

KRISHI VIGYAN KENDRA BARH, PATNA
22th Extension Council Report, 2022
October- 2021 to March, 2022

1. Staff Position (Only S.S & H and S.M.S)

S. No.	Name	Post	Specialization	Date of joining	Mobile No.
1.	Dr. Kumari Sharda	Senior Scientist & Head	Home Science	07.05.2012	7549476543
2.	Dr. Mrinal Verma	SMS,	Agril. Engineering	25.07.2007	9431266300
3.	Dr. Bishnu Deo Singh	SMS	Extension Education	20.12.2007	9430806435
4.	Sri Rajeev Kumar	SMS	Soil Science	12.04.2012	9835133147

2. A. Achievement of training programme 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	03	08	67	03	11	11	78
ii	Agril. Engineering	07	216	04	25	0	241	04
iii	Extension Edu.	07	145	36	35	41	180	77
iV	Soil Science	14	296	37	44	06	340	43
	Total	31	665	144	107	58	772	202

B. Training Programme for Rural Youth (ON/OFF)

S. No.	Discipline	Course no.	No. of Beneficiaries					
			Others		SC/ST		Total	
			M	F	M	F	M	F
i	Agril. Engineering	01	20	0	07	0	27	0
ii	Extension Edu.	02	23	04	04	0	27	04
iii	Soil Science	01	11	01	0	0	11	01
	Total	03	43	4	11	0	54	4

C. Sponsored training programme (ON/OFF)

S. No.	Discipline	Course no.	No. of Beneficiaries					
			Others		SC/ST		Total	
			M	F	M	F	M	F
i	Agril. Engineering	02	56	04	14	03	70	07
ii	Extension Edu.	05	1416	71	115	94	1531	116
iii	Soil Science	04	306	45	67	15	373	60
	Total	11	1778	120	196	112	1974	183

* Sponsored by ATMA, Patna, State Department of Agriculture, BAMETI, Patna, Jal Shakti Abhiyan

E. Online Meeting /Training

S. No.	Discipline	Course no.	No. of Beneficiaries					
			Others		SC/ST		Total	
			M	F	M	F	M	F
i	Home Science	02	04	29	0	11	04	40
ii	Agril. Engineering	02	42	12	04	0	46	12
iii	Extension Edu.	03	55	10	7	2	62	12
iv	Soil Science	01	22	0	03	0	25	0
	Total	08	123	51	14	13	137	64

G. Special Programme.

S. No	Name of Programme	Date of Programme	Place of Programme	No. of Participant	Visit of VIPs.
1	Mahila Kisan Diwas	15.10.2021	KVK, Barh	77	
2	World Soil Day	05.12.2021	KVK, Barh	78	Sri, Vijay Shankar, Jila Parishad, Member, Barh
3	PM Live telecast (Natural Farming)	16.12.2021	KVK, Barh	348	
4	Kisan Diwas	23.12.2021	KVK, Barh	62	
5	World Woman Day	08.03.2022	KVK, Barh	264	
6	Kisan Mela cum Udhan Pradarshani	29- 30.03.2022	KVK, Barh, Patna	1105	DDC, Patna, DAO, Patna, ATMA, Patna, JDA, Patna

3. (A) FLD, 2020-21

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
Sabour Ardhjal	ICM	Improved cultivators	31	12.56	42.35	34.57	22.50	38697	76221	37525	0.97	32803	56659	23856	0.73
SRI (Sabour Ardhjal)	ICM	Improved cultivators	11	4.46	45.8	36.2	26.57	44661.36	82358.18	37696.82	0.84	41972.73	65110.91	23138.18	0.55

(B) Performance of the demonstration under CFLD on Pulse & Oilseed Crops during Rabi 2021-22:

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
Moong	INM & IPM	Improved cultivars, seed treatment, Sulphur application, weed management	27	10	2.6	2.2	20.2	12505.71	18240.00	5734.29	0.46	12220.00	15200.00	2980.00	0.25
Lentil	INM & IPM	Improved cultivars, seed treatment, bio fertilizer application, pest management	25	10	13.23	11.14	19.08	30560.80	79368.00	79368.00	2.60	30123.20	66840.00	36716.80	1.22
Chickpea	INM & IPM	Improved cultivars, seed treatment, IPM	25	10	16.79	13.23	28.37	32612.5	83960	50972	1.54	35252	66180	30928	0.87
Pea	INM & IPM	Variety, seed treatment, Biofertilizer application, pest management	25	10	15.97	13.56	18.28	28466.67	60673.33	32206.67	1.13	28392.59	51511.11	23118.52	0.81
Mustard	INM & IPM	Improved variety, sulphur@10 Kg/ha, Insect pest management	75	30	16.54	14.13	17.37	30501.22	107518.67	77017.45	2.52	30184.68	91858.00	61673.32	2.04
Arhar	INM & IPM	Improved variety, sulphur@10 Kg/ha, Insect pest management	26	10	14.29	12.53	14.33	28334.62	78607.69	50273.08	1.77	30076.92	68902.31	38825.38	1.29

4. Climate Resilient Agriculture Programme.

Seasons	Physical Target (per district)	Physical Target (No. of Demo)	Target achieved (No. of Demo)	Achievement (%)
Kharif (2021)	595	595	540	90.7
Rabi (2021-2022)	623	623	658	105.6
Summer (2022)	360			

5. ON Farm Trial, 2020-21

OFT 01 (Agriculture Engineering)

Assessment of different mulching materials in production of vegetable (Brinjal)

Result: - The trial was conducted in farmer's field in village Narayanpur under Naubatpur block of Patna. The vegetable selected for this trial was brinjal. Technology option was as follows: -

Farmers Practice – No mulching

TO1- Mulching with Paddy Straw

TO2- Mulching with Silver Black Plastic mulch

Different Parameters observed in the trial is as follows

Table -1 Effect of different type of mulching on irrigation, weed population

Sl No	Treatment	No of irrigation	Plant height(cm)	Weed population/m2
1	Farmers Practice (No mulching)	04	70.5	68
2	Straw mulching	01	74.2	-
2	Plastic mulching	01	76.6	-

Table-2 Effect of different type of mulching on yield and economics

S. N	Treatment	Yield (q/ha)	Gross Income (Rs)	Net Income (Rs)	BCR
1	Farmers Practice (No mulching)	146	175200	126000	2.56
2	Straw mulching	183	219600	165700	3.07
3	Plastic mulching	212	254400	195900	3.35

The result revealed that in the production of brinjal weed population was nil in case of mulching with paddy straw and mulching with plastic mulching material whereas the weed population was 68 per square meter in case of no mulching. The net income was Rs 195900.00 per hectare in case of plastic mulching which was more as compared to other methods.

OFT- 02 (Agriculture Engineering)

Assessment of different bag storage method to minimize losses in storage.

Result:- The experiment was conducted at two different locations in village Baghakol under Bikram Block and village Rana Bigha under Barh block. Five nos of hermetic bag was provided to ten no of farmers. Lentil was stored in the hermetic bag as well as also in PVC bag covered with plastic bag. 25 kg of lentil was put in the each bag for the assessment of the storage.

Table-1 The storage performance of hermetic bag as compared to other methods

Sl No	Treatment	Moisture content (%)		Germination (%)		Grain damage (%)	
		Before	After	Before	After	Before	After
1	Storage in plastic bag	12.6	14.9	89	76	0	8.0

2	Storage in thin PVC bag and putting in plastic bag	12.6	14.2	89	86	0	1.5
3	Storage in hermetic bag	12.6	13.4	89	88	0	0

The result revealed that there is negligible loss of 1% in germination of lentil in case of storage in hermetic bag as compared to 12% in case of storage in general plastic bag. The grain damage was nil in case of hermetic bag whereas it was 1.5% in storage in thin PVC bag putting in plastic bag and 8% in case of storage in plastic bag. The moisture content increased mere 0.8 % in case of hermetic bag whereas it was 2.3 % in case of storage in plastic bag.

OFT -03 (Extension Education)

S.N.	Title	Content Analysis of the Farmers friendly print literature.
1	Problem Diagnose	Lack of technical knowledge for farmers as per need
2	Thematic area	Capacity Building
2	Source of technology	BAU, Sabour
3	Technology option:	TO ₁ – Existing agricultural technical knowledge TO ₂ – Extension literature provided by KVK TO ₃ –Extension Literature provided by other agencies
4	No. of Respondents	60
5	Performance Parameters	Level of knowledge gained, Adoption, Production and Income

Distribution of respondents according to the Socio-Personal and psychological characteristics (N = 60)

S. No.	Variables	Categories	Frequency	Percentage
1	Age	Young Age	28	46.67
		Middle Age	20	33.33
		Old Age	12	20.00
2	Level of education	Read & Write	3	5.00
		Middle School	13	21.67
		High School	21	35.00
		Intermediate	17	28.33
		UG/ & Above	6	10.00
3	Annual income	Low (Below 25,000)	9	15.00
		Medium (25,001 -50,000)	21	35.00
		High (50,001 & above)	30	50.00
4	Operational land holding	Marginal (up to 1 Ha)	11	18.33
		Small (Above 1 & up to 2 Ha)	18	30.00
		Medium up to 5 ha	27	45.00
		Large above 5 ha	4	6.67
5	Social cohesiveness	Low	8	13.33
		Medium	36	60.00
		High	16	26.67
6	Mass media access	Low	7	11.67
		Medium	33	55.00
		High	20	33.33
7	Farming Experience	Low (<=5)	13	21.67

	(yrs.)			
		Medium (5-10)	26	43.33
		High (≥ 10)	21	35.00
8.	Extension Contact (Score)	Low (≤ 2)	6	10
		Medium (2-4)	22	36.67
		High (≥ 4)	32	53.33
9.	Social Participation (Score)	Low (≤ 2)	7	11.67
		Medium (2-4)	23	38.33
		High (≥ 4)	30	50.00
10.	Innovativeness (Score)	Low (≤ 2)	6	10.00
		Medium (2-4)	23	38.33
		High (≥ 4)	31	51.67

Level of Knowledge gained

Technology option	No. of trials	Content of the literature	Format of the literature	Level of knowledge gained
TO ₁ – Existing agricultural technical knowledge	20	Poor	Unsystematic	16%
TO ₂ – Extension literature provided by KVK	20	Very good	Systematic & Well designed	46%
TO ₃ –Extension Literature provided by other agencies	20	Good	Systematic	38%

Extent of adoption and Economics of wheat cultivation

Technology option	No. of trials	Extent of adoption of farmers practices	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
TO ₁ – Existing agricultural technical knowledge	20	21%	30.54	36500	54972	25256	1.50
TO ₂ – Extension literature provided by KVK	20	45%	37.5	35000	67500	34500	1.92
TO ₃ –Extension Literature provided by other agencies	20	34%	32.5	36000	58500	27500	1.62

Results: The gross return and net return is higher in case TO₂ – (Extension literature provided by KVK) in local language than the Extension literature provided by other agencies to the farmers. Therefore, Extension literature in local language provided by KVK not only increase level of knowledge, but also increase level of adoption of new package of practices and income of the farmers.

OFT- 04 (Extension Education)

S.N.	Title	Study on awareness and perception of farmers about Soil Health Card
1	Problem Diagnose	Farmers unawareness about soil health card benefits
2	Source of technology	BAU, Sabour

3	Technology option:	TO ₁ – Farmers not having Soil Health card TO ₂ – Farmers having soil health card and follow the recommendations TO ₃ - Farmers having soil health card but not following the recommendations
4.	No. of Respondents	60
4	Performance parameter	➤ Unable to calculate fertilizer dose as per the recommendation ➤ Awareness about SHC ➤ SHC is not in the Priority list of farmers ➤ Mindset about traditional fertilizer use pattern ➤ Constraints of capital at crucial time of farming ➤ Distance from Field to Lab ➤ Change in Productivity ➤ Waiting for others adoption success rate

Distribution of respondents according to their socio-personal, economic, communication & psychological profile

S.No.	Particulars	Category	Frequency (No)	Percentage (%)	Rank
1.	Age (yrs.)	Young (20 - 35)	14	25.00	III
		Middle (35 - 50)	28	45.00	I
		Old (50 & above)	18	30.00	III
2.	Gender	Male	60	89.17	I
		Female	0	10.83	II
3.	Caste	General	22	70.84	I
		OBC	32	20.83	II
		SC/ ST	6	08.33	III
4.	Education	Illiterate	04	14.17	IV
		Read & Write	09	07.50	V
		Primary School	07	06.67	VI
		Middle School	20	19.17	III
		Intermediate	12	24.16	II
		UG/ PG	06	28.33	I
5.	Occupation	Agriculture	60	65.00	I
		Service	01	04.17	IV
6.	Monthly Income (Rs.)	Below 10,000	14	07.50	III
		10,001 - 1 5,000	29	39.17	II
		15,001 & above	17	53.33	I
7.	Family Size	Small (< = 5)	04	07.50	III
		Medium (5 - 10)	26	39.17	II
		Large (> 10)	30	53.33	I
8.	Type of House	Kachcha	6	20.83	III
		Pacca	35	35.83	II
		Mixed	19	43.33	I
9.	Land Holding Size (ha.)	Small (< = 2)	12	35.83	II
		Medium (2.1 - 4)	38	43.33	I
		Large (> = 4.1)	10	20.83	III
10.	Farming Experience (yrs.)	Low (<=5)	9	17.50	II
		Medium (5-10)	23	65.83	I
		High (>=10)	28	16.67	III

11.	Extension Contact (Score)	Low (≤ 5)	04	07.50	III
		Medium (5-10)	22	81.67	I
		High (≥ 10)	34	10.83	II
13.	Social Participation (Score)	Low (≤ 5)	01	00.83	III
		Medium (5-10)	37	75.84	I
		High (≥ 10)	22	23.33	II
14.	Innovativeness (Score)	Low (≤ 5)	06	10.00	III
		Medium (5-10)	34	76.67	I
		High (≥ 10)	20	13.33	II

Distribution of respondents according to awareness about SHC

S.No.	Awareness Level (Score)	Frequency (No)	Percentage (%)	Rank
1.	Low (≤ 5)	09	17.50	III
2.	Medium (5-10)	37	57.50	I
3.	High (≥ 10)	14	25.00	II
Total		60	100.00	

Distribution of respondents according to their awareness about utility of SHC

S.No.	Response	Frequency (No)	Percentage (%)	Rank
1.	Yes	53	79.17	I
2.	No	07	20.83	II
Total		60	100.00	

Distribution of respondents according to their perception regarding SHC

S.No.	Condition	Frequency (No)	Percentage (%)	Rank
1.	Less Favorable	08	12.50	III
2.	Favorable	33	82.50	I
3.	Most Favorable	19	05.00	II

Distribution of respondents according to their attitude towards SHC

S.No.	Attitude	Frequency (No)	Percentage (%)	Rank
1.	Positive	49	80.83	I
2.	Negative	11	19.17	II
Total		60	100.00	

Distribution of respondents according to their constraints expressed by farmers in utilization of SHC

S.No.	Constraints	Frequency (No)	Percentage (%)	Rank
1.	Unable to calculate fertilizer dose as per the recommendation	31		V
2.	SHC is not in the Priority list of farmers	56		I
3.	Mindset about traditional fertilizer use pattern	51		II
4.	Constraints of capital at crucial time of farming	46		VIII
5.	Distance from Field to Lab	43		III
6.	Change in Productivity	39		IV
7.	Waiting for others adoption success rate	29		VI
8.	Irregularity of extension services	19		VII

Result - The gross return and B:C ratio is higher in case TO₂ – (recommendation of fertilizer application through training/ group meeting.) followed by recommendation of fertilizer application through Soil Health Card. Therefore, Technology option –I was found most effective and appropriate for enhancing paddy yield as well as for increasing adoption of recommended dose of fertilizer application and to increase their knowledge and perception towards Soil Health Card

OFT 05 (Soil Science)

Title: - Evaluation of Sulphur and boron application on crop yield of Mustard

1. Problem diagnosed: - Imbalance use of Fertilizer leads to low yield (approx 9.0 q/ha) and low Profitability.
2. Technological options :-
 - a. **Farmers Practice** : Use of N@ 75 kg/ha as Urea in two split & P₂O₅ @ 55 kg/ha
 - b. **Technological option I** : Use of Recommended of Fertilizer i.e N @ 60kg/ha (2 split i.e ½ basal and ½ at just before flowering), P₂O₅ @ 40 kg/ ha (basal), K₂O @ 40 kg/ ha (basal)
 - c. **Technological option II** : RDF+20 Kg S /ha

d. Technological Option III: - RDF + 20 Kg S/ha and 1 Kg B /ha

4. Source of technology: - BAU, Sabour
5. Production system and thematic area: - Rice-Mustard/Wheat cropping system.
6. Performance of the technology with performance indicators:-

Technological options	No. of branch /Plant	No of Siliqua/ branch	1000 seed weight(gm)	Grain Yield(q/ha)
Farmer Practice	14.5	172.2	5.2	9.0
Technical option I	18.2	230.7	5.9	11.9
Technical option II	19.8	243.7	7.18	13.3
Technical option III	21.2	343.83	7.38	17.65
SEM±	0.72	21.64	0.07	0.57
CD (0.05)	1.55	46.09	0.16	1.22
CV(%)	11.88	26.22	3.55	13.28

Post harvest Soil nutrient Status - pH-7.2, EC- 0.12dsm⁻¹, OC (%) -0.54, N-328.6, P₂O₅-16.4, K₂O-165.6, Fe- 14.2ppm, Mn -12.6ppm, Zn- 0.48ppm, Cu -1.48, S -9.2 ppm, B-0.36ppm

Economics analysis of the trial-

Technological options	Gross Cost(Rs)	Gross Return (Rs)	Net Return(Rs)	B:C Ratio
Farmer Practice	22400	40185	17785	0.79
Technical option I	24700	53595	28895	1.16
Technical option II	26800	59850	33050	1.23
Technical option III	27600	79425	51825	1.87

7. Final Recommendation For micro level Situation: - Application of S and Boron in the soils of Patna district found effective in enhancing yield of mustard.
8. Constraints identified and feed back for research: - Role of sulphur and boron is still unknown to many of the resource poor farmer and lack of knowledge is identified as major constraint for out scaling the technology.
9. Process at farmer's participation and their reaction: - Farmers actively participated in the programme

6. Soil sample analyzed.

Details	No. of Samples	No. of Farmers	No. of villages
Soil sample analysis	576	576	15

7. Other extension activities

Activities & sub activities	No.	No. of Beneficiaries
Scientist visit to farmers field	47	187
Farmer's visit to KVK	842	842
Diagnostic Visi	07	141
News paper coverage	10	Mass
Radio talk	04	Mass
Field Day	05	210
Kisan Goshthi	03	246
Advisory services/Helpline services	125	1249
Publication of Krishak Samachar	02	1000
Exposure Visit	09	450

8. Seed material produced at KVK, farm

S.N.	Crop	Variety	Area(ha)	Class	Production (q)	Remarks
1	Lentil	IPL-316	1.5	C/S	7.6	1 st weight
2	Gram	PG-186	3.5	F/S	33.9	1 st weight
3	Wheat	DBW-187	4.5	C/S	146.8	1 st weight
4		S. Nirjal	2.0	C/S	66.0	1 st weight
5	Khesari	Ratan	05	T/L	10.73	1 st weight
6	Rai	RH-725	1.2	T/L	10.65	1 st weight

09. Action Plan: October, 2021 to March, 2022

Home Science

Thematic Area	Title of Training	Qrt. No.	Duration	Venue	Participants/Trainees								
					SC		ST		Other		Total		
					M	F	M	F	M	F	M	F	T
Rural Youth													
Value addition	Value addition Mushroom	1 st Qtr.	01	ON/OFF	5	0	0	0	15	0	20	0	20
Value addition	Value addition Mango.	1 st Qtr.	01	ON/OFF	5	0	0	0	15	0	20	0	20
Agricultural Engineering (Practicing Farmer)													
Use of plastic in farming practices	Use f poly house/ poly tunnel for seedling raising	I st Qtr.	2	ON/OFF	2	0	0	0	23	0	25	0	25
Farm Machinery	Advantages of Laser Land Leveler	-Do-	2	ON/OFF	5	0	0	0	25	0	30	0	30
Farm Machinery	Different type of crop harvesting machines	-Do-	2	ON/OFF	5	0	0	0	15	0	20	0	20
Other	Advantages of summer ploughing	II nd Qtr.	2	ON/OFF	3	0	0	0	17	0	20	0	20
Other	Use of Combine harvester for wheat	-Do-	2	ON/OFF	3	0	0	0	17	0	20	0	20

	harvesting												
Agricultural Engineering (Rural Youth)													
RCT	Agricultural Mechanization and advantages of Farm Machinery	1 st Qtr.	5	ON/OF F	3	0	0	0	17	0	20	0	20
Repair of maintenance of farm implements	Repair and maintenance of different farm machinery	2 nd Qtr.	5	ON/OF F	3	0	0	0	17	0	20	0	20
Agricultural Engineering (Extension Functionaries)													
Micro Irrigation	Adoption of Baler for Crop Residue Management	1 nd Quarter	1	ON/OF F	0	0	0	0	15	0	15	0	15
Extension Education (Practicing Farmer)													
Group dynamics	Need and importance of farmers club/SHG	1 st Quarter	2	ON/OF F	3	0	2	0	10	5	15	5	20
Formation and management of SHGs	Formation and management of SHG	-do-	2	ON/OF F	3	0	2	0	10	5	15	5	20
Leadership Development	Importance of leadership in the development of Agriculture	-do-	2	ON/OF F	3	0	2	0	10	5	15	5	20
Mobilization of social capital	Effective utilization of social & natural resources.	-do-	2	ON/OF F	3	0	2	0	10	5	15	5	20
Entrepreneurial development of Farmers / youth	Development of entrepreneurship skill among Farmers	-do-	2	ON/OF F	3	0	2	0	10	5	15	5	20
Group dynamics	Need and importance of farmers club/SHG	2 nd Quarter	2	ON/OF F	3	0	2	0	10	5	15	5	20
Formation and management of SHGs	Formation and management of SHG	-do-	2	ON/OF F	3	0	2	0	10	5	15	5	20
Leadership Development	Importance of leadership in the development of Agriculture	-do-	2	ON/OF F	3	0	2	0	10	5	15	5	20

Mobilization of social capital	Effective utilization of social & natural resources.	-do-	2	ON/OFF	3	0	2	0	10	5	15	5	20
Entrepreneurial development of Farmers / youth	Development of entrepreneurship skill among Farmers	-do-	2	ON/OFF	3	0	2	0	10	5	15	5	20
Extension Education (Rural youth)													
Vermin culture	Vermin composting	1 st Quarter	3	ON/OFF	3	0	2	0	15	5	20	5	25
Entrepreneurship	Role of Entrepreneur in Agriculture	-do-	3	ON/OFF	3	0	2	0	15	5	20	5	26
ICT	Use of ICT in Agriculture	2 nd Quarter	3	ON/OFF	3	0	2	0	15	5	20	5	27
Integrated farming System	Goatery	-do-	3	ON/OFF	3	0	2	0	15	5	20	5	25
Formation and management of SHGs	Need and Importance of SHG / Farmers club	1 st Quarter	2	ON	5	0	0	0	15	0	20	0	20
Group dynamics	Significance of Group Farming	1 st Quarter	2	OFF	5	0	0	0	15	0	20	0	20
Market led Extension	Use of ICT Tools for market access.	2 nd Quarter	2	OFF	5	0	0	0	15	0	20	0	20
Leadership Development	Role & Importance of Leaders in managing Groups	2 nd Quarter	2	ON	5	0	0	0	15	0	20	0	20
Soil Science (Practicing Farmer)													
Soil health and fertility management	Importance of balanced fertilizer application in onion production	1 st Quarter	2	OFF	4	1	0	0	18	2	22	3	25
Soil and water testing	Importance of soil and water testing for better crop production	-Do-	2	OFF	4	1	0	0	18	2	22	3	25
Integrated nutrient management	Integrated nutrient management in paddy	-Do-	2	OFF	4	1	0	0	18	2	22	3	25
Production and use of	Vermicompost production techniques	-Do-	2	ON	4	1	0	0	18	2	22	3	25

organic input													
Micronutrient deficiency in crop	Importance of secondary and micronutrient in crop production	-Do-	2	OFF	4	1	0	0	18	2	22	3	25
Soil and water testing	Importance of soil and water testing for better crop production	-Do-	2	OFF	5	0	0	0	18	2	23	2	25
Soil fertility management	Nutrient management in maize	2 nd Quarter	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 Science (Rural Youth)													
Soil health and fertility management	Practical hand on soil testing using soil testing kit	1 st quarter	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	Vermicompost production and their marketing	2 nd quarter	3	ON	5	0	0	0	16	4	21	4	25
Production and use of organic	Blue green algae production technique	-Do-	3	ON	5	0	0	0	16	4	21	4	25

inputs													
Soil Science (Extension functionaries)													
Soil health and fertility management	Fertilizer recommendation for rice through crop manager (webapp)	1 st quarter	1	OFF	2	0	0	0	16	2	18	2	20
Integrated nutrient management	Integrated nutrient management in Paddy	-Do-	1	OFF	2	0	0	0	16	2	18	2	20
Micronutrient deficiency in crops	Fertilizer recommendation for rice through crop manager (webapp)	2 nd quarter	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

10. Frontline demonstration to be conducted* 2022

Sl. No	Season	Crop	Variety	Area in ha.	No. of Demonstration
1	Kharif	Paddy	R. Sweta	10	25
2		Madua		0.25	10
3		Turmeric	R. Sonia	01	40
4		Fodder crop	Napier / Berseem	02	40
5		Mushroom	Puwal Mushroom	10	10

11. On Farm Trail to be conducted* 2022

OFT: 01 (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	As there in bulk production of carrot in this area but the farmers are not using value added products of carrot and it is vested in the season.
3	Details of Technologies selected for Assessment	Farmers Practice- Local people consume fresh carrot as such as vegetables or juice. Tech Option I- Preparation of Carrot Jam Formulation - Ingredients 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 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	CFTRI, Mysore
5	Performance Indicator	Test, texture, colour and overall acceptabliling
6	Replication	10
7	Production system and thematic area	Value addition
8	Constraints identified	
9	Process of Farmer Participation	

OFT: 02 (Agricultural Engineering)

1	Title of On Farm Trial	Assessment of direct sowing of Rice by different methods
2	Problem diagnosed	To mush time consumed in transplanting
3	Details of Technologies selected for Assessment	Farmers Practice- Transplanting Tech Option I- DSR by Tractor operated Zero Till Drill Technology Option II- Sowing by DSR Machine(Inclined Plate Planter)
4	Source of Technology	BISA, BAU
5	Performance Indicator	Plant Height. No of Tillers, Yield, BC Ratio
6	Replication	10
7	Production system and thematic area	Wheat-Rice
8	Constraints identified	Irregular climatic condition affecting the productivity
9	Process of Farmer Participation	

OFT: 03 (Agricultural Engineering)

1	Title of On Farm Trial	Assessment of Happy seeder for wheat sowing under crop residue management
2	Problem diagnosed	Residue burning in the field after harvest of rice
3	Details of Technologies selected for Assessment	Farmers Practice- Broadcasting of wheat in the field Tech Option I- Sowing of wheat by Happy Seeder incorporating the crop residue Technology Option II- Removal of crop residue and sowing by Zero Till drill
4	Source of Technology	BAU Sabour
5	Performance Indicator	Soil status , no of plant/ m2 , no of irrigation, yield and BC Ratio
6	Replication	10
7	Production system and thematic area	Rice- Wheat
8	Constraints identified	Lesser time window for timely sowing of wheat
9	Process of Farmer Participation	

OFT: 04 (Extension Education)

1	Title	Assessing the Awareness level of Soil Health Card (SHC) in Paddy Cultivation
2	Problem diagnosed	Farmers awareness about benefits of Soil Health Card

3	Details of Technology	Farmers Practice – Farmers having no SHC and not applying recommended dose of fertilizers. Tech Option I - Recommendation of fertilizer application through training/ group meeting. Tech Option II - Farmers having Soil Health Card and follow the Recommendation.
4	Source of technology	BAU, Sabour, Bhagalpur
5	No. of Farmers	36
6	Production system and Thematic Area	Capacity Building
7	Constraints identified and Feedback of research	
8	Performance of Technology Performance Indicator	i. Level of Awareness (%), ii. Yield (qt./ha) iii. BC Ratio
9	Process of Farmers Participation & their reaction	

OFT: 05 (Extension Education)

1	Title	Effectiveness of Community Radio Programme on Awareness (knowledge) related to Nutritional and health wellbeing of Radio Listener
2	Problem diagnosed	Poor awareness related to Nutrition and health being among Radio Listener
3	Details of Technology	Tech Option I - Nutrition and health Awareness of Farmers not connected with C.R. Tech Option II - Nutrition and health Awareness of Farmers connected with C.R. Tech Option III - Nutrition and health Awareness of Farmers through SD Card
4	Source of technology	C.R. Compendium
5	No. of Farmers	36 Radio listener & Non Listener
6	Production system and Thematic Area	Capacity Building
7	Performance of Technology with performance indicator	i. Awareness level towards Nutrition, ii. Awareness level in health wellbeing, iii. Consumption pattern in food habit.
8	Final Recommendation for Micro level Situation	
9	Process of Farmers Participation and their reaction	

OFT: 06 (Soil science)

1	Title	Evaluation of different nutrient management options in Maize for higher productivity
2	Problem diagnosed	Limited availability of straight fertilizer leads to yield and income loss to farmers in maize production.
3	Technological option	Farmers Practice- 150:40:25:: N:P ₂ O ₅ :K ₂ O Kg/ha

		Technological Option I:- Recommended dose of fertilizer i.e 100:60:40 Kg N:P₂O₅:K₂O/ha Technological Option II:- Nutrient application through foliar spray as per following schedule a. Foliar spray of Nano urea @500 ml/acre and Nano DAP@250ml/acre at 10 days after sowing b. Foliar spray of Nano urea@500ml/are and Nano DAP@250ml/acre at 30 days after sowing c. Foliar spray of Nano urea@500ml/acre along with NPK 19:19:19 and NPK::0:0:50@ 1.25Kg/acre at just before flowering
4	Source of Technology	BAU, Sabour
5	Replication	07
6	Production system and thematic area:	Maize- Wheat production system
7	Performance of the technology with performance indicators	Plant height(cm), No. of cob/plant, No. of grain/cob, yieldq/ha and pre and post soil nutrient status
8	Constraints identified	Seed, herbicide (Atrazine), pesticide(Profenophos), fertilizer(urea, DAP and Potash), Nano urea, Nano DAP, NPK 19:19:19, NPK 0:0:50
9	Process of Farmer Participation	

12. Extension Activities

Nature of Extension Activity	No. of activities	Total		
		Male	Female	Total
Field Day	16	220	110	330
KisanMela	4	100	50	150
KisanGhosthi	11	100	50	150
Method Demonstrations	10	50	10	60
Group meetings	8	200	100	300
Lectures delivered as resource persons	5	100	50	150
Advisory Services	150	200	100	300
Scientific visit to farmers field	40	80	40	120
Diagnostic visits	300	200	50	250
Exposure visits	2	100	25	125
Soil health Camp	2	400	100	500
Soil test campaigns	2	300	100	400
Scientific visit to farmers field	35	781	241	1022
Farmers visit to KVK	500	800	300	1100
Swatchta Hi Sewa	15	450	154	604

13. Seed material produced at KVK, farm 2022

S.N.	Crop	Variety	Area(ha)	Remarks
1	Moong (Summer)	IPM 2-3	3.0	F/S
2	Paddy (Kharif)	Sabour Harshit	3.0	C/S
