raised bed planting /Line sowing	90	90	100	102
Lentil	Zero Tillage Technology	30	30	100	32
Mustard	Raised Bed/ZT Planting	50	50	100	55
Potato	Raised Bed Planting	3	3	100	8
Wheat Community Irrigation		20	20	100	25
Total		**623**	**623**	**100**	**695**

08) ON FARM TRIALS

OFT's Completed

S.N.	OFT	Treatment	Result/ Parameter
1	**Assessment of microbial consortia against wilting in solanaceous crops (Tomato).**	**F.P**- Chemical Pesticides **TO1**- IIHR consortia (Arka microbial consortia) **TO2**- NRC Litchi consortia	T.O.2- IIHR Consortia had better performance than other two options in terms of wilting after 75 days (12.4%) yield (340 q/ha) & BC ratio (3.31) however performance of NRC consortia was at par (14.3 %, 327 q/ha & 3.19). **FP** (28.61 %, 282 q/ha & 2.87)
2	**Assessment of fruit bagging in guava for quality improvement.**	**F.P**- No bagging **T.O.1**- Perforated polythene bag cover **T.O.2**- Paper bagging	It is observed that T.O.1 Perforated polythene bag cover is better option for bagging of fruit for quality improvement.
3	**Improvement of Nitrogen use efficiency in wheat.**	**F.P**: RDF (100:40:20) Kg/ha **TO1**: 50% of RDN & 100% PK + nano urea @4ml/lt. water (Single spray at 35	Application of 50 % RDN & 100 % PK with 2 Spray of Nano urea at 35 DAS and 60-65 DAS @ 4 ml/ L

		DAS). **TO2**: 50% of RDN & 100% PK + 2 sprays of Nano Urea at (35 DAS) and (60-65DAS) @ 4 ml/lt water.	in wheat (HD 2967) performed best in terms of yield (42.52 q/ha) andB C ratio (1.91) in comparison to farmer practices (36.25q/ha & 2.47)
4	**Integrated nutrient management in lentil along with liquid bio-fertilizer.**	**F.P.** – Farmers Practice (0:30:0 :: N.P.K. with no uses of liquid bio-fertilizers) **T.O.1**– RDF [20:50:0] (80% of N) + 1.0 l/ha liquid Rhizobium **T.O.2**– RDF [20:50:0] (80% of N + 80% of P) + 1.0 l/ha liquid Rhizobium **+** 1.0 l/ha liquid PSB)	TO_2: Seed treatment with PSB & Rhizobium and application of 50% RDF + WS 18:18:18 @5 gm/litre water (Single spray at pre flowering) is better in terms of yield (12.71 q/ha) and BC ratio (2.43) as compared to TO1 (11.35 q/ha, 2.20) and FP (10.05 q/ha, 1.89) in lentil (IPL 220).
5.	**Improvement of Nitrogen use efficiency in rice.**	**Farmer Practice**: RDF (100:40:20) Kg/ha **Technological Option 1**:50% of RDN & 100% PK + nano urea @4ml/lt. water (Single spray at pre flowering stage). **Technological Option 2**: 50% of RDN & 100% PK + 2 sprays of Nano Urea at (25 to 30 days) and (60-65 days) @ 4 ml/lt water.	TO_2 exhibited the highest grain yield (54.01 qt/ha), followed by TO1 (50.20 qt/ha), as compared to Farmer Practices (FP) with a yield of 49.76 qt/ha. Regarding straw yield. The maximum cost of cultivation was observed with FP, followed by TO_2 and TO_1. Both gross return and net return were highest for TO_2, followed by TO_1 and FP.
6.	**Assessment of different feeding strategies of reduced daily ration in Pangassius fish farming.**	**T.O-1 (F.P):-** Daily feeding @ 5% body weight **T.O-2:-** Alternate feeding schedule (5H/ 1L, 5 days high ration @ 5% body weight followed by 1 day low ration @ 2.5% body weight with 30% protein). **T.O-3:-** Alternate feeding schedule (6H/1L, 6 days high ration @ 5% body weight followed by 1 day low ration @ 2.5% body weight with 30% protein).	In spite of reducing the feed quantity periodically, there was no significant effect on gained body weight resulting into net saving. Both feeding schedule (reduction at7^{th} day as TO2 & 6^{th} day as TO3) in Pangassius fish farming outperform the FP in terms of B:C (TO2:1.53 & TO3:1.54 as compared to FP:1.44). The reduced feeding schedule gave substantial net return of Rs. 4.06 lakh (TO3) & 4.01 lakh (TO2) per acre as compared to Rs. 3.56 lakh

			in FP.
7.	**Assessment of growth and survivality of Pangassius fish species through feed probiotic addition in formulated feed.**	**F.P**. : Formulated fish feeding daily @ 2-3 % body weight of stocked fish without any feed probiotic **TO1**: Formulated fish feeding @ 2-3 % body weight of stocked fish + 0.2 % probiotic inclusion **TO2**: Formulated fish feeding @ 2-3 % body weight of stocked fish + 0.5 % probiotic inclusion.	The inclusion of probiotic in feed @ 0.5% (TO2) shows best BC ratio (1.79). The fish yield is found to be 116.7 qt/acre in TO2, 99.24 qt/acre in TO1 and 76.67 qt/acre in the farmers practice. Probiotic inclusion @ 0.5% is best for fish feeding in Pangas culture.
8.	**Assessment of yield and economics of Pangassius-carp poly culture fish farming system.**	**TO1 (F.P):-**Pangassius fish monoculture (@ 75000/acre stocking density (SD)). **T.O-2:-** Pangas (SD @ 73000/ha) + Rohu (SD @ 300/ha) + Catla (SD @ 400/ha) **T.O-3:-**Pangas (SD @ 70000/ha) + Rohu (SD @ 300/ha) + Catla (SD @ 400/ha) + Amur carp (SD @ 250/ha)	The fish seed has been provided to beneficiaries. Stocking of fish seed has been done during March 2024. The final yield will come after six months.

09) RAWE Programme:

Batch	No. of students of VKSCoA, Dumraon	No. of days stayed
11th Batch (07 Aug – 06 Nov 2023)	07 (boys)	90 days (03 months)
12th Batch (08 Jan – 04 April, 2024)	07 (girls)	90 days (03 months)
13th Batch (06th May- till date)	10 (girls)	90 days (03 months)

10) KVK-Farm Activities:

a) Seed Production during Rabi- 2023-24

SN	Crop	Variety	Area(ha)	Class of Seed required (B/S, F/S, C/S, TFL)	Production (qt)
1	Wheat	HD-2967	2.50	C/S	74
2	Wheat	DBW-187	2.0	F/S	42.50
3	Linseed	Sabour Tisi-2	0.5	C/S	1.75
4	Chickpea	GNG-2299	1.5	C/S-2	14.0
5	Potato	K. Sinduri	0.15	C/S	30.0
6	Pigeon pea	NDA-2	0.125	T/L	1.27

7	Chickpea (NF)	GNG-2299	0.187	T/L	3.32
8	Lentil	IPL-220	0.125	T/L	2.20
9	Mustard	Pusa-B-27	0.125	T/L	0.90
10	Chick pea	Sabour Chana-1	0.125	T/L	1.75

b) Seed Production during Zaid 2023-24

S.N.	**Crop**	**Variety**	**Area (ha)**	**Class of Seed to be produced**	**Production (q)**
				(B/S, F/S, C/S, TFL)	
1	Moong	Virat & MH-1122	1	T/L	2.5 (expected)
2	Dhaincha	Dhaincha	6	Nil	Green manuring

11) Plantation Drive/ Planting materials

Plants sold to farmers

S.No.	**Plants**	**Variety**	**No. of plants**	**Amount Rs.**
1.	Mango	Amrapali	150	12000
		Mallika	150	12000
2.	Papaya	Red lady	2500	50000
3.	Vegetable seedlings	Different veg. varieties	40000	4000

12) Revolving fund generated (year-wise)

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand (Kind + cash)
2023-24	1,02,10,779	57,25,183	43,32,654	**1,16,03,317**
(Rs. One Crore Sixteen lakhs Three thousand Three hundred Seventeen only)				

13) Other Extension activities conducted

Activities & Sub- activities	**Achievement**	**No. of Beneficiaries**
Field day	9	332
Kisan Mela	2	351
Scientist Visit to farmer's field	15	202
Soil Health Campaign	01	70
Animal Health Campaign	01	65
Farmer's Visit to KVK	648	648
Newspaper coverage	22	Mass
Radio/TV Talk	2	Mass
Extension Literature Published	5	1430
Advisory Services / Helpline service	1215	1215
SMS portal message	02	20412
Publication of Krishak Samachar	02	2000
Kisan Chuapal	4	73
Kharif Abhiyaan	16	1730

14) Celebration of important days:

Celebration of Important Days	No. of activities	Farmers			Extension Officials			Total		
		M	F	Total	M	F	Total	M	F	Total
Gandhi Jayanti (2nd Oct.)	1	5	2	7	11	2	13	16	4	**20**
Fisheries day (21 Nov)	1	41	5	46	7	1	8	48	6	**54**
National Constitution Day (26 Nov.)	1	17	3	20	11	2	13	28	5	**33**
World Soil Day (5th Dec.)	1	50	12	62	9	1	10	59	13	**72**
Kisan Diwas (23rd Dec.)	1	116	19	135	3	1	4	119	20	**139**
Swachhta hi Seva	5	102	14	116	45	3	48	147	17	**164**
Swachh Bharat Abhiyan	7	179	36	215	51	9	60	230	45	**275**
Jal Jeevan Hariyali Diwas	1	30	15	45	9	3	12	39	18	**57**
World Environment Day	1	38	9	47	11	2	13	49	11	**60**

15) Awards & Recognition:

Awards to Scientists:

(i) Dr. Gopalji Trivedi Best Extension Professional Award: Dr. Shobha Rani, Sr.Scientist and Head received the Dr. Gopalji Trivedi Best Extension Professional Award conferred by BAU, Sabour during Kisan Mela 17-19 Feb, 2024.

(ii) Best Performer CFLD Pulse Award: Dr. Ratan Kumar, SMS (Horticulture), KVK Rohtas received the prestigious " **Best Performer CFLD Pulse Award** " for CFLD pulse during Zonal Workshop of KVKs at KVK Ranchi during July,8-10, 2023.

Awards to Farmers:

S.No.	Name of farmer	Address	Details of Award
1.	Sri Arjun Singh,	Village- Masona, Sanjhauli	**Plant Genome Saviour Award,** conferred by Hon'ble President of India
2.	Sri Dilip Kumar Singh	Village- Mohaddiganj, Sasaram	
3.	Sri Dilip Kumar Singh	Village- Mohaddiganj, Sasaram	**Dainik Jagran National farmers award,** by Dainik Jagran
4.	Sri Pradeep Kumar	Village- Mohaddiganj, Sasaram	Best Farmer Award, by Pulse Research Institute, Mokama in 2023
5.	Sri Premchandra Kr. Patel	Village- Dinara, Block-Dinara, Rohtas	Best Farmers Award, BAU, Kisan Mela-2024
6.	Sri Vishal Kumar	Village- Dhangain, Block-Bikramganj	1st Prize Krishi Gyan Pratiyogita
7.	Sri Arjun Singh	Village- Masauna, Block- Sanjhauli	2nd Prize Krishi Gyan Pratiyogita
8.	Sri Sunil Kumar	Village- Mirzapur, Block- Dawath	3rd Prize Krishi Gyan Pratiyogita
9.	Sri Arjun Singh	Village- Masauna, Block- Sanjhauli	Horticulture Show-Potato

16) Working with Cereal Systems Initiative for South Asia (CSISA):

Rice–wheat is the major production system of the district. To augment the system productivity, KVK, Rohtas joined hands with CMYYIT through CSISA project to support wide spread adoption of sustainable intensification technologies to spur Agricultural growth, both within the time horizon of the project.

Three trials conducted under CSISA project at KVK Rohtas:

- Demonstrating the performance of DSR under dust mulch
- Rice-Wheat system optimization through crop establishment with DSR
- Reducing seed rate of rice through rice nursery enterprise

17) CRA (Climate Resilient Agriculture) New Field labs 2024-25:

Name of Village	Panchayat	Block	Distance from KVK (km.)
Sikaria	Sikaria	Sasaram	51
Shivpur	Sikaria	Sasaram	50
Dhaudarh	Dhaudarh	Sasaram	55
Tendua	Darigawan	Sasaram	65
Rangpur	Karserua	Sasaram	60

18) Mentha Innovative Project: KVK Rohtas is running a project entitled "Popularization the improved cultivars of Menthol Mint (Mentha arvensis) among farmers' of Zone-IIB (Bihar) for higher production and livelihood security" approved by ATARI, Zone-IV, Patna under which four varieties of mentha namely Golden, CIM-Kranti, CIM-Unnati and Kosi have been taken for comparative assessment

Proposed Action Plan
(June 2024 to September 2024)

01) Training Programme

Training Programme	Total No. of Courses	No. of Participants
Participating Farmers (PF)	35	700
Rural Youth (RY)	12	360
Extension Functionaries (EF)	10	300
Total	**57**	**1360**

02) On Farm Trials (2024-25)

S. N.	Title of OFT	Treatment
1	**Assessment of Mulching and Staking on tomato rotting and weed infestation.**	**T1 (FP):** Use of Insecticide (cypermethalin , Imidachloprid 17.8%) **T2 :** Mulching **T3 :** Stacking **T4 :** Stacking with mulching
2	**Assessment of management practice of mango orchard using different combination of chemical through foliar spray.**	**T1 (FP) :** Application of FYM @ 40 kg /tree **T2:** FYM or compost @ 50 kg / tree, Fertilizer dose of 1:1:1.5 kg NPK / tree. Urea spray @ 1% solution **T3:** Spraying of WSF (19:19:19) @ 1% (2 times: July-august & Sept-oct.) + spraying of 'K' rich WSF (13:0:45) @ 1% (2 times: Jan-feb. & March. –April.) + IIHR Mango special @ 0.5% (3 times/yr: July-AUG, Dec-Jan. & Feb – Mar.)
3	**Assessment of efficiency of cropping system by introducing horticultural crops in Zaid.**	**T1 (FP) :** Fallow **T2 :** Marigold **T3 :** Cowpea **T4 :** Inter cropping with cow pea and marigold
4	**Assessment the Impact of weedy rice on soil status & profitability of rice**	T1 (FP) : Manual Removal of weedy rice T2 : 20 days before transplanting Pre germination application of herbicide (Pretilachlore 1.5 kg/ha) T3 : Pre Transplanting (20 DBT) herbicide Glyphosate 1-1.5 kg/ha + oxyfluorefen 0.8 kg/ha at 25 DAT
5	**Assessment the Resource Conservation Technology on soil properties and profitability of Chickpea**	T1 (FP) : Tillage & Broadcasting T2 : RDF + Zero tillage T3 : RDF + Zero tillage (Mulching)
6	**Assessment of effect of different plant spacing on Rajendra Sweta Variety of Paddy**	**T1 (FP)-** 20cm x20 cm T2 : 30cm x30cm T3 : 40cm x40cm
7	**Assessment of effect of herbicide on chickpea.**	**T1(FP)** : No weeding T2 : Topramezone a.i. 20.16 g/ha (PoE) at 20 DAS T3 : Tank mix Topramezone+Quizalofop 20.16+50 a.i. g/ha (PoE) at 20 DAS
8	**Assessment of yield and economics of Pangassius-carp**	**TO1 (F.P):-**Pangassius fish monoculture (@ 75000/acre stocking density (SD).

	poly culture fish farming system.	**T.O-2:-** Pangas (SD @ 73000/ha)+Rohu (SD @ 300/ha)+Catla (SD @ 400/ha) **T.O-3:-**Pangas (SD @ 70000/ha)+Rohu (SD @ 300/ha)+Catla (SD @ 400/ha)+Amur carp (SD @ 250/ha)
9	**Assessment of different medicines combination for prevention of winter mortality in panagssius farming.**	**TO1 (F.P):-**Use of salt @ 30 kg/acre/week along with daily water exchange. **T.O-2:-**Use of water sanitizer @ 1 litre/acre/weekalong with daily water exchange. **T.O-3:-**Use of water sanitizer @ 1 litre/acre/week+ $CuSo_4$400gm/acre/week along with daily water exchange
10	**Comparative assessment of different methods of wheat sowing**	**T1 (FP):** Broadcasting **T2**: Sowing with zero-till drill **T3**: Sowing with happy seeder
11	**Comparative assessment of different methods of rice sowing**	**T1 (FP)**: Transplanting of rice seedling in Puddled field T2: Sowing with DSR T3: Sowing with Drum Seeder T4: Sowing in un-puddled condition of field

03) Frontline demonstration (2024-25)

Sl. No.	Crop & variety / Enterprises	Technology package for demonstration	Proposed Area (ha)/ Unit (No.)	No. of Beneficiaries
1	Paddy	Biofortified variety	5	15
2	Wheat	Biofortified variety	5	20
3	Brinjal	Sabour Sadabahar	4.0	10
4	Papaya (Red lady)	Plant	1.0	20
5	Garlic	Sabour Garlic-1, Sabour Garlic-2	1.0	20
6	Tomato (Kashi Vishesh)	Seed	0.5	20
7	Improved Fish varieties	Improved Catla, Jayanti Rohu	2.0	10
8	Improved Fish varieties	Amur Carp	0.5	5
9	Poultry Chicks	Banraja, Sonali etc	40	50
10	Paddy	Seed, Nano Urea	4.0	10
11	Paddy	Seed, BGA, Azolla	4.0	10
12	Ragi	Seed	0.5	10
13	Wheat	Bio-fortified Seed	4.0	10
14	Mustard	Seed, Bio-fertilizers (Azo + PSB)	4.0	10
15	Lentil	Bio-fertilizers (Rhizo + PSB) +18:18:18	4.0	10
16	Wheat	KNO_3 application through Drone	25	25
17	Paddy	Mechanical Transplanting	3	5

04) Proposed Seed Production Programme Kharif 2024

S.N.	Crop	Varieties	Class of seed	Area (ha)	Land Topography	Target Production (q)
1.	**Paddy**	S. Sampann	F/S	1	Low Land	40.00
2		Rajendra Mahsuri-1	F/S	1	Medium land	40.00

3		R. Sweta	F/S	4	Medium land	100.00
4		BPT 5204	C/S	0.5	Medium land	30.00
5		MTU 7029	C/S	0.5	Medium land	40.00
Total				**7.0**		**260.00**

05) Proposed crops & technologies under CRA Programme 2024-25 :

Crop	**Variety**	**Technology /Intervention**	**Village**					**Total Area Achieved (Acre)**
			Sikaria	**Shivpur**	**Dhaudarh**	**Tendua**	**Rangpur**	
Paddy	S. Heera	DSR/ AWD	18	18	18	10	12	76
	BPT 5204	DSR/LS	15	15	15	14	10	69
	C.G. Devbhog	WH & FB/LS	5	5	5	5	5	25
Arhar	NDA 2	RB/LS	37	35	37	26	20	155
Maize	VNR 4226	RB/LS	30	25	50	20	20	145
Millet	Ragi	LS/ Transplanting	10	6	7	4	3	30
Soyabean	P 1241	RB/LS	5	2	5	1.5	1.5	15
Urd		LS	15	10	5	5	5	40
Til		LS	8	8	1	2	1	20
Community Irrigation			4	4	4	4	4	20
	Total		**147**	**128**	**147**	**91.5**	**81.5**	**595**

06) Extension Activities

Activities	**No.**	**No. of beneficiaries**
Field days	18	450
Kisan Gosthi	8	450
Exposure visit	18	1000
Farmers meeting	4	160
Scientists visit to farmers field	36	650
Farmer visit to KVK	650	650
Radio talk	6	Mass coverage
T.V. talk	04	Mass coverage
Help line / Whatsapp	1000	1000
News paper coverage	40	Mass coverage
Kharif Maha-Abhiyaan	01	2250
Soil Health campaign	04	220
Animal Health campaign	02	100
Live telecast/Video Conferencing	10	750
Networking Collaboration (Line deptt. Jeevika, ATMA, CSISA, NGOs etc.)		
Outreach Programme (Messaging, Mobile phone, website, email etc.)		

KRISHI VIGYAN KENDRA, SAHARSA

Report of 26th Extension Education Council Meeting
(From October 2023 to May 2024)

1. Achievement of Training programme:

A. Training programme for practicing farmers/farmwomen:

Sl. No	Subject	No. of training	Number of Participants					
			Other		SC		Total	
			M	F	M	F	M	F
(i)	Agronomy	04	**63**	**06**	**46**	**39**	**109**	**45**
(ii)	Entomology	05	97	07	72	19	169	26
(iii)	Horticulture	13	198	43	116	33	314	76
(iv)	Home Sc.	15	105	69	31	210	136	279
(v)	Agril. Engg.	08	55	52	31	86	86	138
	Total	**45**	**518**	**177**	**296**	**387**	**814**	**564**

B) Rural Youth:

Sl. No	Subject	No. of training	Number of Participants					
			Other		SC		Total	
			M	F	M	F	M	F
(i)	Horticulture	03	81	14	31	9	112	23
(ii)	Home Sc.	05	26	30	09	67	35	97
(iii)	Agril. Engg.	02	0	0	0	59	0	59
	Total	**10**	**107**	**44**	**40**	**135**	**147**	**179**

C) Extension functionaries:

Sl. No	Subject	No. of training	Number of Participants					
			Other		SC		Total	
			M	F	M	F	M	F
(i)	Home Sc.	01	15	1	0	0	15	1
(ii)	Agril. Engg.	02	129	07	26	07	155	14
	Total	**03**	**144**	**08**	**26**	**07**	**170**	**15**
	Total(A+B+C)	**58**	**769**	**229**	**362**	**529**	**1131**	**758**

3. Participation in Sponsored Training Programmes:

Sponsoring Agency	Number of training conducted	Number of Beneficiaries
ATMA, Saharsa	1	134
BREDA	1	51
Assitt. Director Horticulture	1	214
MBAC	1	35
DAO	2	300
NFL	1	62
Total	7	796

4. Front line demonstration:

Crop	Tech. demonstrated	Variety	Area (ha.)	No. of farmers	Check yield (q/ha)	Demo yield (q/ha)	% increase	Gross Cost	Gross Return	Net Return	B:C ratio
Paddy	DSR wet field condition	Sabour Harshit	03	06	25.2	29.8	18.25	312.15 (Output/man an hour) DSR		67.9 (Output/man hour) Transplanting	
Wheat	Bio fortified	BHU 31	12	50	24.0	33.4	38.3	37500	85763	48263	2.29
Lentil	Bio fortified	IPL 220	04	30	12.6	9.8	28.6	31250	80540	49290	2.58
Mushroom	Technique of Mushroom Cultivation	Oyster	-	25	-	2.0 kg/bag	-	50/ bag	200/ bag	150	3.0
Mushroom	Technique of Mushroom Cultivation	Button	-	15		1.5 kg./bag	-	194 /bag	358 /bag	164	0.84
Makhana	Scientific cultivation of Makhana Cultivation	Sabour Makhana 1	2.0	05	17	25	47.05	88000	180000	92000	1.05
Nutritional Garden	House hold Food security	Seasonal Veg. seeds	0.1	30	1 kg /day	2 kg / day	100	500	1800/ month	1300	3.6

Cluster Front Line Demonstration:

Crop	Technology demonstrated	Variety	Area (ha.)	No. of farmers	Check yield (q/ha)	Demo yield (q/ha)	% increase	Gross Cost	Gross Return	Net Return	B:C ratio
Linseed	IPM, IDM & Nutrient Management	Sabour Tisi 1	10	25	6.9	10.8	56.52	21630	65230	43600	3.01
Rapeseed Mustard	IPM, IDM & Nutrient Management	RH 725	40	100	9.2	12.3	33.7	21725	65520	43795	3.02
Lentil	INM	IPL 316	20	50	8.9	11.3	26.96	18930	62195	43265	3.28
Green gram	Varietal Replacement , IPM, IDM	Sikha	20	50					Crop Standing		

5. On Farm Trial:
OFT -1: (Horti.)

1.	Title of On farm Trial	Ex situ residue management of potato
2.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	FP: Sowing in ridge and furrow method TO_1: Sowing of potato seed with FYM and paddy straw 15 cm TO_2: Sowing of potato seed with FYM and water hyacinth
3.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	DRPCAU, Pusa, Bihar
4.	Performance of the Technology with performance indicators	i) Plant height (cm) ii) Fruit yield per plant (kg) iii) Avg. no. of fruit/ plant iv) Avg. Weight of fruit (g) v) Yield/plant (kg) vi) Yield q/ha vii) Cost of cultivation viii) Gross return ix) Net return x) B: C ratio

Table: Effect of ex-situ residue management on yield and economics of potato.

Thematic area	**Technology options with detailed treatments**	**Area (ha)**		**Plant Height (cm)**	**Fruit Yield per Plant (Kg)**	**Avg. no. of Fruit per plant**	**Avg. wt. of fruit per (g)**	**Yield (q/ha.)**
		Proposed	**Actual**					
Residue Management	Sowing in ridge and furrow method	0.4	0.4	43	0.72	6.0	120	309
	Sowing of potato seed with FYM and paddy straw 15 cm	0.3	0.3	45	0.90	7.0	130	338
	Sowing of potato seed with FYM and water hyacinth	0.3	0.3	41	0.75	6.5	116	318

Thematic area	**Technology options with detailed treatments**	**Area (ha)**		**Cost of cultivation (Rs./ha.)**	**Gross Return (Rs./ha.)**	**Net Return (Rs./ha)**	**B:C ratio**
		Proposed	**Actual**				
Residue Management	Sowing in ridge and furrow method	0.4	0.4	147500	309000	161500	2.09
	Sowing of potato seed with FYM and paddy straw 15 cm	0.3	0.3	145000	338000	193000	2.33
	Sowing of potato seed with FYM and water hyacinth	0.3	0.3	146700	318000	171300	2.16

Result: The on farm trial conducted on farmers field during Rabi 2022-23 revealed that Sowing of potato tuber with FYM and paddy straw 15 cm may be the best option for Ex situ residue management of potato as a result of higher tuber yield (309 q/ha) with BC ratio 2.33 in comparison to farmers practice.

OFT 2: (Horticulture)

1.	Title of On farm Trial	Assessment of bio control agent for management of Panama wilt in Banana
2.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**FP: Tissue Culture plant** **TO-I:** ICAR Fusicont **TO-II:** Sabour Trichoderma
3.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	DRPCAU, Pusa, Bihar
4.	Performance of the Technology with performance indicators	i) Initial plant population ii) First wilt incidence iii) Wilting percentage iv) Fruit yield (t/ha) v) T.S.S. (^{O}B) vi) Cost of cultivation (Rs/ha) vii) Gross return (Rs/ha) viii) Net return (Rs./ha) ix) B:C ratio (Rs./ha)

Result: Crop Standing.

OFT: 3 (Agril. Engg.)

1.	Title of On farm Trial	Assessment different weeding tools in paddy crop.
2.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	FP: Manual weeding TO I: Manual inter culturing with a grubber TO II: Inter culturing with a cono weeder.
3.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	BAU, Ranchi, Jharkhand
4.	Performance of the Technology with performance indicators	i. Field Capacity ii. Number of effective tillers per hill iii. No of grains per panicles iv. 100 grain weight (g) v. Yield (q/ha) vi. Cost of cultivation (Rs./ha.) vii. Gross Return (Rs./ha.) viii. Net return (Rs./ha.) B:C ratio

Table: Performance assessment of weeding tools in paddy crop

Thematic area	Technology options with detailed treatments	Area (ha)		Field Capacity (m2/ hr.)	Weeding efficiency (%)	Yield Attributing characters		
		Proposed	Actual			No. of eff. tillers /hill	No. of grains /panicles	100 grain wt. (g)
Application of small tools/ implements	FP	0.4	0.4	44.05	92.36	17	241	2.17
	TO-I	0.3	0.3	49.81	86.24	18	242	2.18
	TO-II	0.3	0.3	68.32	96.21	23	249	2.18
	SE m^{+}-			1.46	1.03	1.21	0.28	NS
	CD 5%			3.84	2.76	3.28	0.71	

Thematic area	Technology options with detailed treatments	Yield	Cost of cultivation	Gross	Net Return	B:C ratio
		(q/ha)	(Rs./ ha.)	Return	(Rs./ ha)	
				(Rs./ ha.)		
Application of small tools/ implements	FP	42.6	48563	92996	44433	1.91
	TO-I	43.1	47225	94087	46862	1.99
	TO-II	48.3	42350	105439	63089	2.49
	SE m^{+}-	1.36				
	CD 5%	3.59				

Result: During the trial for mechanically control of weeeds in paddy field it was observed that the incorporation of uprooted weeds was only possible by application of a cono weeder due to its push pull action. It was found that with the highest field capacity (68.32 m2/ha) for mechanical weeds control and an significant increase in yield by 13.38 percent in comparison to manual weeding, the cono weeder (TO-II) was the most suitable weeding tool for interculturing operation in paddy field. The B:C ratio in the trial was also found the highest (2.49) for the field ehere a cono weeder was applied as inter culturing tool.

6. Other extension activities:

S. No.	Activity	Number	Beneficiaries
1.	Kisan Gosthi	06	273
	Kisan Mela	02	6000
2.	Exhibition	01	279
3.	Scientist visit to farmers field	224	523
4.	Farmers visit to KVK	389	389
5.	Field Day	07	316
6.	Other Extension Activities	06	610

7.	News paper coverage	22	-
8.	Soil Testing	250	250
9.	Workshop /Group Meeting	04	168
10.	Exposure visit	12	614

7. CRA Programme: Rabi 2023-24

Sl. No.	Intervention	Crop	Area Covered (Acre)
1.	ZTT mode of sowing	Wheat	**243**
2.	ZTT Sowing by Happy Seeder	Wheat	70
3.	INM/Green Seeker	Wheat	100
4.	Line Sowing	Pea	20
5.	ZTT mode of sowing	Lentil	65
6.	Raised bed Sowing	Mustard	50
7.	Raised bed Sowing	Potato	5
8.	Raised bed Sowing	Maize	50
		Total	**603**

8. NICRA: Rabi 2023-24

Sl. No.	Intervention	Crop	Variety/Breed	Area Covered (Acre)/ No.	Beneficiaries
1.	Zero tillage method of sowing	Wheat	HI 1563	50	75
2.	Zero tillage method of sowing	Greengram	Sikha	50	80
3.	Backyard Poultry	Poultry	Vanraja	-	56
4.	Area Specific Mineral Mixture for cattle	Cattle	-	80 (No.)	40
5.	Worm Management in cattle	Cattle	Albendazole	100 (No.)	40
6.	Establishment of Mango orchard	Mango	Jardalu	150 (plants)	15
				Total	**291**

9. Performance of instructional farm: Rabi 2023-24

S. No	Crop	Variety	Class	Area (ha.)	Production (q.)
1.	Wheat	DBW 187	FS	2.0	46.0
		HI 1563	FS	2.0	
2.	Pea	IPFD 10-12	FS	1.0	10.0
		IPFD 1603	FS	1.0	08.0
3.	Linseed	S. Tisi 1	FS	2.0	04.0
4.	Rapeseed Mustard	RH 725	TL	1.35	3.4
5.	Lentil	IPL 316	CS	2.0	17.0
		IPL 220	TL	0.1	1.5
6.	Potato	Badi Aloo	TL	0.05	09.0
		K. Pukhraj	TL	0.05	08.25
		UC MAP	TL	0.05	07.75

Proposed Action Plan
(June 2024 to September 2024)

1. A. Practicing farmers/farmwomen (PF)

Sl. No	Subject	No. of training	Number of Participants					
			SC		**Other**		**Total**	
			M	F	M	F	M	F
(i)	Agronomy	04	50	25	25	0	75	25
(ii)	Entomology	05	50	25	75	0	125	25
(iii)	Horticulture	07	70	35	105	0	175	35
(iv)	Home Sc.	08	0	104	0	96	0	200
(v)	Agril. Engg.	06	30	0	150	0	180	0
	Total	**30**	**200**	**189**	**355**	**96**	**555**	**285**

B. Rural Youth (RY)

Sl. No	Subject	No. of training	Number of Participants					
			SC		**Other**		**Total**	
			M	F	M	F	M	F
(i)	Agronomy	03	15	06	60	09	75	15
(ii)	Entomology	03	15	06	60	09	75	15
(iii)	Horticulture	04	20	08	80	12	100	20
(iv)	Home Sc.	03	0	45	0	30	0	75
(v)	Agril. Engg.	02	10	0	50	0	60	0
	Total	**15**	**60**	**65**	**250**	**60**	**310**	**125**

C. Extension Functionaries (EF)

Sl. No	Subject	No. of training	Number of Participants					
			SC		**Other**		**Total**	
			M	F	M	F	M	F
(i)	Agronomy	02	10	04	40	06	50	10
(ii)	Entomology	02	10	04	40	06	50	10
(iii)	Horticulture	03	15	06	60	09	75	15
(iv)	Home Sc.	03	0	36	0	39	0	75
(v)	Agril. Engg.	01	05	0	25	0	30	0
	Total	**11**	**40**	**50**	**165**	**60**	**205**	**110**
	Grand Total(A+B+C)	**56**	**300**	**304**	**770**	**216**	**1070**	**520**

2. On Farm Trials:

Sl.No.	**Thematic area**	**Topic**	**Technology Options**
1.	Weed Management	Assessment of weed management practices in DSR	TOI: DSR under dry Soil TOII: DSR (Pre-sowing irrigation followed by tillage followed by rice seeding) followed by first post sowing irrigation at 15 DAS TOIII: DSR+ Sesbania (Sesbania broadcasted on the same day, DSR is established and sesbania killed by application of 2,4 D @ 500g a.i /ha at 25-30 DAS
2.	Application of small tools/ implements	Assessment different weeding tools in paddy crop.	FP: Manual weeding TO I: Manual inter culturing with a grubber TO II: Inter culturing with a cono weeder.

3. FRONT LINE DEMONSTRATION

Season	Crop/ Enterprise	Component / Variety	No. /Area (ha)	No. of demo
Kharif	Makhana	Sabour Makhana 1	02	05
	Paddy	Sabour Sampann	05	12
	Paddy	DSR (Wet field condition)	02	10
	Brinjal	HYV	02	08
	Nutri Garden	Seasonal Vegetable	20 unit	08

4. Other Extension Activities:

Activities	No.	Participants
Kisan Gosthi /Kisan Mela	03	400
Field days	05	250
Diagnostic Survey	40	-
Scientist visit to farmers field	150	-
Farmers visit to KVK	125	-
Important Day Celebration	03	150
SAC Meeting	01	-
News Paper Coverage	10	-

5. Soil Testing:

No. of Soil sample Analysis	**250**

6 . NICRA: Kharif 2024

Sl. No.	Intervention	Crop Variety	Area Covered (Acre)	Beneficiaries
1.	DSR paddy	Sabour Sampann	100	100
2.	Backyard Poultry	Banraja	2600 (poultry birds)	26
3.	Area Specific Mineral Mixture	Cattle	80	40
			Total	**166**

7. CRA Programme Kharif 2024:

Sl. No.	Intervention	Crop	Area Covered (Acre)
1.	DSR	Paddy	300
2.	AWD	Paddy	75
3.	WH & FB	Paddy	75
4.	INM & Green Seeker	Paddy	75
5.	Line Sowing Finger Millet	Finger Millet	50
		Total	575

8. Seed Production:

Name of the Crop	Variety / Type	Area (ha.)
Paddy	R. Sweeta	8.0
Paddy	R. Mahsoori -1	4.0
Paddy	S. Hira	1.0

KRISHI VIGYAN KENDRA, SHEIKHPURA

Report of 26th Extension Education Council Meeting
(From October 2023 to May 2024)

Achievement of Training Programme

Discipline	PF					RY					EF				
	No of course	Others		SC/ST		No of course	Others		SC/ST		No of course	Others		SC/ST	
		M	F	M	F		M	F	M	F		M	F	M	F
Ag. Engg.	10	236	25	30	10	2	38	8	5	2	1	45	8	15	2
Horticulture	20	521	125	161	108	3	45	1	19	0	4	114	54	10	5
Vet. Science	14	179	18	138	46	4	43	19	30	26	2	0	52	0	5
Entomology	9	220	142	102	108	0	0	0	0	0	2	27	24	2	0
Agronomy	4	86	31	56	79	0	0	0	0	0	0	0	0	0	0
Soil science	15	591	334	125	182	2	115	11	17	4	0	0	0	0	0
Home Science	22	445	466	257	383	4	10	68	8	37	5	80	139	7	20
Total	**94**	**2278**	**1141**	**869**	**916**	**15**	**251**	**107**	**79**	**69**	**14**	**266**	**277**	**34**	**32**

Other Training Programme

Programme	**No. of Course**	**No. of Participants**				**Grand Total**
		Others		**SC/ST**		
		M	**F**	**M**	**F**	
Sponsored Training (ATMA, DAO, BREDA, DHO, NGO etc.)	39	1890	524	481	245	3140
RPL Training (Vermi Compost Producer)	1	11	4	12	1	28

Achievement of Front Line Demonstration (FLD)

Crop	Thematic area	Season	Technology Demonstrated	Area (Ha)/Nos.		No of Beneficiaries	Yield		% increase in yield
				Target	Achievement		Demo (q/ha)	Check (q/ha)	
Onion	ICM	Rabi	NHRDF Red-3	2	2	24	320	275	16.36
Livestock	Disease Management	Rabi	Deworming of goat	25 No of animal	100 No.	25	17.2	14.8	16.2
Livestock	Disease Management	Rabi	Management of involution of uterus in cow by use of herbal drug + Calcium Supplementation each @100ml/cow/day for 10 days	25 No.	25 No.	25	2660 lit/lactation	2280 lit/lactation	16.6
Mushroom	Income generation	Rabi	Oyster	20	20	20	1.2 kg/kg of straw	-	-
Green Gram	ICM	Summer	Shikha	20	20	54	Crop Standing		

Achievement of Cluster Front Line Demonstration (CFLD)

Crop	Thematic area	Season	Technology Demonstrated	Area (Ha)		No of Beneficiaries	Yield		% increase in yield
				Target	Achievement		Demo (q/ha)	Check (q/ha)	
Lentil	ICM	Rabi	IPL - 316	20	20	56	12.15	10.23	18.76

Achievement of On Farm Trial (OFT)

S. No.	Title of OFT	Problem	Technology Option	Results
1	Improvement of Nitrogen use efficacy in Rice	Excessive use of chemical fertilizer and spiraling price of urea leads to increase in cost of	**Technology option1.**Farmers Practice: RDF(N:P:K.-100:40:20) **Technology option 2:** 50% RDN & 100% PK +Nano urea @ 4 ml/litre of water (Single spray at flowering stage)	The result reveals that technology option 3 had higher yield and profitability above and over on the farmer

		cultivation.	**Technology option 3:** 50% RDN & 100% PK + 2 spray of Nano urea (25-30 DAS and 60-65 DAS) @ 4 ml/litre of water.	practice followed by technology option 2.
2	Crop regulation in guava for winter season	Low production of guava prevails in Sheikhpura district in winter season	**Technology option 1:** Farmers practices: Harvesting rainy season crop. **Technology option 2:** Single Spray of 10% Urea in Bloom stage (in month of May) T**echnology option 3:** Pruning of 50% length of current season shoot in April-May.	Technology option 3 is the best in respect of average fruit yield (g) and yield (kg/plant) while in respect of T.S.S was found highest in farmers practices.
3	Assessment of different weedicides for weed control in Rabi Onion	The onion crop suffers generally during early period of its growth by heavy infestation of weeds which results in low yield.	Technology option 1: Farmers Practice: Hand weeding **Technology option 2:** Application of Pendimethalin @ 3 ml/litre of water as pre emergence follow by Oxyfluorfen @ 1 ml/Litre within 30-32 days T**echnology option 3:** Pendimethalin @ 3ml/liter of water as pre emergence followed Imazathaphyr @ 1.2 ml/l of water as post-emergence at 45 DAT	Technology option performed well in respect of weed control, yield and BC rarion
4	Assessment of different methods for palm sprouts flour making	Lack of knowledge regarding value addition of Palm sprouts	**Technology option 1**: Farmers Practice:- Local people use palmyra palm sprouts by boiling in limited amount. **Technology option 2:** Preparation of Palmyra palm sprouts flour by boiling for 30 minutes and then cutting in small pieces. (1 cm) and drying of palmyra palm sprouts T**echnology option 3:** Preparation of Palmyra palm sprouts flour by boiling for 30 minutes and then grating on grater and drying of palmyra palm sprouts.	sensory quality of TO2 is better than TO1with no significant difference. The Palmyra palm sprout flour making can be adopted by farmers as their source of income and also to reduce the wastage of palmyra palm sprouts during season.
5	Assessment of astringent efficacy of shisham leaves for management of diarrhea in goats.	Diarrhea in goatis a serious setback of goatry, it causes severe economic losses to goat farmers	**Technology option 1**: Farmers practice:- Use of anti diarrhea powder. **Technology option 2:**1 Use of Shisham leaves paste @10g/day orally for 5 days. T**echnology option 3:** Use of rice gruel 100ml twice daily orally.	Result indicates that Technology option 2 shows highest body weight gain percentage (9.8%) with highest BC ratio (26.6)
6	Assessment of	Low yield of wheat due to	**Technology option 1**: Farmers practice:- Broadcasting (in	As far as crop residue is

	Happy seeder for Wheat sowing under crop residue management	water logging and weed growth	tilled condition). **Technology option 2:** Sowing of wheat by Happy seeder incorporating the crop residue T**echnology option 3:** Removal of crop residue and sowing by Zero Till drill.	concern, Happy seeder perform well as it incorporates 31.5 qt/ha of residue.
7	Improvement of Nitrogen use efficacy in wheat	Excessive use of chemical fertilizer and spiraling price of urea leads to increase in cost of cultivation	**Technology option 1**: Farmers practice:- RDN N:P:K::100:40:20 **Technology option 2:** 50% RDN (50 kg N/ha)+ 100% P & K +Nano urea@ 4ml/ l water (Single spray at 35DAS) T**echnology option 3:** 50% RDN+ 100% P &K +2 Spray of nano urea @ 4 ml/l water (35DAS+60-65 DAS)	Data shows that TO3 had higher grain yield and profitability in comparison of farmer practices and TO2.

Achievement under SCSP

Front Line Demonstration (FLD)

Crop	**Thematic area**	**Season**	**Technology Demonstrated**	**Area(Ha)**		**No of Beneficiaries**	**Yield**		**% increase in yield**
				Target	**Achievement**		**Demo (q/ha)**	**Check (q/ha)**	
Lentil	ICM	Rabi	IPL - 316	10.0	10.0	50	12.15	9.5	27.89
Wheat	ICM	Rabi	HD 2967	2.0	1.0	5	42.5	35	21.43
Wheat	ICM	Rabi	HI 1563	2.0	2.0	10	39	35	11.43
Wheat	ICM	Rabi	S. Shrestha	2.0	2.6	13	38	35	8.57
Wheat	ICM	Rabi	S. Samridhi	2.0	2.4	12	39	35	11.43
Green Gram	ICM	Summer	Shikha	20.0	20.0	83	Crop Standing		
Total				38.0	38.0	173			

Number of Training	**No. of Participants**	
3	M	F
	96	77

Training conducted under SCSP

Achievement of NARI (Nutri Sensitive Agriculture Resources and Innovation)

S. No.	Name of Nutri-Smart Village	Type of Nutrition Garden	Number	Area (sqm)	No. of beneficiaries
1.	Diha	Backyard/Kitchen Garden	40	2560	40
2.	Belchhi	Backyard/Kitchen Garden	18	1152	18
3.	Belkhundi	Backyard/Kitchen Garden	15	960	15
4.	Pandhar	Backyard/Kitchen Garden	14	896	14
5.	Gohda	Backyard/Kitchen Garden	13	832	13
TOTAL			**100**	**6400**	**100**

Production from Nutri-Garden

Sr. No.	**Nutri-Garden Establishment**	**No. of nutri-garden units**	**Total Area (m^2)**	**No. of families associated**	**Total Production (kg)**
1	Kharif	50	6500	50	110
2	Rabi	50	6111	50	128
3	Summer	30	4010	30	0

Extension Activities

SI. No.	**Name of the programme attended**	**Date**	**No of Programme**	**Beneficiaries**
1	PM live programme	13/10/23	17	10
2	Man ki baat kisano ke sath by Ag. Minister, Bihar through Zoom	13/10/2023	1	10
3	Prayogshala se khet tak at Sawal Jawab programme	1/11/2023, 02/12/2023	2	60
4	PM Live programme	31/10/2023, 15/11/23,09/12/2023, 15/12/2023, 28/02/2024,	5	325
5	Ex Trainees meet	2/11/2023	1	25

6	ATMA-KVK joint visit	28/12/23	2	49
7	Krishi yantrikaran mela	14/12/23	1	253
8	World soil day	15/12/2023	1	57
9	Exposure visit at BAU Sabour Kisan Mela	17-19/02/24		300
10	Animal health Camp	18/3/24	1	73
11	Field Day	19/03/2024,	2	68
12	Awareness on malnutrition eradication	23/4/24	1	22
13	Scientist farmers interface	13/5/24	1	50
14	Krishi Gyan vahan	27-31/5/24	5	1166
15	Human Health camp	21/5/24	1	100
16	Viksit Bharat Sankalp Yatra	05/12/2023, 30/12/2023	43	17017
Total			**84**	**19585**

Production of Seed and Other Farm Produce

			Target			**Achievement**				
SN	**Crop**	**Variety**	**Class of Seed to be produce (B/S, F/S, C/S, TFL)**	**Area (ha)**	**Production (q)**	**Class of Seed produced (B/S, F/S, C/S, TFL)**	**Area (ha)**	**Production (q)**	**Productivity (q/ha)**	**Remark (**Marketing Strategies adopted by the centre for seed sale in Kharif2023)
1	Paddy	Sabour Harshit	C/S	5.0	175	C/S	4.8	197.0	41.0	188.8 qt sent to DSF
		Rajendra Sweta	C/S	Nil	Nil	C/S	0.1	4.0	40.0	
	Wheat	HD 2967	TL	-	-	TL	0.4	12.92		
	Lentil	IPL 316	CS	4	32	CS	3.0	4.83		Low production due to lack of irrigation
	Chick Pea	GCP 105	TL	-	-	TL	0.1	1.41		
	Linseed	Sabour	CS	1	6	CS	1.0	4.22		

		Tisi								
	Mustard	RH 725	TL	-	-	TL	0.1	1.09		
	Egg	Vanraja						3000 Nos.		
	Chicks	Vanraja						100 Nos.		

Revolving Fund Status

Fund	Amount (Rs.)
Cash	652807
Kind	800000

Achievements and yield result of CRA *Kharif* season (2023-24)

S. No.	Name of Crop	Variety	Intervention	Target area (acre)	Achieved area (acre)	Grain yield (q/ha)		% increase in yield
						Demo	Local Check	
1.	Paddy	R. Sweta	DSR	300	300	53.41	48.56	9.98
		S. Harshit				43.4	38.10	13.91
		R. Sweta	AWD	60	60	51.25	45.72	12.09
		R. Sweta	WH & FB	40	40	50.25	44.86	12.01
		R. Sweta	NE/Green Seeker /INM	40	40	58.8	47.30	24.31
2.	Maize	NA	Raised bed	25	0			
3.	Maize + Arhar Intercropping / Soyabean	NA	Raised bed	40	0			
4.	Finger Millet	RAU-8	Raised Bed	25	25	14.0	NA	NA
5.	Pigeon pea	IPA-203	Raised Bed	15	15	13.5	11.6	16.37
6.	Community Irrigation			20	20			
7.	Other Interventions	NA	NA	30				
	Total area (in acre)			595	**500**			

Achievements and yield result of CRA *Rabi* season (2023-24)

S. No.	Name of Crop	Variety	Intervention	Target area (acre)	Achieved area (acre)	Harvested area (%)	Grain yield (q/ha)		% increase in yield
							Demo	Local Check	
1.	Wheat	HD-2967	Zero Tillage	300	300	26	43.96	38.8	13.29
2.	Wheat	HD-2967	Happy Seeder	50	50	30	44.24	38.7	14.31
3.	Wheat	HD-2967	NE/Green Seeker/INM	30	30	26.67	44.57	39.2	13.69
4.	Wheat+Mustard	(HD-2967+RH-0725)	Intercropping	50	50	40	(34.81+2.52)	0	NA
5.	Chickpea	RVG-203	Zero Tillage	50	50	90	14.93	9.8	52.34
6.	Lentil	IPL-316	Zero Tillage	100	100	100	12.15	10.23	18.76
7.	Linseed	ST-3	Crop Diversification	23	23	100	9.7	7.6	27.63
8.	Community Irrigation			20	20				
	Total area (in acre)			623	623				

Achievements of CRA *Summer* season (2024)

S. No.	Name of Crop	Variety	Intervention	Target area (acre)	Achieved area (acre)
1.	Green gram	Sikha	Zero Tillage	260	260
	Total area (in acre)			**260**	**260**

Proposed Action Plan
(June 2024 to September 2024)

Discipline	PF					RY					EF				
	No of course	Others		SC/ST		No of course	Others		SC/ST		No of course	Others		SC/ST	
		M	F	M	F		M	F	M	F		M	F	M	F
Ag. Engg.	4	80	20	15	5	2	40	10	8	2	1	20	5	4	1
Horticulture	6	120	30	20	10	3	60	15	10	5	1	20	5	4	1
Agronomy	6	120	30	20	10	3	60	15	10	5	1	20	5	4	1
Soil science	6	120	30	20	10	3	60	15	10	5	1	20	5	4	1
Home Science	6	120	30	20	10	3	60	15	10	5	1	20	5	4	1
Total	28	560	140	95	45	14	280	70	48	22	5	100	25	20	5

Training Programme

Front-Line Demonstration (FLD) programme

Sr. No.	**Crop /animal**	**Thematic area**	**Technology**	**Season**	**Area (Ha)**	**No.of Demonstration/farmers**	**Estimated cost (Rs.)**
1.	Onion	ICM	Kharif Onion	Kharif	2	20	20,000
2.	Nutri Garden	Nutrition	Different Vegetable Seed	Kharif	1	20	5000
3.	Paddy	IDM	Biofortified variety of paddy	Kharif	8	20	8000
4	Dragon Fruit	ICM	Dragon Feuit plants	Kharif	0.4	10	10000
Total					**11.4**	**70**	**43000**

On Farm Trial (OFT)
OFT1

Crop	Rice
Season	Kharif
Problem	Low yield of rice
Main cause	Due to imbalance use of nutrients
Title of OFT	Integrated Nutrients management in rice
Farming situation	Irrigated medium land
Thematic area	Integrated Nutrients management
Farmer practice (T1)	No use of ZnSo4 and BGA
Technology options (T2)	NPK::120:60:40 + 20 kg Zinc Sulphate /ha
Technology options (T3)	NPK::100:60:40 + 20 kg Zinc Sulphate + BGA @10kg/ha
Source of technology	RPCAU, Pusa, Samastipur
No. of Trials	10
Details of critical input	Urea, SSP, MOP, Zinc Sulphate and BGA
Cast of individual critical input	Rs 500/=
Total cast of critical input	Rs 15000/=
Performance indicated to be recorded	1- Technical indicator (Soil Analysis, No. of tillers, No. of effective tillers, Grain per panicle, yield (q/ha). 2- Economic indicator (cast of cultivation, grass return, net return, B: C ratio) 3- Farmer perception (Training, field visit and field day)
Source of technology	RPCAU, Pusa, Samastipur
No. of Trials	10
Details of critical input	Urea, SSP, MOP, Zinc Sulphate and BGA
Cast of individual critical input	Rs 500/=

OFT 2

Crop	Rice- Wheat Cropping system (RWCS)
Season	Kharif/Rabi/Summer
Problem	Low profitability of existing cropping system
Main cause	RWCS is irrigation, nutrient and labour intensive leads to non-judicious use of inputs
Title of OFT	Assessment of effect of crop diversification on yield and economics
Farming situation	Sandy loam, Medium to upland , irrigated
Thematic area	NRM

Technology option selected for assessment	TO_1 Farmer practice- Rice- Wheat (prominent cropping system of district) TO_2 Finger millet + Pigeon pea – Onion – Green gram TO_3 Rice – Maize + Potato– Green gram
Source of technology	ICAR-IIMR, Hyderabad-2022 and AICRP- IFS-2019, BAU, Sabour , Bhagalpur
No of trial	10 , Area=($1000m^2$)
Detail of critical input	Nutrient NPK fertilizer, soil sample analysis charges, Seed, pesticides
Cost of individual critical input	Rs. 1000

Note :- Further more OFTs will be included in the plan after OFT finalization workshop

Intervention under SCSP

Sr. No.	Crop /animal	Thematic area	Technology	Season	Area (Ha)	No.of Demonstration/ farmers	Estimated cost (Rs.)
1.	Onion	ICM	Kharif Onion	Kharif	2	20	20,000
2.	Nutri Garden	Nutrition	Different Vegetable Seed	Kharif	1	50	15000
3.	Paddy	IDM	Biofortified variety of paddy	Kharif	10	20	10000
4	Dragon Fruit	ICM	Dragon Feuit plants	Kharif	0.4	10	10000
5	Brinjal	ICM	Hybrid variety	Kharif	2	50	25000
6	Cauliflower	ICM	Early Variety Sabour Agrim	Kharif	2	50	25000
Total					**17.4**	**200**	**105000**

Seed/Planting material production

S. No.	Crop & Variety	Area/Nos.
1	Paddy	5.0
2	Millet, Ragi	0.25 ha.
3	Cauliflower seedling, var. Sabour Agrim	60000 (Nos.)
4	Brinjal Seedling, Var. PH 6	14000 (Nos.)
5	Brinjal Seedling, Var. Rajendra Baigan 2	30000 (Nos.)
6	Tomato seedling, var. Kashi Vishes	35000 (Nos.)
7	Poultry, Vanraja	Egg 1000 (Nos.)

8	Chicks	400

CRA Kharif intervention 2024-25

Crop	Technological Interventions	Ambari	Nimi	Sadikpur	Shekhopur Dih	Chhema	Total
Maize	Raised bed	15	15	10	15	15	**70**
Pearl millet	Line Sowing	10	10	10	10	10	**50**
Finger millet	Line Sowing	15	15	15	15	15	**75**
Paddy	DSR	25	25	20	25	20	**115**
Pigeon pea (Arhar)	Raised bed	30	30	30	30	30	**150**
Black gram	Line Sowing	5	5	5	5	5	**25**
Soybean	Line Sowing	12	10	10	10	8	**50**
Sorghum	Line Sowing	6	6	6	6	6	**30**
Others		6	6	6	6	6	**30**
Total		**124**	**122**	**112**	**122**	**115**	**595**

KRISHI VIGYAN KENDRA, SUPAUL

Report of 26th Extension Education Council Meeting
(From October 2023 to May 2024)

1. Achievement of Training Programme :

A. Training Programme for Practicing Farmers/Farm women:

Sl. No.	Discipline	Duration (days)	Course No.	No. of Beneficiaries					
				Others		SC/ST		Total	
				M	F	M	F	M	F
(i)	Plant Pathology	26	26	1130	156	377	309	1507	465
(ii)	Horticulture	24	24	549	79	329	361	878	440
(iii)	Ag. Extension	13	13	245	45	222	197	467	242
(iv)	Home Science	06	06	90	18	100	207	190	225
	Total	**69**	**69**	**2014**	**298**	**1028**	**1074**	**3042**	**13626**

B. Training Programme for Rural Youth:-

Sl. No.	Discipline	Duration (days)	Course No.	No. of Beneficiaries					
				Others		SC/ST		Total	
				M	F	M	F	M	F
(i)	Plant Pathology	08	13	165	34	24	17	189	51
(ii)	Home Science	01	01	18	11	01	-	19	11
	Total	**09**	**14**	**183**	**45**	**25**	**14**	**208**	**62**

C. Training Programme for Extension Functionaries:-

Sl. No.	Discipline	Duration (days)	Course No.	No. of Beneficiaries					
				Others		SC/ST		Total	
				M	F	M	F	M	F
(i)	Plant Pathology	01	01	14	06	08	02	22	08
(ii)	Horticulture	01	01	14	06	08	02	22	08
	Total	**02**	**02**	**28**	**12**	**16**	**04**	**44**	**16**

D. Vocational training for Rural Youth:-

Crop / Enterprise	Training title	Duration (days)	No. of Participants		
			Male	Female	Total
BSDM RPL training	Makhana Grower cum Processor 2.0	10	19	11	30

E. Sponsored Training programme

Sl. No	Title	Duration (days)	Client PF/RY/EF*	No..of courses	No. of Participants				Sponsoring Agency
					Others	SC	ST	Total	
1.	IFFCO programme	01	PF	01	90	10	-	100	IFFCO
2.	Rabi Mahotsav	12	PF	12	2500	200	100	2800	ATMA, Supaul
3.	Kisan Gosthi	01	PF	01	33	22	0-	55	BREDA patna

4.	Farmers scientist interaction	01	PF	01	39	11	-	50	DAO Supaul
5.	Kisan Gosthi	01	PF	01	32	021	-	53	ATMA, Supaul
6.	Natural farming awareness	01	PF	01	61	64	-	125	ICAR
7.	Natural farming awareness	01	PF	01	90	60	-	150	ICAR
8.	INM in Mango	01	PF	01	72	28	-	100	DHO, Saharsa
9.	Natural farming awareness	01	PF	01	154	52	-	206	ICAR
10.	Button Mushroom Production	01	PF	01	26	04	-	30	MBAC, Saharsa
11.	Oyster Mushroom	01	PF	01	26	04	-	30	MBAC, Saharsa
12.	Kisan Gosthi	01	PF	01	47	24	-	71	CRAP
13.	Kisan Gosthi	01	PF	01	-	-	70	70	CRAP
14.	Kisan Gosthi	01	PF	01	51	08	-	59	CRAP
15.	District Level Kharif Mahotsav	01	PF	01	201	55	-	256	ATMA, Supaul
16.	IPM in Kharif crops	01	PF	01	140	48	-	188	ATMA, Supaul
17.	INM training	01	PF	01	31	09	-	40	MBAC, Saharsa

PF- Practicing Farmer /RY- Rural Youth/EF- Extension Functionaries

1. **Front Line Demonstration:**
   Details of FLDs implemented during **October 2023 to May 2024** (Information is to be furnished in the following **three tables** for **each category** i.e. **cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops**.)

Sl. No.	Crop	Variety	Thematic area	Technology Demonstrated @	Season and year	Area (ha) Actual	No. of farmers/ demonstration
1.	Jute	JBO 2003H	ICM	Seed (var. JBO 2003H)	Kharif 2023	40.0	102
2.	Sorghum	UPMC 503	INM	Seed (var. UPMC 503)	Rabi 2023-24	5.0	63
3.	Berseem	Muscavi	INM	Seed (var. Muscavi)	Rabi 2023-24	5.0	50

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	% Increase yield
Jute	ICM	Varietal demo	102	40.0	43.24
Sorghum	Fodder production	Varietal demo	63	5.0	44.82
Berseem	Fodder production	Varietal demo	50	5.0	33.57

Crop	Thematic Area	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Jute	ICM	55700	139250	83550	2.5	53600	98250	44650	1.83
Sorghum	Fodder production	102900	294000	191100	2.86	97000	188500	91500	1.94
Berseem	Fodder production	75000	282480	207480	3.76	68000	211480	143480	3.11

RAWE Programme

No. of students	Male	Female	Remarks
35	21	14	Male students stay till now

Achievement under CRA programme

S. No.	Intervention	Physical achievement (Acre)	Season
1.	Raised bed Potato	10	Rabi 2023-24
2.	Raised bed Maize	35	
3.	ZT Wheat	355	
4.	Raised bed Mustard	50	
5.	INM/NE Wheat	50	
6.	INM/NE Mustard	50	
7.	Wheat +Mustard intercropping	50	
8.	Maize + Potato inter cropping	10	
9.	ZT Moong	50	Summer 2024
10.	Line Sown Jute	200	
11.	Finger Millet	10	

CFLD

Sl. No.	Crop	Variety	Thematic area	Technology Demonstrated @	Season and year	Area (ha) Actual	No. Of farmers/ demonstration
1.	Lentil	IPL-316	ICM	Seed, Vr. IPL-316, R.culture, PSB, Zinc	Rabi 2023-24	14.0	35
2.	Mustard	RH-725	ICM	Seed, Vr. RH-725, PSB	Rabi 2023-24	30.0	75
3.	Sunflower	KBSH-44	ICM	IPM	Rabi 2023-24	20.0	50

OFT-1

1	**Title of On Farm Trial**	Improvement of Nitrogen use efficiency in Wheat (Rabi 2024-25)
2	**Problem Definition**	Excessive use of chemical fertilizer and Spiraling price of urea leads to increase in cost of cultivation.
3	**Details of Technologies**	**Farmers practice**: RDF (100:40:20) kg/ha **TO-I**: 50% of RDN & 100% PK + nano urea @ 4ml/lt. water (Single spray at 35 days). T.O-II: 50% of RDN & 100% PK + 2 sprays of nano urea at (30-35 days) and (60-65 days) @ 4ml/lt. water

Table: Efficacy of Nano-Urea in Wheat Crop.

Technology option	No. of trials	Yield component			
		Plant height	No. of effective tillers	ear head length(cm)	1000 grain wt
Farmers practice: RDF (100:40:20) kg/ha	08	85	270	13.5	25.5
T.O.1: 50% of RDN & 100% PK + nano urea @ 4ml/lt. water (Single spray at 35 days).		92.5	305	16.4	27.5
T.O.2: 50% of RDN & 100% PK + 2 sprays of nano urea at (30-35 days) and (60-65 days) @ 4ml/lt. water		98.6	380	20.6	29.6

Technology option	No. of trials	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
Farmers practice: RDF (100:40:20) kg/ha	08	31.9	32500	75180	42680	2.31
T.O.1: 50% of RDN & 100% PK + nano urea @ 4ml/lt. water (Single spray at 35 days).		35.9	34000	91500	57500	2.69
T.O.2: 50% of RDN & 100% PK + 2 sprays of nano urea at (30-35 days) and (60-65 days) @ 4ml/lt. water		41.5	35500	104000	68500	2.92

Result : Data depicted in the table shows that maximum yield of wheat 41.5 q/ha was recorded in application of 50% of RDN & 100% PK + 2 sprays of nano urea at (30-35 days) and (60-65 days) @ 4ml/lt. water) closely followed by 50% of RDN & 100% PK + nano urea @ 4ml/lt. water (Single spray at 35 days) which was markedly higher than Farmers practice to the tune of 35.9 & 31.9 q/ha respectively. And similar trend was also found with respect to net return and BC ration.

OFT 2: Agronomy

1	Title of On farm Trial	Integration of fertilizer in different form on yield of lentil during Rabi 2023-24.
2	Problem diagnosed	Injudicious use of chemical fertilizer.
3	Details of technologies	**Farmers Practice:** Seed Treatment + RDF (20 : 40-50) kg/ha,RDF of BAU,Sabour. **T.O. I :**50%of RDF + WS (18 : 18 : 18) @ 5 gm /lt.water (single spray at pre flowering) **T.O.II : :** Seed Treatment with PSB + Rhizobium 50%of RDF + WS(18:18:18)@5 gm/lt.water (single spray at pre flowering)

Table: Efficacy of water soluble nutrients in Lentil.

Technology option	No. of trials	Yield component			Disease/ insect pest incidence (%)
		Plant height at harvest (cm)	No. of pods per plant	1000 seed weight (g)	
Farmers Practice: seed treatment + RDF	08	34.5	105	16.0	18
T.Option I: 50% of RDF + WS (Water soluble fertilizers i.e 18:18;18 @ 5gm/water (single spray at pre flowering stage)		37.8	112	17.0	09
T.OptionII: Seed treatment with PSB+ R.culture, 50% of RDF + WS (Water soluble fertilizers i.e 18:18;18 @ 5gm/water (single spray at pre flowering stage)		39.9	126	18.5	04

Technology option	No. of trials	Disease/ insect pest incidence (%)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
Farmers Practice: seed treatment + RDF	08	18	12.2	18500	54900	50400	2.97
T.Option I: 50% of RDF + WS (Water soluble fertilizers i.e 18:18;18 @ 5gm/water (single spray at pre flowering stage)		09	14.3	20600	64350	59850	3.12
T.OptionII: Seed treatment with PSB+ R.culture, 50% of RDF + WS (Water soluble fertilizers i.e 18:18;18 @ 5gm/water (single spray at pre flowering stage)		04	16.7	21200	75150	70650	3.54

Grain rate : Rs.45 /kg

Result: A data depicted in table shows that maximum yield obtained in technical option II (16.7 qt/ha) followed by technology option I (14.3 qt/ha) which was significantly higher than farmers practice. Similar trend was also obtained in respect of net income and BC ratio respectively.

OFT-3

1.	**Title of On farm Trial**	**Assessment of different fungicides for management of spot blotch disease in wheat.**
2.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**Farmer practice:** Bavistin @ 2.5gm/lit at the time of disease appearance **TO1:** • Seed treatment with Vitavax 200 WS @ 2.5g/kg • Seed +Foliar Spray of Propiconazole @ 1ml/litre water first at boot leaf stage and second spray 20 days after first spray. **TO2:** • Seed Treatment with Trichoderma viride @ 5g/kg • Seed

		+Foliar Spray of Hexaconazole @ 1ml/lit water first at boot leaf stage and and second spray 20 days after first spray

Table: Management of spot blotch disease of wheat.

Technology option	No. of trials	Disease incidence (%)	Yield/plant (kg)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	B:C ratio
TO I (FP)	**10**	23.20	27.5	27500	51675	24175	1.87
TO II		63.35	35.9	34000	91500	57500	2.69
TO III		67.52	38.8	35500	104000	68500	2.92
CD 5%		2.56	4.02				

Result: *The present study concluded that among fungicides treatment* Seed Treatment with Trichoderma viride @ 5g/kg • Seed +Foliar Spray of Hexaconazole @ 1ml/lit water first at boot leaf stage and and second spray 20 days after first spray *was most effective but at par with other treatments to manage and also in terms of cost effectiveness and higher B:C ratio.*

Seed material produced at KVK, farm :

Sl. No.	Crop	Variety	Quantity of seed (q)	Value (Rs)	Number of farmers provided
1.	Paddy	R.M-1	45.46	190932	40
		R.Sweta	1.85	7770	15
		SabourSampann	9.0	30.600	05
2.	Wheat	Sabour Samridhi	9.6	38400	-
		DBW-187	60.40	241600	-
3.	Mustard	RH-725	3.79	36000	-
4.	Cauliflower	SabourAgrim	4050	2000	-
5.	Tomato	KashiVishesh	5000	2500	-
6.	Brinjal	Hybrid Ph-6, Rajendra Baigan -2	6800	4800	
7.	Turmeric	R. Sonia	4.0 qt	16000	-
8.	Tuber (Potato)	K. Neelkanth	23.0	92000	-
		K. Mohan	17.0	68000	-
		UC Map	7.5	30000	-

1. Performance of Instruction Farm :

Sl. No.	Crop	Season	Area(ha)/No	Yield (Qtl.)	Remarks
1.	Guava	-	50 plant	-	Auction/ on lease basis
2.	Mango	-	0.8/200 approx	-	
3	Anola		0.20 acre	-	
4.	Pond	-	0.75 acre	-	
5.	Poultry	-	150 sqft	-	

2. Performance of demonstration units (other than instructional farm)

Sl. No.	Name of demo Unit	Year of estt.	Area(Sq.mt)	Details of production		
				Variety/breed	Produce	Qty.
1.	Mushroom spawn	2016	260	Oyster	Spawn	3.94 qt
2.	Vermi Compost	2012	18	Eisenia fetida	6 qt.	200 qt
3.	NADEP	2019	06		10 qt.	-

	compost					
4.	IFS	2017	4000	HF/sahiwal	Milk	2166 lit.
5.	Mango orchard	2006	4000	-	-	-
6.	Guava Orchard	2006	2000	Allhabai safeda, Lalit, L-49	-	-
7.	Amala	2006	2000	Narendra	-	-
8.	Poly house	2017	45	-	-	-
9.	Shed net	2017	20	-	-	-
10.	Natural farming bio production unit	2022	18			

Sl. No.	Name of demo Unit	Year of estt.	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1.	Mushroom spawn	2016	17900	39000	
2.	Vermi Compost	2012	12000		Farm use
3.	NADEP compost	2019	-	-	-
4.	IFS	2017	-	91000	-
5.	Mango orchard	2006	-	-	-
6.	Guava Orchard	2006	-		Leased out
7.	Amala	2006	-	15200	
8.	Poly house	2017	-	-	-
9.	Shed net	2017	-	-	-
10.	Natural farming bio production unit	2022			

3. List of special programmes undertaken by the KVK, which have been financed by ATMA/ Central Govt/ State Govt./NHM/NFDB/RKVY (Kisan Salahkar) Other Agencies

Name of the programme/scheme	Purpose of programme	Date/ Month of initiation	Funding agency	Amount (Rs.)
CFLD	Demonstration	October 2015	ICAR	4,13,200
CRA Programme	Resource conservation and yield enhancement	October 2020	Govt. of Bihar	96,51,944
Natural farming	Training, demonstration etc	June 2022	ICAR	5,36,508
SCSP	Training and demonstration	April 2020	ICAR	2,73,969
NICRA	Promotion of climate resilient agriculture	Since 2011	ICAR	10,25,000
RAWE programme	Capacity building of agriculture students	October 2020	MBAC Saharsa	69,000

4. Soil samples analysed :

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Sample	183	183	09	20130

5. Other Extension Activities :

Activities & Sub- activities	No.	No. of Beneficiaries
Field day	03	200
Kisan Choupal/Kisan Gosthi	27	2891
Scientist Visit to farmer's field	157	343
Farmer's Visit to KVK	735	735
Newspaper coverage	25	Many
Radio talk, Television Talk	03	Many
Advisory Services/Helpline service	1068	1068
Publication of Krishak Samachar	01	2000
World Soil Day	01	57
PM/AM Live telecast programme	01	25
Animal health camp	01	102
SAC Meeting	01	35

6. <u>Any new initiative taken by KVK</u>

1. Establishment of nutri garden unit.
2. Establishment of crop cafeteria.
3. Starting seed production programme for small units like Barnyard millets, Cheena, Kutki etc.,
4. Establishment of nursery pond for Makhana production.
5. Installation of two community borewell at CRA village Madhubani on and Pariyahi during May'2024.
6. Development of LTE plot in one acre for cultivation of millets during April 2024.
7. Beautification and development of Office premises and development of pathway for ATIC cum seed sale centre, KVK, Supaul.

Proposed Action Plan
(June 2024 to September 2024)

1. Proposed Training Programmes :

A. Training for Practicing Farmers/Farm women :-

Sl. No.	Discipline	Duration (days)	Course No.	No. of Beneficiaries					
				Others		SC/ST		Total	
				M	F	M	F	M	F
(i)	Plant Pathology	05	05	85	20	35	10	120	30
(ii)	Horticulture	05	05	85	20	35	10	120	30
(iii)	Ag. Extension	05	05	85	20	35	10	120	30
(iv)	Home Science	05	05	85	20	35	10	120	30
	Total	**20**	**20**	**340**	**80**	**140**	**40**	**480**	**120**

B. Rural youths

Sl. No.	Discipline	Duration (days)	Course No.	No. of Beneficiaries					
				Others		SC/ST		Total	
				M	F	M	F	M	F
(i)	Plant Pathology	03	03	50	10	10	05	60	15
(ii)	Horticulture	03	03	50	10	10	05	60	15
(iii)	Ag. Extension	03	03	50	10	10	05	60	15
(iv)	Home Science	03	03	50	10	10	05	60	15
	Total	**12**	**12**	**200**	**40**	**40**	**20**	**240**	**60**

C. Extension functionaries

Sl. No.	Discipline	Duration (days)	Course No.	No. of Beneficiaries					
				Others		SC/ST		Total	
				M	F	M	F	M	F
(i)	Plant Pathology	01	01	22	03	03	02	25	05
(ii)	Horticulture	01	01	22	03	03	02	25	05
(iii)	Ag. Extension	01	01	22	03	03	02	25	05
(iv)	Home Science	01	01	22	03	03	02	25	05
	Total	**04**	**04**	**88**	**12**	**12**	**08**	**100**	**20**

D. On Farm Trial to be conduct : (Each SMS and P.C. has to conduct 2OFT and 1 OFT respectively in Rabi Season)

OFT TO BE CONDUCTED:-

S. N.	Title	Treatment	No. of Farmers
1	Improvement of nitrogen use efficiency in rice .	Farmers Practice – RDF (100:40:20)kg/ha T.O I – 50% RDN and 100% PK+ Nano urea(4 ml/litre) water (Single spray at pre flowering stage). T.O II - 50% RDN and 100% PK+ 2 spray of Nano urea at(25 to 30 DAT) and 55 DAT @ 4ml/lt water (specially for medium duration variety).	08

2	Stalk rot in maize	Farmers Practice – Ridge bed method (45cm X 20cm) T.O I: Ridge bed method (60cm X 20cm) {Plants/ha-83,000} T.O II: Raised bed method (60cm X 20cm) {Plants/ha-83,000T3: Paired method (30:75cm X 20cm) {Plants/ha-1,11,111}	08
3	Assessment of efficacy of Nano-urea in Hybrid Maize	Farmers Practice –RDF ($N_{120}P_{75}K_{50}$ kg /ha) T.O I: NE-based Nitrogen Management(NM) T.O II: Green Seeker based NM T.O II: Leaf Colour Chart (LCC) based NM T.O IV: STR based NM	06
4	Assessment of different fungicides for management of spot blotch disease in wheat	**Farmer practice:** Bavistin @ 2.5gm/lit at the time of disease appearance **TO1:** • Seed treatment with Vitavax 200 WS @ 2.5g/kg • Seed +Foliar Spray of Propiconazole @ 1ml/litre water first at boot leaf stage and second spray 20 days after first spray. **TO2:** • Seed Treatment with Trichoderma viride @ 5g/kg • Seed +Foliar Spray of Hexaconazole @ 1ml/lit water first at boot leaf stage and and second spray 20 days after first spray	10
5	Assessment of management practices for Red banded caterpillar in mango	**Farmers Practice (FP)**: Spray with chlorpyriphos when symptoms appear @3ml/litre of water) **Technology option-I** : 1. Collection and destruction of fallen fruits. 2. Spray deltamethrin 0.0028 % (deltamethrin 2.8 EC@ 1ml/lit) at marble size and repeat after two weeks **Technology option-II** : Two sprays of thiacloprid 21.7 SC 0.04 % (@ 2ml/lit) at 25-30 days interval.	10
6	Assessment of Microbial Consortia against Wilting in Brinjal	T1: IIHR consortia (Arka microbial consortia) T2: NRC Litchi consortia	8
7	Evaluation of Foliar Nutrition in Mango	T1: FYM or compost @ 50 kg / tree, Fertilizer dose of 1:1:1.5 kg NPK / tree. Urea spray @ 1% solution T2: Spraying of WSF (19:19:19) @ 1% (2 times: July-august & Sept-oct.) + spraying of 'K' rich WSF (13:0:45) @ 1% (2 times: Jan-feb. & March. –April.) + IIHR Mango special @ 0.5% (3 times/yr : July-AUG, Dec-Jan. & Feb – Mar.)	8
8	Development and impact of iron rich finger millet based Biscuit among the adolescent girl & women.	T_1:- Wheat flour (35 g) + Ragi (15 g) T_2:- Wheat flour (30 g) + Ragi (20 g) T_3:- Wheat flour (25 g) + Ragi (25 g)	10
9	Preparation & assessment of nutritional value of leaf powder of moringa leaves.	T_1:- Butter milk 100 ml + Moringa leaves 1 gm T_2:- Butter milk (100 ml)/ + moringa leaves 2 gm T_3:- Butter milk (100 ml)/ + moringa leaves 3 gm	10
10.	Training and awareness on natural farming	T_1:-Training about natural farming component T_2:-Awareness about natural faming.	10

E. FRONTLINE DEMONSTRATION:-

S.N	Season	Crop/ Enterprise	Variety	Area(ha)	No. of Demonstration
1.	Kharif 2024	Pyrazosulfuron ethyl 10 WP @ 20 g ai/ha + Bispyribac Sodium 10 SC (PoE) @ 20g ai./ha at 20-25 DAS (2-4 leaf stage of weeds)	Paddy cv.RM-1	6	15
2	Rabi 2024-25	50% RDN and 100% PK+ 2 spray of Nano urea at35 DAS and 60-65 DAS (Timely sown variety)	Wheat cv.DBW 187	6	15
3	Summer 2025	Pendimethalin 30 EC(PE) @ 1kg ai/ha at 0-3 DASfbImazethapyr 10 SL(PoE) @40g.ai/ha at 15-25 DAS (2-4 leaf stage of Smell mellon& Physalis minima in moist condition)	Green gram (all variety)	6	15
4	Kharif	Trichoderma viride for soil, seed and seedling treatment	Paddy cv.RM-1	02	10
5	Rabi	Kitchen garden establishment	Vegetables (different variety)	0.25	25

CFLD demonstration to be conducted*2024

S. No.	Season	Crop	Varieties	Area in ha	No. of Demonstration
1.	**Summer 2024**	Sunflower	KBSH-44	10.0	25

Farm activities:

Sl. No.	Crop	Season	Variety	Area (ha)
1.	Paddy	Kharif 2024	R.M-1, Sabour Sampan etc	5.0
2.	Mango	Kharif 2024	Malda, Amrapali, Malicaetc	No. 500
3.	Vegetable seedling	Kharif 2024	Brinjal, Cauliflower, Cabbage etc	No. 50,000
4.	Guava	Kharif 2024	Allahabad Sabheda	No. 250
5.	Ammla	Kharif 2024	-	No. 300
6.	Makhana	Kharif 2024	Sabour Makhana-1	1.0
7.	Poultry Bird	Kharif 2024	Vanraja	-
8.	Poultry Egg	Kharif 2024	Vanraja	-
9.	Guava	Kharif 2024	Allahabad Sabheda	No. 250
10.	Ammla	Kharif 2024	-	No. 300
11.	Makhana	Kharif 2024	Sabour Makhana-1	1.0
12.	Poultry Bird	Kharif 2024	Vanraja	-
13.	Poultry Egg	Kharif 2024	Vanraja	-

F. Extension Activities

Activities	No.	Participants

Kisan Goshthi/ Kisan Chaupal	10	900
Field days	8	400
Kisan Mela	02	100
Diagnostic visit	25	200
Scientist visit to farmers field	100	500
Farmers visit to KVK	500	500
Farmers advisory service/Help line	500	-
Important day celebration	05	500
Radio /TV Talk	02	-
News Paper coverage	10	-
Extension literature	01	2000
ICAR Foundation Day	01	100
Video Conferencing Training	10	200
International Yoga Day	01	80

CRA Programme Phase -II (Kharif- 2024)

S. No.	Intervention	Crop	Target area (Acre)
1.	DSR	Paddy	155
2.	Line Sowing	Groundnut	125
3.	Line Sowing	Finger Millets	115
4.	Fodder	Sorghum	50
5.	Raised Bed	Maize	130
Total			**575**

Extension Model

Nurturing Learning and experimental Innovations by Farmers Library in Bihar

"*Learning by doing is an effective pedagogy emphasized by modern education that can be put to use in every field, even agriculture, the oldest practice of tilling the land. A uniquely positioned intervention of Farmer Library by krishi Vigyan Kendra, Banka-Bihar Agricultural University, Sabour, Bhagalpur for the implementation of agricultural innovations at farmers field with group discussion and excellent guidance of scientists of KVK, Banka as well as Bihar Agricultural University, Sabour. A farmers Library established in a Panchayat Bhawan of limate Resilient Agriculture program adopted village Uprama (Lilatari-Kathachatar) provides a platform to showcase modern agricultural techniques and promote learning and experimentation among farmers by the audio-visual aids of communication. Most farmers of that village and adjacent villages are collecting in farmer's library for discussion every day at the evening time and have a good awareness of agriculture practices and livestock production Management as well as mechanization though have exposure to the developing trends in the agrarian sector. Since the early Green Revolution, India has been at the core of boosting agricultural productivity and meeting the food security of the nation, with more focus on cereal crops and pulses. Over time, landholding size was reduced and the next two generations had to survive on the portion of land they received in lineage as per the applicability of the law. Currently about 54 percent of the population is dependent upon agriculture directly or indirectly. Agriculture has the scope to evolve and produce much more diversified and quality products to capture a better portion of the GDP. Farmers benefit when their produce fetches good remuneration from the field in terms of yield by securing the soil fertility, which motivates them to continue the crop cycle*."

Keywords: Group Discussion, Success story, Case study, Audio-visual aids, Innovations, Bihar Kisan Diary.

The word library is derived from the Latin word 'Libraria' which means barks of a tree (that was an early writing material). Its origin is traced to another Greek word 'Librariun' which means a book case. It gives an idea how books were kept. Library is considered as a social institution which provides free access to knowledge. According to Richardson, library is an institution where books are acquired for use, arranged for use, served for use and it is the 'use' which is the motive of the library. Today, library is a necessary unit in the social fabric. Now the library is an institution charged with the functions of acquiring books and other reading material, of organizing them and putting them for use and to be served to those readers who need them and to inculcate the habit of reading among them with the idea of universal education. India is known for its vast and precious literature and has had its literary tradition with education research as its pillars. Dr. S. Radha Krishnan, the former president of India said, "In the old days, teachers of India were themselves librarians and they held the highest esteem." Information is that power which has played a great role in the growth of human civilizations from the primitive days leading to the development of economic, political, social, occupational, and cultural and many

other sectors of human society. At one time, Farmers library was regarded as a storehouse of agriculture and related books and books were meant for preservation only. The main purpose of the library was to store the knowledge or to preserve the books. The person could read the books in the farmers library only. The readers were expected to use the library on their own.

Aims and Objectives of Farmers' Library at Uprama, Banka

Farmers library aim is to enable users to make the most effective use of the resources and services of the farmers library. The role of library is to develop reading habits among the farmers for the implantation of technological interventions at their field.

Main objective of Farmers library is to provide ideas as well as information to the progressive farmers, farm women, rural youth as well as extension functionaries to enhance the production and productivity of crops and animals. It inculcates the habit of lifelong learning. Teaching learning and training process remains active because of the came to existence of farmers library at Uprama Village. It develops the imagination by reading a variety of materials. For education, Farmers library acts as a brain of any institution amongst progressive farmers. The primary objective of a Farmers library is to provide the right information to the right users at the right time. The other objectives of Farmers library are discussed below:

• **To support all educational programmes**: The farmers library made the hub of all the activities planned and executed in the institution/University/KVKs. farmers library used by progressive farmers to prepare for their next season planning, information, recreation, innovations/new initiatives and various other extra-curricular activities which are executed by the farmers from time to time at field for demonstration. So to satisfy users varied needs, farmers library provide books that support all educational programme of the agricultural institute.

• **To cultivate reading and discussion habits:** The habit of reading books other than text books should be inculcated among farmers. If good farmers library habits are formed at early stage, then these will continue later. Farmers library contain *kisan diary, krishak sandesh, krishak samachar, extension bulletin, popular articles, leaf lets* for meeting the recreational needs of the farmers. Reading and discussion habit improves the imaginative skills and enhances the implementation of technological interventions at farmers' field for getting maximum profit.

• **To increase the vocabulary and knowledge:** The reading material is available in the Farmers library in such a way that there are various books of the same title. Such material increases the vocabulary and general knowledge of farmer to convey the message to other farmers for implementation of the technology. The farmers gain extra knowledge more than practicing work done by him at this locality which is beneficial for the farming community for the knowledge as doing by other place farmers.

• **To Inculcate the habit of seeking help of additional sources other than books:** As a farmer's library is the hub of activities so student can use it for education, information, recreation, inspiration etc.

• **To encourage lifelong education**: The farmers library provide information, inculcate ideas and develops knowledge that is so essential to functioning successfully in today's information and knowledge based society. The reading material in the library goes on updating from time to time and every learner deserves to polish the knowledge which is new. For this purpose, library assists the learner in their whole life. Farmers Library promotes literacy and disseminates useful information to the progressive farmers and encourages lifelong learning. It is fundamental for libraries to equip farmers with lifelong learning skills through its reading materials and resources and develop in them creative thinking and imagination and enabling them to live as ideal and responsible farmer.

• **To develop self-learning skills of farmers:** Farmers Library develops independent reading habits of the farmers, improves the quality of discussing, makes the farmers acquainted with different library materials like *success story, kisan diary, catalogue cards* etc. It also trains the farmers to a life-long self learning skill through utilization of library resources in any situation. It helps the farmers to be a good citizen which ultimately supports towards national agricultural development.

• **To help extension functionaries to improve their training expertise:** Books in the Farmers library are available for the extension functionaries also. The extension functionaries require further reading to keep their knowledge up to date. They also require many other items for support of training which are maintained in the farmers' library at Uprama to create lifelong education in them and thirst for acquiring new knowledge/ideas.

• To **provide healthy material for recreational and entertainment purpose:** Farmers and extension functionaries like to read not only for their curriculum but also for their pleasure and recreation. Therefore, the aim of farmers' library is to provide good books for entertainment purpose also. Farmers Library contains fiction, nonfiction, biographies and popular magazines for recreational needs of the users.

• **To add new books:** The books in Farmers library added from time to time by Krishi Vigyan Kendra, Banka. Whenever there is a change in curriculum or increase in farmers' strength, news books added to satisfy user's needs. The list of newly purchased books displayed on the notice board with the heading "list of new arrivals" to make users aware of the new books.

• **To preserve newspapers clipping**: Newspapers are the most important sources of latest information. It would be most appropriate if the relevant cuttings of educational write ups, items or events related to institute etc. are organized and stored in file for future reference in the farmers' library. Educational or informative articles also be preserved and displayed on the bulletin board.

• **To provide reference books:** *Bihar kisan diary, krishak sandesh, krishak samachar, extension bulletin, popular articles, leaf lets* and other reference books made available in farmers library for use. Diversified choice of books for reading will help the users in building up emotional balance and stability and promote intellectual curiosity.

• **Preserved history and past culture:** Books are the authentic proof to preserve the historical as well as cultural heritage. The farmers gain such knowledge and enhance their vocabulary and information in farming.

• **For religious and spiritual upliftment:** Religious literature is preserved in the library for guidance for the future generation. By reading various stories as well as literature, the learners increases and upliftment the religious and spiritual knowledge. Various yoga asanas are also the part of such material.

• **Arranged non-printed materials:** Farmers library aims to provide extra material other than books including globe, chart, CDs, DVDs, maps etc. materials Library also aims to provide the facility of various film shows to the farmers. Farmers Library main purpose is reading and reading inevitably increases the brain power of communities. It plays a very important role in promoting the progress of knowledge. A library is the soul of any school which provides knowledge to the readers in terms of reading material. Hence, library is the centre of intellectual as well as social activities of the village community.

To increase the empowerment of farmers in various personal and economic aspects, different information sources should be used along with organizing training programmes so that the farmers become more aware about the improved and changing agricultural practices, government programmes and schemes and credit facilities. More awareness needs to be created among farmers about utilization of marketing channels for increasing their profitability. Information about real-time marketing scenario should be offered to the farmers so that they can make better decisions and enhance the profitability. It was observed from the study that most of the respondents lacked the entrepreneurial attitude.

Therefore, it is recommended that various extension strategies like market led extension, ICT led extension and agri-preneurship led extension should be implemented in integrated approach to enhance the empowerment of farmers. Special importance should be given in increasing the income as well as profitability of the farmers by improving productivity and lowering of costs. Small and marginal farmers need to been courage to form Farmer Producer Organizations (FPOs) to improve their competitive position in the market. It will enable them to have economies of scale in procurement of the inputs, processing, marketing as well as export of the produces. It will also help them to have easy access to credit facilities. In collaboration with various organizations, farmers' library can play an important role to act as a facilitator in training the farmers to form FPOs. Farmers should be motivated for adopting improved practices of integrated natural resource management, integrated pest management and integrated plant nutrient management in their farms. They should be trained about post-harvest management and

value addition of the produces as well as meeting the product quality standard necessary for export. Crop diversification and Integrated Farming System (IFS) will also contribute immensely to increase profitability and also to mitigate various risks arising in farms.

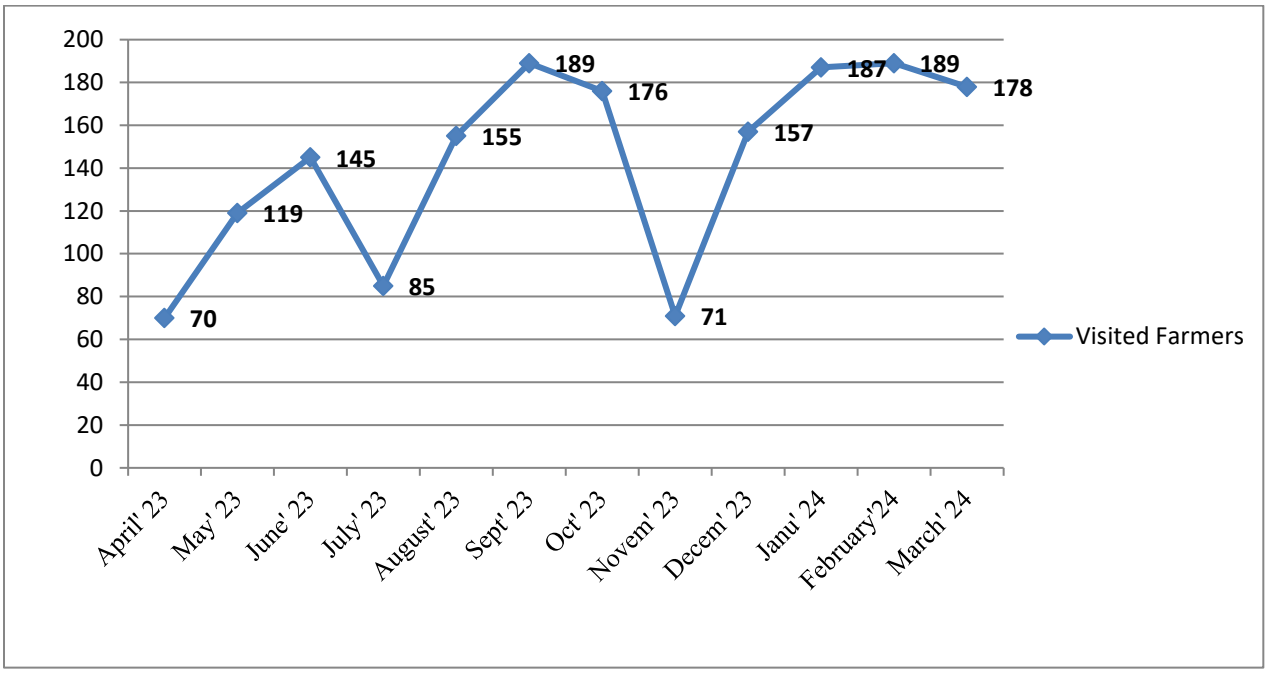

Figure 1: Month wise visit of progressive Farmers at Farmers Library

Table 1: Satisfaction of the farmers regarding advisory/diagnosis services of Farmers Library, (n=120).

S. No.	Particulars	Satisfied		Somewhat Satisfied		Not Satisfied	
		f	%age	f	%age	f	%age
1.	Technical knowledge of the expert	112	93.33	08	6.67	-	-
2.	Communication skills	117	97.50	03	2.50	-	-
3.	Time taken to solve problem	110	91.67	10	8.33	-	-
4.	Availability of expert	102	85.00	08	6.67	-	-
5.	Interest of expert in advisement	111	92.50	09	7.50	-	-
6.	Expert guidance	104	86.67	06	5.00	-	-
7.	Expert behaviour	110	91.67	10	8.33	-	-
8.	Language of expert	120	100.00	00	0.00	-	-
9.	Sample diagnosis	111	92.50	09	7.50	-	-

Data in Table 1 revealed that more than 90% of the farmers were satisfied with the various aspects under the advisory/diagnosis services i.e. expert behavior (91.67 %), communication skills of expert (97.50 %), sample diagnosis (92.50%), technical knowledge of the expert (93.33%), interest of expert in advisement (92.50%), time taken to solve problem (91.67%), expert guidance (86.67%) and language of expert (100.00%). While in the case of

availability of experts, 85.00% of the farmers were satisfied and 15.00 % were somewhat satisfied for the same. It indicated that most of the farmers were satisfied with the various aspects of advisory/diagnosis services. The results were in track with the findings of Kalra and Kumar (1995), Sharma (1999) and Bansal (2009).

Table 2: Satisfaction of farmers regarding literature/publications available at Farmers Library.

S. No.	Particulars	Satisfied		Somewhat Satisfied		Not Satisfied	
		f	%age	f	%age	f	%age
1.	Content of literature	113	94.17	2	1.67	8	6.67
2.	Usefulness of content	105	87.50	7	5.83	8	6.67
3.	Importance of subject matter	90	75.00	25	20.83	5	4.17
4.	Suitability of content and title	111	92.50	7	5.83	2	1.67
5.	Timely delivery of publication	87	72.50	20	16.67	13	10.83
6.	Periodicity	111	92.50	9	7.50	0	0.00

The data in Table 2 indicated that majority (94.17%) of the farmers were satisfied with the content of literature whereas 87.50% were satisfied with the usefulness of the content. In case of importance of subject matter about 75.00% of the farmers were satisfied while 20.83 % were somewhat satisfied. A large majority of the farmers (92.5%) were satisfied with suitability of content and title of the publication. The data further revealed that 72.50 % of the farmers were satisfied with timely delivery of publications while 10.83% were not satisfied. It may be due to untimely reach of publication of monthly magazines to the farmers. Majority of the farmers (92.50%) were found satisfied regarding the periodicity of the monthly magazine. The findings of the study were in conformity with those of Hnumanaikar *et al.* (2011).

Table 3: Overall satisfaction of farmers to the services of Farmers library

Sl. No.	Level of satisfaction	f	% age
1.	Low	7	5.83
2.	Medium	12	10.00
3.	High	101	84.17

The data presented in Table 3 indicated that 84.17% of the farmers had high level of overall satisfaction regarding different services provided at farmers' library by Krishi Vigyan Kendra, Banka, whereas 10% and 5.83% of the farmers had medium and low level of satisfaction, respectively. It is due to the reason that farmers visited at farmers' library got satisfactory advice from the experts for the solution of their farm problems. The findings of the study were in conformity with those of Sekhon (2000) and Kumar and Singh (2007), while in contradictory with Chaturvedani *et al.* (2016).

Recommendation:

The study was an attempt to generate and compile data about satisfaction regarding services provided at Farmers Library run by Krishi Vigyan Kendra, Banka, Bihar Agricultural University, Sabour. It can be concluded that high majority of the farmers were satisfied with advisory/diagnosis services, literature/publications services and technological interventions provided at Farmers Library. More than half and one third of the farmers had high and medium level of overall satisfaction, respectively towards at Farmers Library.

Way Forward

Various extension strategies like market led extension, ICT led extension and agrepreneurship led extension should be implemented in integrated approach to enhance the empowerment of farmers. Special importance should be given in increasing the income as well as profitability of the farmers by improving productivity and lowering of costs. Small and marginal farmers need to been courage to form Farmer Producer Organizations (FPOs) to improve their competitive position in the market. It will enable them to have economies of scale in procurement of the inputs, processing, marketing as well as export of the produces. It will also help them to have easy access to credit facilities. In collaboration with various organizations, farmers' library can play an important role to act as a facilitator in training the farmers to form FPOs. Farmers should be motivated for adopting improved practices of integrated natural resource management, integrated pest management and integrated plant nutrient management in their farms. They should be trained about post-harvest management and value addition of the produces as well as meeting the product quality standard necessary for export. Crop diversification and Integrated Farming System (IFS) will also contribute immensely to increase profitability and also to mitigate various risks arising in farms.

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