

PROFORMA FOR ANNUAL REPORT 2022(1st January-31st December 2022)

1. GENERAL INFORMATION ABOUT THE KVK

Krishi Vigyan Kendra, Munger has been established in April, 1979 according to sanction order 22(6)79 Edn. 11 dated 23.04.1979. It is the oldest KVK of RAU Pusa in later of BAU Sabour Bhagalpur. It is situated on the southern bank of north flowing, holy Ganga. It is located at latitude(24°57'N to 25°29'N), longitude(86°21'E to 86°42'E) & altitude (30M to 65M) respect to MSL. It is situated at eastern outskirts of Munger town. It is 2 km from Munger Station & 10 Km distance from Jamalpur railway station. It is situated along Sitakund road near Sadar block, Munger.

1.1. Name and address of KVK with phone, fax and e-mail

Address	Telephone/ Mobile		E mail	Whats App (office/Head)
Krishi Vigyan Kendra, Munger P.O. Shankarpur, Distt. Munger – 811201, Bihar	Office	FAX		
	7019790873	-	mungerkvk@gmail.com mungerkvk2020@gmail.com	7019790873

1.2 .Name and address of host organization with phone, fax and e-mail

Address	Telephone		E mail
	Office	FAX	
Bihar Agricultural University Sabour (Bhagalpur), Bihar PIN Code – 813210			vcbausabour@gmail.com www.bausabour.ac.in

1.3. Name of the Senior Scientist and head with phone & mobile No.

Name	Telephone / Contact		
Senior Scientist and head	Residence	Mobile	Email
Smt Rita lal	7019790873	7019790873	mungerkvk@gmail.com

1.4. Year of sanction of KVK : 1979
(Reference of Sanction Order) : 22(6) 79 Edn. 11 dated 23.04.1979.

1.5. Staff Position (as on 31st December 2022)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline/	Pay Scale with present basic	Date of joining	Permanent/Temporary	Category (SC/ST/ OBC/ Others)
1	Senior Scientist & Head	Vacant	-	-	-	-	-	-
2	Subject Matter Specialist	Smt. Rita. Lal	SMS and Incharge Senior Scientist & Head	Home Science	139900 (GP-7000) Level-11	31.08.1983	Permanent	OBC
3	Subject Matter Specialist	Mukesh Kumar	SMS	Horticulture	98200 (GP-6000) Level-10	25.7.2001	Permanent	OBC
4	Subject Matter Specialist	Er. Ashok Kumar	SMS	Agri. Engineering	92500 (GP 6000) Level-10	12.11.2007	Permanent	OBC
5	Subject Matter Specialist	Dr. Vinod kumar	SMS	Agronomy	73200 (Gp 5400) Level-10	24.04.2012	Permanent	UR
6	Subject Matter Specialist	Vacant	SMS	-		-	-	-
7	Subject Matter Specialist	Vacant	SMS	-		-	-	-
8	Farm Manager	Vacant	-	-		-	-	-
9	Programme Assistant	Sri Prahalad Kumar	Programme Assistant (LAB)	Programme Assistant (LAB)	47600 (GP 4200) Level-6	17.12.2012	Permanent	OBC

10	Computer Programmer	Sri.Prem Chandra Maurya	Programme Assistant	Computer	46200 (GP 4200) Level-6	14.05.2013	Permanent	UR
11	Accountant / Superintendent	Sri Kaushal Kishore Chaudhary	Assistant	Assistant	46200 (GP 4200) Level-6	12.04.2013	Permanent	OBC
12	Stenographer	Sri Dharmendra Kumar	Stenographer	Stenographer	33300 (GP 2400) Level-4	02.07.2013	Permanent	UR
13.	Driver	Sri Sanjeev Kumar Singh	Driver	Driver	27600 (GP 2000) Level-3	11.05.2015	Permanent	OBC
14.	Driver	Sri Jitendra Kumar	Driver	Driver	27600 (GP 2000) Level-3	21.05.2015	Permanent	SC
15.	Supporting staff	Malti Devi	Messenger	Messenger	38300 (GP1900) Level-2	09.08.1991	Permanent	OBC
16.	Supporting staff	Vacant	Messenger	-	-	-	-	-

1.6. Total land with KVK (in ha) : 11.18

S. No.	Item	Area (ha)
1	Under Buildings	0.65
2.	Under Demonstration Units	0.73
3.	Under Crops	6
4.	Orchard/Agro-forestry	1
5.	Others with details	2.8
	Total	11.18

1.7. Infrastructure Development:
A) Buildings and others

S. No.	Name of building	Not yet started	Completed up to plinth level	Completed up to lintel level	Completed up to roof level	Totally completed	Plinth area (sq.m)	Under use or not*	Source of funding
1.	Administrative Building					Completed	302.86	Use	ICAR
2.	Farmers Hostel					Completed	422.06	Use	ICAR
3.	Staff Quarters (6)					Completed	803.80	Use	ICAR
4.	Piggery unit								
5	Fencing					Partially Completed	735 m		ICAR
6	Rain Water harvesting structure (Farm pond)						10000	Not	Time to time renovate but feeder channel & command area for rain water harvesting is less
7	Threshing floor					Completed	325.22	Use	ICAR
8	Farm godown					Completed	91	Use	ICAR
9.	Dairy unit	To be repaired obsolete building of KVK for IFS Model III by DWP,BAU,Sabour							
10.	Poultry unit								
11.	Goatary unit								
12.	Mushroom Lab						290'		
13.	Mushroom production unit					300sq.f. Utilize in spawn & mushroom production			RKVY
14.	Shade house					Completed	300	Use	NHM
15.	Soil test Lab					Completed	23.73	Use	ICAR
16	Others. Please Specify								
17.	Hi- tech polyhouse					Completed	18.58	Use	NHM
18.	Vermin compost unit					Complete	800	Use	RKVY
19.	Research & demonstration unit					Complete	2 ha	Use	ITC &KVK Munger
20.	Yantra Shed					Completed	210	Use	CRAP

* If not in use then since when and reason for non-use

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total km. Run in 2022	Present status
Bolero SLE M-II	28.03.2017	674301	21205Km	serviceable
Tractor	13.01.2006	369722.00	195hour	Good
Motorcycle(BRO-8F9278)	28.10.2016	59600	1205Km	serviceable
Motorcycle(BRO-8H1343)	31.03.2016	59600	1957Km	serviceable

C) Equipment & AV aids

a. Lab equipment

Water distillation unit	2006 received from DEE, RAU, Pusa	48000.00	Serviceable	ICAR
Stabilizer (1KVA)	Do	4000.00	Serviceable	ICAR
Electrical Balance with Accessories	Do	98000.00	Serviceable	ICAR
Physical Balance	Do	7345.00	Serviceable	ICAR
Electrical Conductivity Meter	Do	10170.00	Serviceable	ICAR
Horizontal Shaker (Motorized)	Do	25425.00	Serviceable	ICAR
Willey Mil Grinder	Do	25425.00	Serviceable	ICAR
Digestion and distillation system	Do	30510.00	Serviceable	ICAR
Digital PH Meter	Do	10170.00	Serviceable	ICAR
Spectro Photometer	Do	61080.00	Serviceable	ICAR
Hot Plate (Thermostat)	Do	90401.00	Serviceable	ICAR
Hot Air Oven	Do	15259.00	Serviceable	ICAR

b. Farm machinery

Mahasakti Tractor with Accessories	13.01.06	369722.00	Serviceable	ICAR
Generator (5 KVA) with Kirloskar diesel engine (8 HP)	April 06	Received from DEE RAU, Pusa, Samastipur	Serviceable	Do
Kirloskar Pumpset (8 HP)	April, 06	Do	Not Serviceable	Do
Tractor operated Multi Crop power thrasher (Harmba)	2010	85000/- Purchased by KVK from farm development	Serviceable	RAU, Pusa Farm Dev. Fund
Hand winnower	2010	5000.00 Purchased by KVK from farm development	Serviceable	Do
Motorized Mini Dal Mill	2012	Purchase by KVK, Munger under Post-harvest management CAE, RAU, Pusa Rs 45000	Serviceable	Post-harvest management CAE, RAU, Pusa
Sprinkler set	10.08.2012	Rs. 47062.00 Purchased by KVK as DEE BAU Sabour order	Serviceable	KVK, ICAR
Tractor operated harmba Multicrop Thresher	25.10.2013	Rs. 99450.00 Purchased from Vikram farm machinery, Bekapur Munger	Serviceable	KVK, ICAR

Self-propelled Reaper	3.12.2013	Rs. 95400.00 Purchased from Vikram farm machinery, BekapurMunger Under KVK's Fund	Serviceable	KVK, ICAR
c. AV Aids				
Digital Camera	31.03.07	14500.00	serviceable	ICAR
Soil Test Lab. Implements	13.02.06	322524.00	serviceable	Do
Computer	13.09.2000	95198.00	serviceable	Do
Godrej Chair (30)	23.11.2013	1142380.00	serviceable	Do
Godrej table (4)	23.11.2013	16337.00	serviceable	Do
Godrej Chair(12)	23.11.2013	83697.00	serviceable	Do
Godrej Chair (1)	23.11.2013	11937.00	serviceable	Do
Godrej Char (5)	23.11.2013	17738.00	serviceable	Do
Godrej Table (1)	23.11.2013	17059.00	serviceable	Do
Godrej Table (large)	23.11.2013	40102.00	serviceable	Do
Godrej Almirah (7)	23.11.2013	105194.00	serviceable	Do
Godrej Chair	23.11.2013	3547.56	serviceable	Do
UPS	07.12.2013	5680.00	serviceable	Do
Steel bed.(29)	17.12.2013	97875.00	serviceable	Do
Plastic Chair & Table for Kisan Hostel	29.01.2014	27605.00	serviceable	Do
Plastic Chair training (30) & Table (5)	March 2017	84000.00	serviceable	Do
Soil Testing Kit STFR	Nov 2017	86000.00	serviceable	Do
Computer Chair(11pc)	30.3.2019	49500.00	serviceable	Do
Office Sofa 5 seater	30.03.2019	49000.00	serviceable	Do
Voltas A/C split 2tan	29.03.2019	49,999=00	serviceable	Gem portal
Steel Almirah 05 ps	30.04.2019	49,995=00	serviceable	Gem portal
Guard Stabilizer	22.05.2019	5500=00	serviceable	Gem portal
Iron office table 09 ps	22.10.2019	44,550=00	serviceable	Gem portal
Boss chair 02ps	09.11.2019	18,000=00	serviceable	Gem portal
Electronic weighing machine	March 2019	5456.00	serviceable	BSDM
HP inkjet printer	March 2019	11400.00	serviceable	Do
UPS luminous 600 VA	March 2019	2350.00	serviceable	Do
VOLTAS WATER COOLER	March 2019	25000.00	serviceable	BSDM
KENT RO FILER	March 2019	17995.00	serviceable	BSDM
Hp Desktop and Monitor	March 2019	37995.00	serviceable	BSDM
Excide Battery+ Inverter	March 2019	20600.00	serviceable	BSDM
Hand compressor sprayer	09.02.2019	6000.00	serviceable	BSDM
Godrej refrigerator	05.03.2019	23350.00	serviceable	BSDM
Channel rack 6 pcs	20.03.2019	21240.00	serviceable	BSDM
Alumimium Top 2pcs	23.11.2019	8812.00	serviceable	BSDM
Iron Cholni 1 pce	23.11.2019	265.00	serviceable	BSDM
Hp printer 1pce	05.03.2019	4661.00	serviceable	BSDM
Hp Desktop 1pce	05.03.2019	24538.00	serviceable	BSDM
Exide Battery 1pce	05.03.2019	12500.00	serviceable	BSDM
Micro teck Inverter 1pce	05.03.2019	4,600.00	serviceable	BSDM
Godreg Freeze 1pce	05.03.2019	23350.00	serviceable	BSDM
UPS 1 Pcs	05.03.2019	3898.00	serviceable	BSDM
Plastic chair 50 pes	29.03.2019	28600.00	serviceable	SCSP
Moving chair 4 PCs	29.03.2019	13600.00	serviceable	SCSP
Khetia 8 pes	28.03.2019	42000.00	serviceable	SCSP
Trolley 2 wheel	23.3.2019	9000.00	serviceable	NHM
Battery operated sprayer 16Ltr.2pce	22.2.2019	6400.00	serviceable	NHM
Water can 10Ltr 2pcs	22.2.2019	800.00	serviceable	NHM

Seceteare (Regular) 3Pieces	22.2.2019	1125.00	serviceable	NHM
Secular Motar 3 Pieces	22.2.2019	1740.00	serviceable	NHM
Porlc Saw 2 Pieces	22.2.2019	1770.00	serviceable	NHM
Weeder 3 Pieces	22.2.2019	270.00	serviceable	NHM
Garden Hoe 1Pieces	22.2.2019	345.00	serviceable	NHM
Budding Knife 2Pieces	22.2.2019	560.00	serviceable	NHM
Sword 2 Pieces	22.2.2019	640.00	serviceable	NHM
Khurpe 3Pieces	22.2.2019	330.00	serviceable	NHM
Siccle 3 Pieces	22.2.2019	495.00	serviceable	NHM
Head shear 2 Pieces	22.2.2019	1350.00	serviceable	NHM
Drill Heok 1 Pieces	22.2.2019	440.00	serviceable	NHM
Hand Rake 2 Pieces	22.2.2019	460.00	serviceable	NHM
Bulb planter 3 Pieces	22.2.2019	645.00	serviceable	NHM

D) Farm implements

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
M.B. Plough	29.03.06	18700.00	Serviveable	ICAR
9 Tyne Cultivator	29.03.06	10500.0	Serviceable	Do
6 Tynes Zero Till Seed cum fertilizer dirll (2 Nos.)	2007	Received from DEE, RAU, Pusa	Serviceable	Do
Zero till seed cum fertilizer drill (9 tyne)	2011	Received from RKVY, RAU, Pusa	Non Serviceable	RKVY fund, RAU, Pusa
Rotavator (TD) (5' width)	2011	Received from RKVY, RAU, Pusa	Not Serviceable	Do
Power reaper (TD)	2011	Received from RKVY, RAU, Pusa	Serviceable	Do
Three bottom disk plough (TD)	2011	Received from RKVY, RAU, Pusa	Serviceable	Do
Nine tine zero till seed cum fertilizer drill		Received from CIAE, Bhopal, M.P under Mechanization	Serviceable	CIAE, Bhopal/ICAR
Rotavator	18.10.2013	Rs. 99500.00 Purchased from Vikram farm machinery, Bekapur Munger	Serviceable	KVK, ICAR
Conoweeder	2013	-	Serviceable	CAE, Pusa Samastipur
Drum Seeder	2013	-	Serviceable	CAE, Pusa Samastipur

1.8. Details SAC meeting* conducted in the year

Sl.No.	Date	Number of Participants	Salient Recommendations	Action taken	If not conducted, state reason
1.	15.09.2022	42	-	-	-

* Salient recommendation of SAC in bullet form

a copy of SAC proceedings along with list of participants has been cited in Annexure-II

2.a. District level data on agriculture, livestock and farming situation (2022)

2.a 1.

S. No	Farming system/enterprise
1	Rabi : Wheat, maize, gram, lentil, linseed, pea, mustard, pointed gourd, bottle gourd, bitter gourd, brinjal, potato, Tomato, Cabbage & Sugarcane.
2	Kharif : Paddy, Maize, Red gram, millets.
3	Zaid : Mungbean, cucumber & different types of melons & mentha
4	Horticultural Crop : Mango, Bael, Guava, Jamun, Jackfruits etc.

*Source – District Agriculture Department & ATMA, Munger

2.a 2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics
1	IIIA (Regional) 04(National)	Sandy loam(Diara), clay loam (tal) & loamy soil (Hilly Plain)pH = 6.5 to 8, organic carbon = 0.5 to 1% Available N:P:K (Kg/ha) = 200-400 N : 10 – 100 P : 150 – 300 K Average max. Temperature – 38°C Average low. Temperature – 7°C Average Relative humidity = 52% Average rain fall-1120mm, crop intensity 152%

2.a3. Agro ecological situation

S. No	Agro ecological situation	Characteristics
1	Diara	Shallow tubewells have been dug & plastic casing or bamboo casing is used to lift ground water for irrigation. Flood prone area consists of sandy loam and sandy soil(entisols) having fertile alluvial soil for rabi crops. It is gangetaic plain area.
2	Tal	Tal soil (Vertisols) C- content good, Low content in P & K, PH – 6.7 to 7.3. Tal land remains fully submerge by water in kharif and only rabi crops have been cultivated as mono cropping system. Tal soil has high water holding capacity in micro pore space of clay black soil. It is suitable for pulse & oilseed crops.

3	Hilly Plain	Hilly plain red soil (Oxisol), like Chhota Nagpur soil, pH 5.5 to 7.3 & oxisol has high infiltration rate of water and less water holding capacity, crops which require less water are cultivated in this hilly plain area. Most crops are grown in rainfed situation due to lack of deep tubewell
4	Hilly	Sloppy land (slope >1.5%) is found in hilly area in which paddy and other perennial fruit/forest crop are cultivated by deforming land with bench, bund and terracing method. Watershed management programmes have been conducted by Government & NGOs.

2.a-4. Soil type

S. No	Soil type	Characteristics	Area in ha
1	Sandy loam	Diara land (Entisols) poor in C content, N & P low, highly alkaline, PH – 6.9 to 7.7	16030
2	Clay & clay loam	Tal soil (Vertisols) C- content low, Low content in P & K, PH – 6.7 to 7.3	5500
3	Loamy Soil	Hilly plain (Oxisols) soil, High infiltration rate, like Chhota Nagpur soil. pH 5.5 to 7.3	21200

2.a-5. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (q)	Productivity (q/ha)
1	Paddy	12200	268400	22
2.	Wheat	22300	579800	26
3.	Rabi Maize	7130	327980	46
	Kharif Maize	4100	86100	21
4.	Gram	6170	67870	11
5.	Lentil	9190	114875	12.5
6.	Pea	3300	39600	12
7.	Rai/Mustard	3270	42510	13
8.	Tisi (Line Seed)	85	765	9
9.	Sunflower	26	182	7
10.	Summer Paddy	0	0	0
11.	Summer Maize	130	4420	34
12.	Summer Moong (Moong bean)	175	1750	10
13.	Til	176	1408	8
14.	Babycorn	6	42	7
15.	Red Gram	350	5250	15
16.	Fruit	4145	0	
	i. Banana	30	11850	395
	ii. Citrus	375	36000	96
	iii. Guava	310	24800	80
	iv. Litchi	81	6075	75
	v. Mango	3300	257400	78
	vi. Papaya	18	8370	465
	vii. Ber	13	663	51
	viii. Aonla	18	216	12
17	Vegetables	4531	0	
	i. Brinjal	265	49025	185
	ii. Cabbage	85	18275	215
	iii. Cauliflower	675	135675	201
	iv. Okra	55	5775	105

	v. Onion	235	35250	150
	vi. Pea	1200	132000	110
	vii. Potato	320	62400	195
	viii. Sweet Potato	85	24650	290
	ix. Tomato	578	137564	238
	x. Carrot	11	1067	97
	xi. Radish	115	15870	138
	xii. Cucumber	175	42875	245
	xiii. Capsicum	7	266	38
	xiv. Pointed Gourd	565	97180	172
	xv. Watermelon	160	33600	210
18	Flower	35	665	19
19	Mushroom	10190	12737.5	1.25 kg mushroom per kg straw
20	Aromatic Plants	85	6375	75 litre/ ha (mentha oil)
21	Medicinal Plant	285	17670	62
22	Spices	380	3230	8.5

2.a-6. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
January 2022	5.1	20.8	10.2	59-99
February 2022	23.9	23.6	10.4	88-98
March 2022	0.3	35.4	16.2	76-96
April 2022	12	39.4	23.8	30-40
May 2022	87	35.6	24.0	30-38
June 2022	165.5	36.4	26.6	35-45
July 2022	305.7	35.7	23.1	56-98
August 2022	271.1	33.6	24.8	64-99
September 2022	231.7	32.4	25.2	70-90
October 2022	106.2	31.8	20.2	58-88
November 2022	32.4	31.3	13.2	32-93
December 2022	12.4	27.4	11.5	38-99
Cumulative rainfall	104.44			

2.a-7. Production and productivity of livestock, poultry, fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
Crossbred	46000	828000 lit	18Litre /day
Indigenous	62110	124220 lit	2 Litre /day
Buffalo	60310	723720 lit	12 Litre / day
Draft Animal	4910	2005 hp	0.5hp
Sheep	7620	53340 wools	7kg wool/sheep

Goat 1	22140	154980 kg	7 kg/goat meat
Pigs	8140	105820 kg	13 kg/pig
Poultry			
Hens/Layer	65800	182750 kg meat +5527200 eggs	1.25 kg/month/Hen/Broiler & average 8 eggs/ layer/ month
Broiler	80400		
Duck	1810	1810 kg	1.0 kg/month
Fish	25	550 quintal	22 quintal/ha.

2.a-8 Details of Mechanization status (2022)

Sl. No.	Name of implement	No. of farm implements/machinery
1	Tractor	1504
2	Power tiller	565
3	Pumping sets(Diesel engine + centrifugal pump)	2430
4	Irrigation pipes (PVC)	51200(m)
5	State tube well	35
6	Zero till seed cum fertilizer drill	182
7	Rotavator	420
8	Power thrasher	2340
9	Sprinkler set	485
10	Chaff cutter	1630
11	Combine harvester	12
12	Reaper	147
13	Mould board plough	2710
14	Harrow	2220
15	Cultivator	2210
16	Leveler	88
17	Sprayer	9310
18	Cono Weeder,	15400
	Power weeder	58
19	Dug well	1001
20	Bamboo boring	145
21	Total Irrigated Area – 26657.35 ha. (At present year only 7564 ha due to scarcity of rainfall.)	a. Canal = 19936 ha. b. Tube well = 412.5 ha. c. Pond – 258.9 ha d. Well -192 ha e. Other source = 5858.26 ha.
22.	Net sown area	66668 ha

2.b Details of operational area / villages (2022)

Sl. No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Munger	Dharhara	Amari	Paddy & wheat	Low productivity due to disease & pest occurrence high input cost, weed problem and poor water management	HYV, RCT & Irrigation water management
2	Munger	Asarganj	Chaurgaon	vegetable & Paddy cultivation	Low fertilizer use, low productivity, lackness of mechanization, poor water management & nursery management.	water management & fertilizer application methods .
3.	Munger	Jamalpur	Farda	Gram, lentil, Rai, wheat & Pointed gourd	Bad Irrigation practices & lack of processing & mechanization	Processing, irrigation management, mechanization & crop production.
4.	Munger	Sadar Munger	Hasanpur	Vegetable, Mushroom	Poor water management low productivity with high inputs & lack of adoption of improved variety.	Line sowing of crops
5.	Munger	Bariyarpur	Raghunathpur	Wheat, Maize & Moong	Poor water management low productivity with high inputs & lack of adoption of improved variety.	Line sowing high of high yielding variety of cereal crops

2. c. Details of village adoption programme:

Name of the villages adopted by Senior scientist and head and SMS in 2022) for its development and action plan

Name of village	Block	Action taken for development
Hasanpur	Sadar Munger	❖ OFT, Farmers training, gosthi, Field visit, Field day, awareness and kisan chaupal have been organized at Hasanpur village. ❖ Farmers of this village have also been sent to different Kisan gosthi, Kisan Mela and other workshop by KVK , Munger. ❖ Front Line Demonstration on mushroom production conducted by KVK, Munger ❖ Trainig of rural youth has been performed ❖ BAUNewsletter.KVK Munger newspaper & leaflets of different packages of practices(field crops, horticultural crops, nutritional gardening, conservation agriculture) have been distributed among the farmers of the Hasanpur Village.
Kalyantola	Bariyarpur	❖ Training, kisan chaupal, Field visit, FLD & diagnostic survey have been conducted. ❖ Swachhata Awareness programme has been conducted. ❖ Farm women & farmers have been sent to different places for exposure visit.
Rataitha	Haveli Kharagpur	❖ Training, Kisan chaupal, Field visit & awareness programme have been conducted. ❖ Farmers have been taken to Kisan Mela at BAU, Sabour as exposure visit.

Maheshpur	Tarapur	❖ Training, Kisan chaupal, & awareness programme have been conducted.
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2.1 Priority thrust areas

S. No	Thrust area
1.	Productivity enhancement in Rice-Wheat cropping system
2.	Natural Resource conservation and management
3.	Livestock production & management
4.	Watershed management& plantation of horticultural plants.
5.	Entrepreneurship development among farm women and rural youth
6.	Mechanization in Agril.

Publication by KVKs							
Item	Number	No. circulated	No. of Research papers in NAAS rated Journals	Highest NAAS rating of any publication	Average NAAS rating of the publications	Details of awarded publication, if any	Details of Award given to the publication
Research paper							
Seminar/conference/ symposia papers	2	-					
Books							
Bulletins							
News letter	5	5000					
Popular Articles	4	4					
Book Chapter							
Extension Pamphlets/ literature	18	18000					
Technical reports	8	78					
Electronic Publication (CD/DVD etc)							
TOTAL	37	23082					

3.1.1 Achievements on technologies assessed and refined

OFT -1

1.	Title of On farm Trial	Assessment of Integrated nutrient management on profitability and Productivity on paddy
2.	Problem diagnose	Low profitability due to excess use of chemical fertilizer.
3.	Details of technologies selected for assessment/refinement	Farmers Practice: 150:60:40 NPK kg /ha Technology Option 11: 100 %RDF (120:60:40 NPK kg /ha) Technology Option 12: 75 % RDF (90:50:30 NPK kg /ha)+ Blue green algae 10kg /ha Technology Option 13: 75% (RDF 90:50:30 NPK kg /ha)+ Azotobactor@5 ml/kg seed + PSB @ 5 ml/kg seed
4.	Source of Technology	BAU, Sabour
5.	Production system and thematic area	Irrigated, Rice-wheat cropping system & INM
6.	Performance of the Technology with performance indicators	Maximum yield, net return and BC ratio obtained with integrated supply of 75 % RDF + BGA 10 kg/ha in transplanted rice
7.	Final recommendation for micro level situation	Integrated supply of 75 % RDF + BGA 10 kg/ha in transplanted rice is recommended for cultivation
8.	Constraints identified and feedback for research	Unbalance use of chemical fertilizer & proper application of biofertilizer & blue green algae in paddy crop is tedious at farmers' field.
9.	Process of farmers participation and their reaction	Directly face interaction with farmers to motivate through training, kisan choupal programme and them to conduct OFT on INM in paddy.

Title : Assessment of Integrated nutrient management on profitability and Productivity on paddy

Thematic area : Integrated nutrient management

Problem definition : Low profitability due to excess use of chemical fertilizer.

Technology assessed:

Farmers Practice: 150:60:40 NPK kg /ha

Technology Option 11: 100 %RDF (120:60:40 NPK kg /ha)

Technology Option 12: 75 % RDF (90:50:30 NPK kg /ha)+ Blue green algae 10kg /ha

Technology Option 13: 75% (RDF 90:50:30 NPK kg /ha)+ Azotobactor@5 ml/kg seed + PSB @5 ml/kg seed

Table: Integrated nutrient management on profitability & Productivity of transplanted rice

Technology option	No. of trials	Average Tiller population (tillers/ m ²)	Yield component			Disease/ insect pest incidence (%)	Grain Yield (q/ha)	Straw Yield (q/ha)	Cost of cultivation(Rs./ha)	Gross return (Rs/ha)	Net return(Rs./ha)	BC ratio
			Av. Ear length (cm)	Av. No. of grain per ear	Av. Test wt. (1000 grain wt.)							
Farmer practice	7	177	16.0	111	19.9	11-14	28.6	46.4	39220	61586	22366	1.57
Tech Option – 1		209	16.7	137	20.7	9-11	35.4	50.9	38110	74718	36608	1.96
Tech Option – 2		239	17.6	161	21.6	7-8	40.8	62.3	35460	86904	51444	2.45
Tech Option – 3		224	17.2	145	21.1	8-9	38.9	60.7	36140	83246	47106	2.30
						CD	5.99	9.75				
						SEM	2.00	3.26				
						Cv	14.76	15.64				

Results: T.O.2 was found the best technical option in terms of maximum no. of tillers per plant(239), maximum av. Length (17.6 cm), highest number of grain per ear (161), maximum test wt (21.6 gm), less infestation of pest, maximum yield (40.8 q/ha) & B:C ratio (2.45) followed by T.O.-3, TO-1 & F.P. respectively.

OFT – 2

1	Title of On farm Trial	Assessment of Integration of fertilizer in different form on yield of lentil
2	Problem diagnose	Injudicious use of chemical fertilizer
3	Technological Options: Technology Details	Farmer Practice: Seed Treatment + RDF(25:40:0NPK kg/ha) 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)
4	Source of Technology	OFT finalization workshop, BAU, Sabour
5	Production system and thematic area	Fallow/Rice- lentil cropping system and IWM
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	Result Awaited
9	Process of farmers participation and their reaction	Result Awaited

Title : Assessment of Integration of fertilizer in different form on yield of lentil
Thematic area : Integrated Nutrient management

Problem definition: Injudicious use of chemical fertilizer

Technology assessed:

Farmer Practice: Seed Treatment + RDF(25:40:0NPK kg/ha)

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 & cost economics

Technology option	No. of trials	Average Weed population (weed/ m ²)	Yield component			Disease/ insect pest incidence (%)	Yield (q/ha)	Cost cultivation(Rs./ha)	Gross return (Rs/ha)	Net return(Rs./ha)	BC ratio
			Av.no. branch/ plant	Av.No. of pods per ear	Av.Test wt. (1000 grain wt.)						
Farmer practice	7										
Tech Option – 1											
Tech Option – 2											
CD											
SEM											
Cv											

Results: Awaited

OFT 3

1	Title of On farm Trial	Diversification of rice-based cropping systems
.		
2	Problem Diagnosed:	low profitability of existing cropping system
.		
3	Technological Options: Technology Details	Farmer Practice: Rice – Wheat (prominent cropping system of district) Technological Option1: Rice- Maize + Potato Technological Option2: Rice-Maize + Vegetable Pea Technological Option3: Rice-wheat –Green gram.
.		
4	Source of Technology	OFT finalization workshop, BAU,Sabour
.		
5	Production system and thematic area	Rice- wheat cropping system and Crop diversification.
.		
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	Result Awaited
.		
9	Process of farmers participation and their reaction	Result Awaited
.		

Title : Assessment of Diversification of rice-based cropping systems

Thematic area :crop diversification

Problem definition: low profitability of existing cropping system

Technology assessed:

Farmer Practice: Rice – Wheat (prominent cropping system of district)

Technological Option1: Rice- Maize + Potato

Technological Option2: Rice-Maize + Vegetable Pea

Technological Option3: Rice-wheat –Green gram.

Table: Effect of Diversification of rice-based cropping systems & cost economics

Technology option	No. of trials	Average Weed population (weed/ m ²)	Yield component			Disease/ insect pest incidence (%)	Yield (q/ha)	Cost of cultivation(Rs./ha)	Gross return (Rs/ha)	Net return(Rs./ha)	BC ratio
			Av.no. branch/ plant	Av.No. of pods per ear	Av. Test wt. (1000 grain wt.)						
Farmer practice	7										
Tech Option – 1											
Tech Option – 2											
Tech Option – 3											
CD											
SEM											
Cv											

Results: Awaited

OFT-4

1.	Title of On farm Trial	Assessment of irrigation water applied in paddy cultivation
2.	Problem diagnosed	less yield with deteriorated quality by investing large quantity water
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmer practice : Rained Technical option1 : Standing water in paddy field throughout crop span Technical option2 : Alternate wetting and drying method of irrigation
4.	Source of Technology (ICAR/AICRP/SAU/other, please specify)	IRRI, Cuttak, Rejesus R.M Palics F.G et all (2011)
5.	Production system and thematic area	Irrigated and Water Management
6.	Performance of the Technology with performance indicators	T.O.2 Alternate wetting and drying method of irrigation in paddy was found the best treatment in terms of Water requirement (mm), Water use efficiency (q/ha mm), Saving of water (%) and increased yield(q/ha,) performance indicator.
7.	Final recommendation for micro level situation	Irrigation applied in paddy through Alternate wetting and drying irrigation method has been recommended on the basis of OFT result.
8.	Constraints identified and feedback for research	There is tedious work to measure accurately irrigation water. Most of the farmers are unaware of technical knowledge about alternate wetting and drying method of irrigation
9.	Process of farmers participation and their reaction	Farmers are motivated to conduct OFT in training, Kisan gosthi & direct interaction with scientist of KVK.

Title : Assessment of irrigation methods of water management in paddy cultivation

Thematic area: Water Management (Agril. Engg.)

Problem definition: Less yield with high inputs & crop residue burning creates environment pollution along with soil fertility deterioration.

Technology assessed:

Farmer practice : No irrigation (Rainfed)

Technical option1 : Standing water in paddy field throughout crop span

Technical option2 : Alternate wetting and drying method of irrigation

Table: Effect of irrigation applied at different stages of paddy & cost economics

Technology option	No. of trials	No. of effective tillers/hill	Yield (q/ha)	Irrigation applied(cm)	% yield increase over control	Water use efficiency (q/ha–c.m.)	Cost of cultivation(Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
Farmer practice	09	14	25	72	-	0.347	27800	54400	26600	1.96
Tech Option – 1		22	35	118	-	0.30	32400	72600	40200	2.24
Tech Option – 2		28	46	95	19.50	0.48	34100	91400	57300	2.68
		CD @ 5 %		1.6						
		CV %		19.16						
		SE _m		0.75						

Results: The data pertaining in table reveals that the best treatment T.O.2 Alternate wetting and drying method of irrigation was found the best treatment comprising with maximum yield 46q/ha, maximum water use efficiency 0.48 q/ha-cm, maximum B:C ratio 2.68 in comparison to F.P. by followed by T.O.1. 19.5% irrigation water was saved in comparison to traditional irrigated plot.

OFT-5

1.	Title of On farm Trial	Assessment of different sowing methods of wheat
2.	Problem diagnosed	Less yield with high inputs & crop residue burning creates environment pollution along with soil fertility deterioration.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmer practice : Traditional method (Ploughing by M.B, cultivator & sowing by broad casting & soil turning or mixing by cultivator) Technical option1 : Sowing of wheat by zero tillage Technical option2 : Sowing of wheat by happy seeder machine
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Indian institute of wheat & Barly Research Karnal Haryana, India. Choolar R.S et al (2016-17)
5.	Production system and thematic area	Irrigated and Farm Machinery
6.	Performance of the Technology with performance indicators	T.O.2 ,Sowing of wheat by happy seeder machine was found the best technical option in terms of more yield, no. of tillers, more spike length with more soil fertility due to incorporation of crop residue in soil.
7.	Final recommendation for micro level situation	Sowing of wheat by happy seeder has been recommended on the basis of OFT result.
8.	Constraints identified and feedback for research	High power more than 50 hp tractor is needed to operate happy seeder. Trained driver & technician is not easily available in rural remote area.
9.	Process of farmers participation and their reaction	Farmers are motivated to sow wheat by happy seeder for managing crop residue to enhance soil fertility in training, kisan choupal.

Title : Assessment of different sowing methods of wheat

Thematic area: Farm Machinery

Problem definition: Less yield with high inputs & crop residue burning creates environment pollution along with soil fertility deterioration.

Technology assessed:

Farmer Practice : Traditional method of sowing

(Ploughing by M.B, cultivator & sowing by broad casting & soil turning or mixing by cultivator)

TO₁: Sowing of wheat by zero tillage

TO₂: Sowing of wheat by happy seeder machine

Table: Effect of different sowing methods of wheat & cost economics

Technology option	No. of trials	Yield (q/ha)	yield increase over control (%)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
Farmer practice	09	36	-	44300	82300	38000	1.86
Tech Option – 1		41	13.88	40600	94200	53600	2.32
Tech Option – 2		45	25	41300	103000	61700	2.49*
CD @ 5 %		1.02					
SEM		0.19					
CV(%)		10.7					

Results: The Technical option (T2) sowing of wheat by happy seeder machine was found the best technical option in term of maximum yield (45 q/ha), 25 % more yield, maximum net profit (Rs 61700 /ha) and maximum BC ratio (2.49) followed by technical option -1 & farmers' practice respectively.

OFT 6

1.	Title of On farm Trial	Assessment of different types of irrigation methods on yield of tomato
2.	Problem diagnose	Less yield with high amount of water application and high input cost. The product is also with deteriorated quality
3.	Details of technologies selected for assessment/refinement	Farmer practice : Traditional furrow bed irrigation Technical option1 : Alternate furrow irrigation Technical option2 : Drip irrigation
4.	Source of Technology	PFDC, R.A.U. Samastipur annual Report (2004)
5.	Production system and thematic area	Irrigated and Water Management
6.	Performance of the Technology with performance indicators	Result awaited
7.	Final recommendation for micro level situation	
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	

Title : Assessment of different irrigation methods on productivity of tomato in medium land

Thematic area: Water Management

Problem definition: Less yield with high amount of water application and high input cost. The product is also with deteriorated quality

Technology assessed:

Farmer practice : Traditional furrow bed irrigation
Technical option1 : Alternate furrow irrigation
Technical option2 : Drip irrigation

Table: Effect of different irrigation methods applied on yield and its cost economics

Technology option	No. of trials	Yield (q/ha)	% increased in yield comparison to control	Depth of Irrigation water applied (c.m.)	Water use efficiency (q/ha-c.m.)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return(Rs./ha)	BC ratio
Farmer practice	09								
Tech Option – 1									
Tech Option – 2									
CD @ 5 %									
CV %									
SE _M									

Results: Results:

OFT-7

1.	Title of On farm Trial	Assessment of Paclobutrazol breaking alternate bearing in Mango cultivation
2.	Problem diagnosed	There is alternate bearing particularly in Mango variety Langra and Bombay Green
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmers Practice: No use of Paclobutrazol T.O.1: Application of full dose of RDF 1000:500:500 gm NPK with 25 kg of FYM per tree + Paclobutrazol (cultar)@1.0 g a.i./m² effective canopy (20-30 g/plant) in soil T.O.2: Application of full dose of RDF 1000:500:500 gm NPK with 25 kg of FYM per tree + Paclobutrazol (cultar)@1.5 g a.i./m² effective canopy (30-45g/plant) in soil
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	AICRP on Fruits, Bengaluru
5.	Production system and thematic area	Fruit cultivation
6.	Performance of the Technology with performance indicators	Fruit retention % 2.No.of fruit per plant 3. Av. fruit weight (g) 4. Fruit yield (t/ha) 5. T.S.S. (^O B) 6.Benefit Cost Ratio
7.	Final recommendation for micro level situation	Application of full dose of RDF 1000:500:500 gm NPK with 25 kg of FYM per tree + (cultar)@1.5 g a.i./m ² effective canopy (30-45g/plant) in soil is recommended on the basis of OFT result
8.	Constraints identified and feedback for research	Local non availability of Paclobutrazol. Soil application of Paclobutrazol is found beneficial for continuous bearing in Mango. Other Chemicals should be formulated for this purpose
9.	Process of farmers participation and their reaction	Farmers are motivated to conduct OFT in training. Kisan gosthi & direct interaction with scientist of KVK.

Title : Assessment of Paclobutrazol breaking alternate bearing in Mango cultivation

Thematic area: Plant protection

Problem definition: There is alternate bearing particularly in Mango variety Langra and Bombay Green

Technology assessed:

Farmers Practice: No use of Paclobutrazol

T.O.1: Application of full dose of RDF 1000:500:500 gm NPK with 25 kg of FYM per tree + Paclobutrazol (cultural)@1.0 g a.i./m² effective canopy (20-30 g/plant) in soil

T.O.2: Application of full dose of RDF 1000:500:500 gm NPK with 25 kg of FYM per tree + Paclobutrazol (cultural)@1.5 g a.i./m² effective canopy (30-45g/plant) in soil

Table: Assessment of Paclobutrazol breaking alternate bearing in Mango cultivation

Technology option	No. of trials	Yield (q/ha)	Fruit weight (gm)	Fruit length (cm)	Plant height (meter)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
Farmer practice	07	52.29	207	6.67	5.83	41000	156870	134870	3.82
Tech Option – 1		82.14	267.86	8.1	6.7	59000	246420	21640	4.17
Tech Option – 2		94.0	304.29	8.5	7.3	61000	282000	249000	4.62*
CD @ 5 %									
CV %									
SE _m									

Results: The table shows that T.O.2 is the best in terms of yield/ha as well as BC ratio in comparison to TO-1 & F.P. respectively.

OFT-8

1.	Title of On farm Trial	Pest Management in tomato by using leaf extract of cynodondactylon
2.	Problem diagnosed	Pest causes heavy loss in tomato crop.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmers Practice – Using Chloropyrifos 20 e.c. @2-3ml/litre of water T.O.1– Using leaf extract of cynodondactylon @ 1:1 (cynodondactylon : water) T.O.2– Spraying of Vermi wash in 15 days interval “ <i>Traditional Knowledge in Agriculture</i> ” book by ATARI, New Delhi.
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	
5.	Production system and thematic area	Irrigated and IPM
6.	Performance of the Technology with performance indicators	Result awaited
7.	Final recommendation for micro level situation	
8.	Constraints identified and feedback for research	Farmers are motivated to conduct OFT in training, Kisan gosthi & direct interaction with scientist of KVK.
9.	Process of farmers participation and their reaction	

Title : Pest Management in tomato by using leaf extract of cynodondactylon

Thematic area: IPM

Problem definition: Pest causes heavy loss in tomato crop.

Technology assessed:

Farmers Practice – Using Chloropyrifos 20 E.C. @2-3ml/litre of water

T.O.1– Using leaf extract of cynodondactylon@ 1:1 (cynodondactylon : water)

T.O.2– Spraying of Vermi wash in 15 days interval

Table: Pest Management in tomato by using leaf extract of cynodondactylon

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	07	226.6	62000	226600	164600	3.65
Tech Option – 1		235.9	58000	235900	177900	4.06
Tech Option – 2		258.1	58000	258100	200100	4.45*
CD		20.2				
SEM		6.51				
Cv		7.17				

Results: The data shows in table that maximum yield 258.1 q/ha , B:C ratio 4.45 & net return Rs 200100 /ha were obtained in Technical Option-2 followed by Technology Option-1 and Farmers Practice respectively.

OFT-9

1.	Title of On farm Trial	Assessment of weed management in transplanted finger millet
2.	Problem diagnose	Low profitability and productivity of finger millet due to heavy infestation of weeds
3.	Details of technologies selected for assessment/refinement	Farmers Practice: One Hand weeding at 40-50 DAS Technology Option 1: (Control no weedicide application) Technology Option 2: Post emergence application of Bispyribac Sodium @ 20g a.i. / ha Technology Option 3: Pendimethalin @ 1.0 kg a.i. / ha as PE followed by Post emergence application of Bispyribac Sodium @ 20g a.i. / ha Technology Option 4: Pretilachlor @ 1.0 kg a.i. / ha as PE followed by Post emergence application of Bispyribac Sodium @ 20g a.i. / ha
4.	Source of Technology	BAU, Sabour
5.	Production system and thematic area	Finger millet-mustard/lentil cropping system and IWM
6.	Performance of the Technology with performance indicators	Application of Pendimethalin @ 1.0 kg a.i. / ha as PE followed by Post emergence application of Bispyribac Sodium @ 20g a.i. / ha was obtained minimum weed population and maximum crop yield, net return and B:c ratio in transplanted finger millet
7.	Final recommendation for micro level situation	Pendimethalin @ 1.0 kg a.i. / ha as PE followed by Post emergence application of Bispyribac Sodium @ 20g a.i. / ha in transplanted finger millet crop is most suitable to controlling of weeds
8.	Constraints identified and feedback for research	Un timely availability of post emergence weedicide and untimely rains affects proper application in transplanted finger millet is tedious to all farmers in the field conditions.
9.	Process of farmers participation and their reaction	Direct face to face interaction with farmers to motivate through training, kisan /gosthi/ choupal programme and them to conduct OFT in weed management in transplanted finger millet. Other farmers have also learned weed management to this crop.

Thematic area: Integrated weed management

Problem definition: Low profitability and productivity of finger millet due to heavy infestation of weeds

Technology assessed:

Farmers Practice: One Hand weeding at 40-50 DAS

Technology Option 1: (Control no weedicide application)

Technology Option 2: Post emergence application of Bispyribac Sodium @ 20g a.i. / ha

Technology Option 3: Pendimethalin @ 1.0 kg a.i. / ha as PE followed by Post emergence application of Bispyribac Sodium @ 20g a.i. / ha

Technology Option 4: Pretilachlor @ 1.0 kg a.i. / ha as PE followed by Post emergence application of Bispyribac Sodium @ 20g a.i. / ha

Table: Effect of weedicides on transplanted finger millet & cost economics

Technology option	No. of trials	Weed population (m ⁻²)	Weed dry weight (gm m ⁻²)	Yield component			Disease/ insect pest incidence (%)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
				No. tillers/hill	No. of ears per m ⁻²	No. of finger per ear						
Farmer practice	6	273	311.7	4	111	6.51	5	16.4	25600	46004	20404	1.80
Tech Option – 1				3	102	6.16	6	14.8	23400	41481	18081	1.77
Tech Option – 2				5	133	6.85	4	17.3	25400	48745	23345	1.92
Tech Option – 3				7	155	7.12	3	22.1	27320	62057	34737	2.26
Tech Option – 4		139	155.7	6	142	6.98	3	21.4	26820	59818	32998	2.23
CD		26.81	28.33					3.71				
SEm		9.01	9.54					1.25				
CV		9.93	9.15					16.63				

Results: Pendimethalin @ 1.0 kg a.i. / ha as PE followed by Post emergence application of Bispyribac Sodium @ 20g a.i. / ha was found the best technical option in term of less weed population(116), dry weight (132.2gm²), more number of tiller /hill(7), number of ears/ m² (155), number of finger per ear (7.12), more test weight(4.24g), grain yield (22.1 q/ha), gross returns(Rs.62057/ha), net returns(Rs.34737/ha), and B:C ratio (4.34)and which was at par with T.O.4 followed by T.O.2, FP & , T.O.1(control) respectively.

3.1.2 Technology Assessed by KVK (Discipline wise)

Technologies assessed under various crops by KVKs (Crop Production)				
	Thematic areas	Number of the technologies (Technology Interventions)	No. of trials	No. of Locations
1	Integrated Nutrient Management	2	7	15
2	Varietal Evaluation			
3	Integrated Pest Management	2	6	14
4	Integrated Crop Management	1	4	7
5	Integrated Disease Management			
6	Small Scale Income Generation Enterprises			
7	Weed Management	1	5	6
8	Resource Conservation Technology			
9	Farm Machineries	1	3	9
10	Integrated Farming System			
11	Seed / Plant production			
12	Post Harvest Technology / Value addition			
13	Drudgery Reduction			
14	Storage Technique			
15	Others (Pl. specify)			
16	Cropping Systems			
17	Farm Mechanization			
18	Others Water management	2	6	18
	Total	9	31	69
Technologies assessed under livestock by KVKs				
	Thematic areas	No. of technologies (Technology Interventions)	No. of trials	No. of locations
1	Disease Management			
2	Evaluation of Breeds			
3	Feed and Fodder management			
4	Nutrition Management			

5	Production and Management				
6	Processing and value addition				
7	Others (Pl. specify)				
	Total		0	0	0
	Technologies assessed under various enterprises by KVKs				
	Thematic areas		No. of technologies (Technology Interventions)	No. of trials	No. of locations
1	Drudgery reduction				
2	Entrepreneurship Development				
3	Health and nutrition				
4	Processing and value addition				
5	Energy conservation				
6	Small-scale income generation				
7	Storage techniques				
8	Household food security				
9	Organic farming				
10	Agroforestry management				
11	Mechanization				
12	Resource conservation technology				
13	Value Addition				
14	Others				
	Total		0	0	0
	Technologies assessed under various enterprises for women empowerment				
	Thematic areas		No. of technologies (Technology Interventions)	No. of trials	No. of locations
1	Drudgery Reduction				
2	Entrepreneurship Development				
3	Health and Nutrition				
4	Value Addition				
	Total		0	0	0

3.2 Achievements of Frontline Demonstrations during 2022

A. Details of FLDs conducted during the year 2022

Cereals

Sl. No.	Crop	Thematic area	Technology Demonstrated with detailed treatments	Area (ha)		No. of farmers/ demonstration								Reasons for shortfall in achievement	
				Prop osed	Actual	SC		ST		Others		Total			
1.	Paddy	Crop & cropping system	Sabour harshit	10	20	0	0	24	26	0	0	24	26	50	
2.	Paddy	Crop & cropping system	DRR049, Zinco rice M S	0	2	1	0	2	1	16	2	19	3	22	
3.	Pearl millet	Crop & cropping system	P9330, P9180	0	2	2	2	1	0	2	0	5	2	7	
4.	Pigeonpea	Crop & cropping system	IPA203	0	6.5	14	18	0	0	0	0	0	0	32	
5.	Wheat	Crop & cropping system	BHU-31, BHU25	0	1	1	0	0	0	4	0	5	0	5	
6.	Pheromone Trap Mango	IPM	Pheromone Trap Mango	6.4	6.4	1	0	0	0	19	1	20	1	21	
7.	Lemon grass	Medicinal and aromatic plants	Varietal (Krishna)	0.4	0.4	0	2	0	0	5	2	5	4	9	
8.	CFLD pigeonpea (2022-23)	Cropping System	IPA203+ Carbenazim+ Rhiz+PSB+Zn	20	20	5	2	10	24	29	7	44	33	77	
9.	CFLD Lentil (2022-23)	Cropping System	IPL 316+ Carbenazim+ Rhizobium +PSB	20	20	3	2	4	2	40	5	47	9	56	
10.	CFLD Chickpea (2022-23)	Cropping System	RVG202+Trichoderma +Rhizobium +PSB	20	20	5	1	10	20	23	6	38	27	65	
11.	CFLD Mustard (2022-23)	INM	NRCHB 101+ Azotobactor +PSB+ S	20	20	5	3	10	8	37	12	52	23	75	
12.	CFLD Mustard	INM	Pusa Mustard30 + Azotobactor +PSB +S	10	10	2	1	2	1	21	3	25	5	30	

12.	CFLD Linseed (2022-23)	Rabi 2022-23	Rainfed	Sandy Clay loam	211.7	21.4	122.5	0.37	paddy/fallow	25.11.2022 to 6.12.2022	Vegetative stage
13.	Vegetable	Rabi 22	Irrigated	Clay loam	212	25	120	0.32	paddy	15.02.2022	20.04.2022

In both the Tables, information of same crop should be provided. For example, if in Table 3.2A crops are mentioned as a,b,c,d etc., in the table for Details of farming situation, the same crop should be mentioned in the identical sequence.

B. Performance of FLD

Oilseeds:

Frontline demonstrations on oilseed 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
CFLD Mustard (2022-23)	INM	NRCHB 101 + Azotobactor +PSB + S	75	20											
CFLD Mustard (2022-23)	INM	Pusa Mustard30 + Azotobactor +PSB + S	30	10											
CFLD Linseed (2022-23)	Cropping System	Sabour tisi1 + Azotobactor +PSB	66	20											
Total			171	50											

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

** BCR= GROSS RETURN/GROSS COST

Pulses

Frontline demonstration on pulse crops

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (g/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
CFLD pigeonpea (2022-23)	Cropping System	IPA203 + Carbendazim + Rhiz+PSB+Zn	77	20											
CFLD Lentil (2022-23)	Cropping System	IPL 316+ Carbendazim+ Rhizobium +PSB	56	20											
CFLD Chickpea (2022-23)	Cropping System	RVG202+Trichoderma +Rhizobium +PSB	65	20											
	Total		198	60											

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

** BCR= GROSS RETURN/GROSS COST

Horticultural crops (separately Fruit, Vegetables, Flower, Medicinal and aromatics, etc.)

Frontline demonstration on pulse crops

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (g/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
Pheromone Trap Mango (FLD)	IPM	Pheromone Trap Mango	21	6.4	92	83	10.84	60000	322000	262000	5.37	58500	290500	232000	4.96
Lemon grass	Medicinal and aromatic plants	Varietal (Krishna)	9	0.4											
	Total														

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

** BCR= GROSS RETURN/GROSS COST

Demonstration details on crop hybrid varieties

[illegible]

Fisheries

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
Common carps																	
Mussels																	
Ornamental fishes																	
Others (pl. specify)																	
Total																	

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

** BCR= GROSS RETURN/GROSS COST

Other enterprises

Category	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.) or Rs./unit				*Economics of check (Rs.) or Rs./unit			
				Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Oyster mushroom	Enterprise development															
Button mushroom																
Vermicompost																
Sericulture																
Apiculture																
Others (pl.specify)																
Total																

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

** BCR= GROSS RETURN/GROSS COST

Women empowerment

Category	Name of technology	No. of demonstrations	Observations		Remarks
			Demonstration	Check	
Farm Women					
Pregnant women					
Adolescent Girl					
Other women					
Children					
Neonatal					
Infants					

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, paddy and lentil	Line sowing by zero tillage	526	182	Less seed , less irrigation water and less environment pollution	Low yield with high input	20-25 % more yield	12-15 man days/ ha	Rs 5000-6000 /ha
Raised bed planter	Maize, Pigeonpea and Potato	Line sowing by raised bed planter	230	105	15-20% more yield with saving of 25-30% irrigation water	Low yield with high input	10-20 days less crop span	25-30 man days/ha	Rs. 2500-4000/ha

Happy Seeder	wheat	Sowing of wheat by happy seeder for crop residue management	40	35	20-22 % 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 wheat and other crops	20-22 man days/ha	Rs.5000-6000/ha
Laser guided land leveler	Paddy	Sowing of DSR after land leveling	72	55	Less input & high efficacy	Low yield due to less utility of inputs for crop production	15-20 % more yield in 20-25 % less input	20-25man days/ha	Rs.8000-10000/ha

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

** BCR= GROSS RETURN/GROSS COST

Farm Machinery

Category	Name of the implement / Equipment / Tool	Crop (if applicable)	No. of Technologies	No. of Demos	Area (ha)
Sowing and planting tools and machineries					
Total	Happy seeder/ Zero tillage	Paddy & wheat	3	566	217(CRAP,CSV)
Intercultural operation tools and machineries					
Total	Laser guided leveler machine	Paddy	1	55	22 (CRAP)
Irrigation management tools and machineries					
Total	Drip irrigation kit	Vegetable	1	10	4
Plant protection tools and machineries					
Total					
Harvesting tools and machineries					
Total	Self propelled reaper	Paddy & wheat	1	10	2

Postharvest processing tools and machineries					
Total					
Total mechanization tools and machineries					
Total					
Others					
Total					
Grand Total			6	641	245

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	Researchers :Water management in different crops should be experimented for this region because proper application of water in crop has not done. Irrigation water should applied on the basis of Crop stage in vegetable cultivation . Irrigation is applied at branching/ tuber formation and flowering stage of vegetable and at curd formation stage in cauliflower & cabbage cultivation. Climate resilient technologies should be applied in rabi & kharif season. RCT Mechanization and water management has experimented. These are suitable in this area. Experiment on short duration, disease & pest resistant varieties of lentil, red gram, chickpea, maize and other crops should be introduced in this region, seed treatment and weed management have also been introduced in different crops like Lentil, Chickpea, paddy. For soil fertility management, soil testing, use of vermin compost should be done in this region. To enhance productivity of pulse improved varieties should be demonstrated. Cluster demonstration for seed production will proved very useful and beneficial for farmers. Direct seeding of rice should be promoted in drought situation. Alternate wetting and drying irrigation method should be experimented irrigation water & enhance or maintain ground water level.
2	Development departments: Diversification of agriculture should be done by vegetable cultivation & pulse cultivation. Availability of agricultural inputs and marketing facility are not appropriate. Hand operated low cost implements & scientific water management should be popularize in agriculture. The agricultural inputs like seed fertilizer & insecticide & pesticide for farmers should be easily available at critical time. Agril. loan for farmer should be available. The irrigation facility should be in Munger & flood eradication project should be implemented. Hi tech irrigation (drip irrigation) & watershed management should be implemented effectively.

Farmers' reactions on specific technologies

Farmers have pleased to observe the results of demonstrated variety & technologies. They have reacted positively about the variety of chickpea, lentil, mungbean, mustard , paddy, wheat, pigeonpea and technologies on water management, use of zero tillage, raise bed planter, water management & other

technologies . They have reacted positively on drip irrigation applied in vegetable cultivation. Reactions of farmers related to demonstrated agricultural technologies as follows.

S. No	Feed Back
IPA-203	This HYV redgram has produce more no. of branches and pods along with resistant to wilt and yellow mosaic.
Seed treatment(insecticide & fungicides)	It is cost effective technology. The fungicide, Trichoderma liquid biofertiliser & insecticide should be easily available. It is applicable for all crops, so the people should be trained by this technology.
Irrigation application in Vegetable	Irrigation applied at branching, flowering & curd /pod formation stages of vegetable cultivation.
Farm Machinery	Zero tillage machine, Rotavator, paddy transplanter & self propelled reaper have proved excellent farm machineries to perform agricultural works in less time with low cost efficiency. The L.D.P.E. pipe proved as useful pipes for small farmer to irrigate their field efficiently without conveyance loss of irrigation water.
Improved variety of different crops	The Improved variety of Paddy, Wheat, Mustard, Chickpea, lentil & mungbean should be available in local basis.
Direct Seeded Rice	It is the best technology to reduce cost of cultivation in paddy cultivation & maximum utilization of rainfall water in paddy cultivation. There is serious weeds problem in direct seeded rice.
Manual tools	Manual tools (Hand hoe, sickle, spade, weeder & Sprayer) are proved as drudgery reduction & capacity enhancer tools among small / marginal SC farmers.
Value addition in Mushroom	Mushroom production is beneficial and protein mal nutrition eradicator among poor SC/ST farm women . It is also successful entrepreneurship among rural women. Mushroom pickle is prepared by using vinegar and salt. Farm women have responded positively about this mushroom pickle preparation method.
Weed management in Pigeonpea	Weeds retard yield(10-40 %)of pigeon pea . Farmers have responded positively to apply imazethyper (pursuit) post emergence weedicide to control weed in pigeonpea.

Performance of the demonstration under CFLD on Pulse and oilseed Crops during Kharif -2022 and Rabi 2022-23

Sl. No.	Crop demons.	Existing (Farmer's) variety name	Existing yield(q/ha)	Yield gap (q/ha) w.r.to Demo			Name of Variety + Technology Demonstrated	No. of farmers	Area in ha	Yield obtained (q/ha)			Yield gap minimized (%) in comparison to Demo		
				District yield (D)	State yield (S)	Potential yield (P)				Max.	Min.	Av.	D	S	P
1	Pigeonpea (2022-23)	Cropping system					IPA203+ Carbendazim+ Rhiz+PSB+Zn	77	20				result awaited & Crop Standing		
	Chickpea (2022-23)	Crop and Cropping System					RVG202+Trichoderma +Rhizobium +PSB	65	20				result awaited & Crop Standing		
	Lentil (2022-23)	Crop and Cropping System					IPL 316+ Carbendazim+ Rhizobium +PSB	56	20				do Crop Standing		
	Oilseed crop														
	Mustard (2022-23)	INM					NRCHB 101+ Azotobactor +PSB+ S	75	20			Result	awaited Crop Standing		
	Mustard (2022-23)	Crop and Cropping System					Pusa Mustard30 + Azotobactor +PSB + S	30	10			Do	do Do Do		
	Linseed (2022-23)	Crop and Cropping System					Sabour tisil + Azotobactor +PSB	66	20			Do	Do Do Do		

Details of fund utilization under CFLD Pulses and Oil seed crops during January 2022 upto December 2022

Crop (provide crop wise information)	Items	Budget Sanctioned (Rs.)	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Pigeonpea (2022-23)	i) Critical input	162,000	1,36,821	1,44,833	
	ii) TA/DA/POL etc. for monitoring	18,000	-	13,676	
	iii) Extension Activities (Field day)				
	iv) Publication of literature			00	
	Total	1,80,000		1,58,509	
Chickpea (2022-23)	i) Critical input	162,000	1,18,800	1,63,275	
	ii) TA/DA/POL etc. for monitoring	18,000	-	3256	
	iii) Extension Activities (Field day)				
	iv) Publication of literature				
	Total	1,80,000		1,66,531	
Lentil (2022-23)	i) Critical input	162,000	55,900	1,43,988	
	ii) TA/DA/POL etc. for monitoring	18,000		9925	
	iii) Extension Activities (Field day)				
	iv) Publication of literature			00	
	Total	1,80,000		1,53,913	
	CFLD pulses G. total	5,40,000	3,11,521	4,78,953	-167432

B Oilseed rabi						
Mustard 2022-23	i) Critical input	1,62,000			1,64,810	
	ii) TA/DA/POL etc. for monitoring	18,000			5,000	
	iii) Extension Activities (Field day)					
	iv) Publication of literature				00	
	Total	1,80,000			1,69,810	
Linseed 2022-23	i) Critical input	90,000			80,595	
	ii) TA/DA/POL etc. for monitoring	10,000			8,364	
	iii) Extension Activities (Field day)					
	iv) Publication of literature				00	
	Total	1,00,000			88,959	
	CFLD oilseed G. total	2,80,000			2,58,769	-2,58,759

[illegible]

Thematic Area	No. of Courses	No. of Participants										Grand Total			
		Other			SC			ST				M	F	M	T
		M	F	T	M	F	T	M	F	T					
Nutrient Use Efficiency															
Soil and Water Testing															
Others, if any															
IV. Livestock Production and Management															
Dairy Management															
Poultry Management															
Piggery Management															
Rabbit Management															
Disease Management															
Feed management															
Production of quality animal products															
Others, if any Goat farming															
V. Home Science/Women empowerment															
Household food security by kitchen gardening and nutrition gardening															
Design and development of low/minimum cost diet															
Designing and development for high nutrient efficiency diet	1	0	20	20	0	5	5	0	0	0	0	25	25	0	25
Minimization of nutrient loss in processing															
Gender mainstreaming through SHGs															
Storage loss minimization techniques															
Enterprise development															
Value addition	2	11	10	21	11	28	39	0	0	0	0	22	38	60	60
Income generation activities for empowerment of rural Women	1	10	10	20	4	15	19	0	0	0	0	14	25	39	39
Location specific drudgery reduction technologies															
Rural Crafts															
Capacity building															
Women and child care															
Others, if any															
VI. Agril. Engineering															
Installation and maintenance of micro irrigation systems															
Use of Plastics in farming practices															
Production of small tools and implements															
Repair and maintenance of farm machinery and	9	141	35	176	44	68	112	0	0	0	0	185	103	288	288

[illegible]

Thematic Area	No. of Courses	No. of Participants										Grand Total			
		Other			SC			ST							
		M	F	T	M	F	T	M	F	T	M	F	T		
Small tools and implements															
Production of livestock feed and fodder															
Production of Fish feed															
Others, if any															
X. Capacity Building and Group Dynamics															
Leadership development															
Group dynamics															
Formation and Management of SHGs															
Mobilization of social capital															
Entrepreneurial development of farmers/youths															
WTO and IPR issues															
Others, if any															
XI Agro-forestry															
Production technologies															
Nursery management															
Integrated Farming Systems															
XII. Others (Pl. Specify)															
TOTAL	52	687	248	935	266	250	516	0	30	30	953	528	1481		

B) Rural Youth Including the sponsored training programmes(on campus)

[illegible]

Thematic Area	No. of Courses	No. of Participants										Grand Total			
		Other			SC			ST				M	F	T	
		M	F	T	M	F	T	M	F	T					
Repair and maintenance of farm machinery and implements	8	146	11	157	50	9	59	0	0	0	0	196	20	216	
Nursery Management of Horticulture crops	1	18	2	20	5	0	5	0	0	0	0	23	2	25	
Training and pruning of orchards															
Value addition															
Production of quality animal products															
Dairying															
Sheep and goat rearing															
Quail farming															
Piggery															
Rabbit farming															
Poultry production															
Ornamental fisheries															
Enterprise development															
Para vets															
Para extension workers															
Composite fish culture															
Freshwater prawn culture															
Shrimp farming															
Pearl culture															
Cold water fisheries															
Fish harvest and processing technology															
Fry and fingerling rearing															
Small scale processing															
Post-Harvest Technology															
Tailoring and Stitching															
Rural Crafts															
TOTAL	20	279	66	345	89	63	152	0	0	0	0	368	129	497	

C) Extension Personnel Including the sponsored training programmes (on campus)

Thematic Area	No. of Courses	No. of Participants										Grand Total			
		Other			SC			ST							
		M	F	T	M	F	T	M	F	T	M	F	T		
Productivity enhancement in field crops	2	19	11	30	7	4	11	0	0	0	26	15	41		
Value addition															
Integrated Pest Management	2	37	3	40	13	4	17	0	0	0	50	7	57		
Integrated Nutrient management															
Rejuvenation of old orchards	3	49	6	55	18	7	25	0	0	0	67	13	80		
Protected cultivation technology															
Formation and Management of SHGs															
Group Dynamics and farmers organization															
Information networking among farmers															
Capacity building for ICT application															
Care and maintenance of farm machinery and implements	2	40	9	49	9	5	14	0	0	0	49	14	63		
WTO and IPR issues															
Management in farm animals															
Livestock feed and fodder production															
Household food security															
Women and Child care															
Low cost and nutrient efficient diet designing															
Production and use of organic inputs	1	18	2	20	8	2	10	0	0	0	26	4	30		
Gender mainstreaming through SHGs															
TOTAL	10	163	31	194	55	22	77	0	0	0	218	53	271		

D) Farmers and farm women Including the sponsored training programmes (off campus)

Thematic Area	No. of Courses	No. of Participants										Grand Total			
		Other			SC			ST							
		M	F	T	M	F	T	M	F	T		M	F	T	
I. Crop Production															
Weed Management															
Resource Conservation Technologies															
Cropping Systems	7	91	13	104	33	38	71	0	0	0		124	51	175	

[illegible]

[illegible]

[illegible]

Thematic Area	No. of Courses	No. of Participants										Grand Total			
		Other				SC				ST					
		M	F	T	M	F	T	M	F	T	M	F	T	M	F
Entrepreneurial development of farmers/youths															
WTO and IPR issues															
Others, if any															
XI Agro-forestry															
Production technologies															
Nursery management															
Integrated Farming Systems															
XII. Others (Pl. Specify)															
TOTAL	68	853	309	1162	261	220	481	0	0	0	0	1114	529	1633	

E)RURAL YOUTH Including the sponsored training programmes(Off Campus)

[illegible]

Thematic Area	No. of Courses	No. of Participants										Grand Total			
		Other			SC			ST							
		M	F	T	M	F	T	M	F	T	M	F	T		
Production of quality animal products															
Dairying															
Sheep and goat rearing															
Quail farming															
Piggery															
Rabbit farming															
Poultry production															
Ornamental fisheries															
Para vets															
Para extension workers															
Composite fish culture															
Freshwater prawn culture															
Shrimp farming															
Pearl culture															
Cold water fisheries															
Fish harvest and processing technology															
Fry and fingerling rearing															
Small scale processing															
Post-Harvest Technology															
Tailoring and Stitching															
Rural Crafts															
Others, if any															
TOTAL	4	104	6	110	16	0	16	0	0	0	120	6			126

F) Extension Personnel Including the sponsored training programmes(Off Campus)

[illegible]

Thematic Area	No. of Courses	No. of Participants										Grand Total				
		Other			SC			ST				M	F	T		
		M	F	T	M	F	T	M	F	T						
Rejuvenation of old orchards	2	43	7	50	12	1	13									
Protected cultivation technology																
Formation and Management of SHGs																
Group Dynamics and farmers organization																
Information networking among farmers																
Capacity building for ICT application																
Care and maintenance of farm machinery and implements	8	178	29	207	42	14	56						220	43		263
WTO and IPR issues																
Management in farm animals																
Livestock feed and fodder production																
Household food security																
Women and Child care																
Low cost and nutrient efficient diet designing																
Production and use of organic inputs	2	44	9	53	10	2	12						54	11		65
Gender mainstreaming through SHGs																
Crop intensification																
TOTAL	14	299	50	349	74	20	94						373	70		443

G) Consolidated table (ON and OFF Campus)

i. Farmers & Farm Women

[illegible]

[illegible]

Thematic Area	No. of Courses	No. of Participants										Grand Total			
		Other				SC				ST		M	F	T	T
		M	F	T	T	M	F	T	T	M	F				
Micro irrigation systems of orchards															
Plant propagation techniques															
Others, if any(INM)															
TOTAL															
c) Ornamental Plants															
Nursery Management															
Management of potted plants															
Export potential of ornamental plants															
Propagation techniques of Ornamental Plants															
Others, if any															
TOTAL															
d) Plantation crops															
Production and Management technology															
Processing and value addition															
Others, if any															
TOTAL															
e) Tuber crops															
Production and Management technology															
Processing and value addition															
Others, if any															
TOTAL															
f) Spices															
Production and Management technology															
Processing and value addition															
Others, if any															
TOTAL															
g) Medicinal and Aromatic Plants															
Nursery management															
Production and management technology	1	4	7	11	16	6	10	10	16	0	0	0	10	17	27
Post harvest technology and value addition															
Others, if any															
TOTAL															
III. Soil Health and Fertility Management															
Soil fertility management															
Soil and Water Conservation	5	111	21	132	25	21	4	4	25	0	0	0	132	25	157
Integrated Nutrient Management	1	25	7	32	3	3	0	0	3	0	0	0	28	7	35

[illegible]

Thematic Area	No. of Courses	No. of Participants										Grand Total		
		Other			SC			ST						
		M	F	T	M	F	T	M	F	T	M	F	T	
Seed Production														
Planting material production														
Bio-agents production														
Bio-pesticides production														
Bio-fertilizer production														
Vermi-compost production														
Organic manures production														
Production of fry and fingerlings														
Production of Bee-colonies and wax sheets														
Small tools and implements														
Production of livestock feed and fodder														
Production of Fish feed														
Others, if any														
TOTAL														
X. Capacity Building and Group Dynamics														
Leadership development														
Group dynamics														
Formation and Management of SHGs														
Mobilization of social capital														
Entrepreneurial development of farmers/youths														
WTO and IPR issues														
Others, if any														
TOTAL														
XI Agro-forestry														
Production technologies														
Nursery management														
Integrated Farming Systems														
TOTAL														
XII. Others (Pl. specify)														
TOTAL	120	1540	557	2097	527	470	997	0	30	30	2067	1057	3124	

ii. RURAL YOUTH (On and Off Campus)

Thematic Area	No. of Courses	No. of Participants			Grand Total
		Other	SC		
			ST		

Thematic Area	No. of Courses	No. of Participants									Grand Total				
		Other			SC			ST							
		M	F	T	M	F	T	M	F	T	M	F	T		
Post-Harvest Technology															
Tailoring and Stitching															
Rural Crafts															
Enterprise development															
Others if any (ICT application in agriculture)															
TOTAL	22	383	72	455	105	63	168	0	0	0	488	135	623		

iii. Extension Personnel (On and Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total				
		Other			SC			ST							
		M	F	T	M	F	T	M	F	T	M	F	T		
Productivity enhancement in field crops	4	53	16	69	17	7	24	0	0	0	70	23	93		
Integrated Pest Management	2	37	3	40	13	4	17	0	0	0	50	7	57		
Integrated Nutrient management															
Rejuvenation of old orchards	5	92	13	105	30	8	38	0	0	0	122	21	143		
Value addition															
Protected cultivation technology															
Formation and Management of SHGs															
Group Dynamics and farmers organization															
Information networking among farmers															
Capacity building for ICT application															

71

Thematic Area	No. of Courses	No. of Participants									Grand Total				
		Other			SC			ST							
		M	F	T	M	F	T	M	F	T	M	F	T		
Post-Harvest Technology															
Tailoring and Stitching															
Rural Crafts															
Enterprise development															
Others if any (ICT application in agriculture)															
TOTAL	22	383	72	455	105	63	168	0	0	0	488	135	623		

iii. Extension Personnel (On and Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total				
		Other			SC			ST							
		M	F	T	M	F	T	M	F	T	M	F	T		
Productivity enhancement in field crops	4	53	16	69	17	7	24	0	0	0	70	23	93		
Integrated Pest Management	2	37	3	40	13	4	17	0	0	0	50	7	57		
Integrated Nutrient management															
Rejuvenation of old orchards	5	92	13	105	30	8	38	0	0	0	122	21	143		
Value addition															
Protected cultivation technology															
Formation and Management of SHGs															
Group Dynamics and farmers organization															
Information networking among farmers															
Capacity building for ICT application															

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Please furnish the details of training programmes as Annexure in the proforma given below

[illegible]

H) Details of training programmes for Rural Youth

Crop / Enterprise	Identified Thrust Area	Training title*	Duration (days)	No. of Participants			Self-employed after training		Number of persons employed else where
				Male	Female	Total	Type of units	Number of persons employed	
Horticulture	Nursery Management	Gardening	180	15	5	20	self	2	2
Horticulture	Fruit cultivation	Gardener skill	5	17	9	26	self	1	1
Custom hiring	Farm machinery	Detail knowledge about custom hiring center	5	35	0	35	self	2	1
Vegetable	Vegetable cultivation	IFS model & Vegetable cultivation	5	2	33	35	self	4	1
Farm machinery	Farm machinery	Care maintenance & repairing of farm implements	5	29	0	29	self	2	2
Mushroom	Mushroom production	Scientific method of mushroom production	12	20	28	48	self	2	2
Horticulture	Nursery Management	Different methods of plant propagation	12	27	3	30	self	2	1
Micro irrigation	Water management	Detail knowledge about drip irrigation	7	19	6	25	self	2	1
Vermicompost	Vermicompost production	Scientific method of vermicompost production	5	20	5	25	self	3	2
Farm mechanization	Farm machinery	Detail knowledge about internal combustion engine	7	20	5	25	self	2	1
Total			243	204	94	298		36	14

*training title should specify the major technology /skill transferred

D) Sponsored Training Programmes

Sl.	Title	Thematic area	Month	Duration (days)	Client	No. of courses	No. of Participants								Sponsoring Agency		
							Male			Female			Total				
					Others		SC	ST	Others	SC	ST	Others	SC	ST		Total	
1	Vermicompost production & its application	Production of organic inputs	Jan22	1	PF	1	15	5	0	5	5	0	20	10	0	30	UCO RSETI, Munger
2	Mentha & lemon grass cultivation	Medicinal & aromatic plants	Jan22	1	PF	1	10	5	0	10	6	0	20	11	0	31	ATMA Munger
3	Organic farming	Production of Organic inputs & its application	Feb22	1	PF	1	15	5	0	5	5	0	20	10	0	30	ATMA Munger
4	IPM in Pulse	IPM	Feb22	1	PF	1	12	8	0	5	5	0	17	13	0	30	ADPP, Munger & DDP, Bihar
5	Importance & INM in rabi crop	INM	Feb22	1	PF	1	20	5	0	5	3	0	25	8	0	33	IFFCO Munger
6	Mushroom production	Mushroom production	April22	1	PF	1	20	5	0	5	5	0	25	10	0	35	ADH, Munger
7	Vermicompost production & its application	Vermicompost production	April22	1	PF	1	10	3	0	15	5	0	25	8	0	33	UCO RSETI, Munger
8	Land leveling by land laser leveler	Farm machinery	April22	1	PF	1	15	5	0	10	4	0	25	9	0	34	CRAP
9	Importance of horticultural crops & its cultivation	Fruit cultivation	April22	1	PF	1	25	5	0	5	0	0	30	5	0	35	ADH, Munger
10	Javik kheti	Organic farming	May22	1	EF	1	20	5	0	5	3	0	25	8	0	33	ATMA+ DAO, Munger

11	Honey production & its processing	Entrepreneurs hip development	May22	2	PF	2	15	10	0	5	2	0	20	12	0	32	FPO, Aurrangabad
12	Training in kharif Mahotsav 2022	ALL	June22 & July 22	9	PF	9	135	45	5	55	27	3	190	72	8	270	ADPP, Munger
13	Training on INM in agriculture	INM	July22	6	PF	6	25	5	0	3	0	0	28	3	0	31	Angraj, NGO
14	Organic method of seed production	seed production	Aug22	1	PF	1	25	10	0	3	0	0	28	10	0	38	BSSOCA, Patna
15	Use of Nano urea through fertigation	INM	Aug22	1	PF	1	22	7	0	4	2	0	26	9	0	35	IFFCO Munger
16	Methods of balance fertilizer application	INM	Sep22	1	PF	1	25	10	0	3	0	0	28	10	0	38	IFFCO Munger
17	Scientific method of crop production in rabi	Cropping system	Oct,Nov 22	9	PF	9	140	50	8	35	20	5	175	70	13	248	ATMA+ DAO, Munger
18	Mushroom Production	Mushroom Production	Nov22	2	PF	2	20	5	3	5	3	2	25	8	5	38	ADH, Munger
19	Water shed management	Soil & water conservation	Dec22	2	PF	2	20	5	3	5	3	0	25	8	3	36	DD soil conservation munger
20	Scientific method of grain storage	PHT	Dec22	1	PF	1	22	5	0	5	3	0	27	8	0	35	CWC, Safiabab, Munger
21	Honey production & its processing	Entrepreneurs hip development	Dec22	2	PF	2	20	8	0	2	0	0	22	8	0	30	ADH, Munger
22	IPM in rabi crops	IPM	Dec22	4	PF+EF	1	25	5	0	2	0	0	27	5	0	32	DDPP, Munger

Group meetings	1	22	10	32	13	1	1	2	23	11	34
Lectures delivered as resource persons	28	582	163	745	13	4	2	6	586	165	751
Advisory Services	1	934	676	1610	13	8	6	14	942	682	1624
Scientific visit to farmers field	32	410	181	591	15	3	1	4	413	182	595
Farmers visit to KVK	1	810	493	1303	16	3	2	5	813	495	1308
Diagnostic visits	15	72	21	93	14	3	1	4	75	22	97
Exposure visits	7	353	120	473	11	3	1	4	356	121	477
Ex-trainees Sammelan	1	22	8	30	8	0	0	0	22	8	30
Soil health Camp	1	20	10	30	10	1	0	1	21	10	31
Animal Health Camp	0	0	0	0	0	0	0	0	0	0	0
Agri mobile clinic	0	0	0	0	0	0	0	0	0	0	0
Soil test campaigns	1	20	6	26	8	0	0	0	20	6	26
Farm Science Club Conveners meet	0	0	0	0	0	0	0	0	0	0	0
Self Help Group Conveners meetings	1	20	5	25	7	0	0	0	20	5	25
MahilaMandals Conveners meetings	1	0	25	25	9	0	1	1	0	26	26
Special Programmes (specify)	43	1210	708	1918	12	8	3	11	1218	711	1929
Jal Sakthi Abhiyan	6	122	35	157	11	6	2	8	128	37	165
Swachhta Mah	23	812	201	1013	15	8	3	11	820	204	1024
Any Other (Specify)	8	320	105	425	10	2	1	3	322	106	428
Total	234	9899	3572	13471		102	45	147	11005	3618	14623

B. Other Extension activities

Nature of Extension Activity	No. of activities
Newspaper coverage	65
Radio talks	6
TV talks	5
Popular articles	5
Extension Literature	8
Electronic media	5
Animal health camp	0
Any other	0

C. Celebration of important days in KVKs

Celebration of Important Days	No. of activities	Farmers			Extension Officials			Total	
		M	F	Total	SC/ST (% of total)	M	F	Total	Total
Republic day (26 th Jan.)	1	20	3	23	2	3	0	3	28
International Women's Day (8 th Mar.)	1	40	50	90	15	5	0	5	110
Ambedkar Jayanti (14 th Apr.)	0	0	0	0	0	0	0	0	0
International Yoga Day (21 st Jun.)	1	22	1	23	2	0	0	0	25
Independence Day (15 th Aug.)	1	22	2	24	1	3	1	4	29
Parthenium Awareness Week	4	90	55	145	0	0	0	0	145
Hindi Diwas (14 th Sep.)	0	0	0	0	0	0	0	0	0
Gandhi Jayanti (2 nd Oct.)	0	0	0	0	0	0	0	0	0
Mahila Kisan Diwas (15 th Oct.)	1	65	25	90	0	0	0	0	90
World Food Day (16 th Oct.)	0	0	0	0	0	0	0	0	0
Vigilance Awareness Week	0	0	0	0	0	0	0	0	0
National Unity Day (31 st Oct.)	0	0	0	0	0	0	0	0	0
World Science Day (10 th Nov.)	1	40	10	50	5	0	0	0	55
National Education Day (11 th Nov.)	1	35	10	45	0	0	0	0	45
National Constitution Day (26 th Nov.)	0	0	0	0	0	0	0	0	0
World Soil Day (5 th Dec.)	1	36	32	68	28	0	0	0	96
Kisan Diwas (23 rd Dec.)	1	75	65	140	10	10	0	10	160

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

Sl.	Date of event	Name of Event/Programme	Interaction of Hon'ble PM/AM	Participants			
				Farmers	Staffs	VIP/Others	Total
2	26.04.2022	Kisan Bhagidari Prathimikta Hamari	Live telecast of Hon'ble PM	262	12	1	275
3	31.05.2022	PM launched 13 scheme for Kisan Kalyan	Interaction of Hon'ble PM	55	5	0	60
4	16.07.2022	ICAR Foundation day	Live telecast of Hon'ble AM	190	13	2	205
5	17.10.2022	PM Kisan Samman Nidhi Programme & Swachhata Awareness	Live telecast of Hon'ble PM & AM	410	18	2	430
6.	23.12.202022	Kisan Bhagidari Prathimikta Hamari	Live telecast of Hon'ble PM	145	14	1	160

3.5 a. Production and supply of Technological products

Village seed

Crop	Variety	Quantity of seed(q)	Value (Rs)	No. of farmers involved in village seed production	Number of farmers to whom seed provided			
					SC	ST	Other	Total
Chickpea	RVG-202	191.5						
Lentil	IPL-316	587.8						
Total		779.3						

KVK farm

Crop	Variety	Quantity of seed (q)	Value (Rs)	Number of farmers to whom seed provided			
				SC	ST	Other	Total
Pigeonpea	IPA203	43.6	523200	50	2	150	202
Grand Total							

Production of planting materials by the KVKs

Crop	Variety	No. of planting materials	Value (Rs)	Number of farmers to whom planting material provided			
				SC	ST	Other	Total
Vegetable seedlings							
Cauliflower							
Cabbage							
Tomato							
Brinjal							

Chilli										
Onion										
Others										
Fruits										
Mango	Amrapali, Mallika, Langra, Gulab khas,	9822	687540	775	323	1610	2708			
Guava	L-49, Allahabad safeda	290	11600	20	10	58	88			
Lime	Purvi kagzi	462	18480	12	33	75	120			
Litchi	Sahi,	750	30000	15	15	20	50			
Pomegranate	Sriganesh	362	14480	5	15	105	125			
Others										
Ornamental plants										
Medicinal and Aromatic										
Plantation										
Spices										
Turneric										
Tuber										
Elephant yams										
Fodder crop saplings										
Forest Species										
Others, pl.specify										
Total		11686	762100							

Production of Bio-Products

Name of product	Quantity	Value (Rs.)		No. of Farmers benefited		
	Kg			SC	ST	Other
Bio-fertilizers						
Bio-pesticide						

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers benefited				
				SC	ST	Other	Total	
Dairy animals								
Cows								
Buffaloes								
Calves								
Others (Pl. specify)								
Small ruminants								
Sheep								
Goat								
Other, please specify								
Poultry								
Broilers								
Layers								
Duals (broiler and layer)								
Japanese Quail								
Turkey								
Emu								
Ducks								
Others (Pl. specify)								
Piggery								
Piglet								
Hog								
Others (Pl. specify)								
Fisheries								
Indian carp								

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers benefited				
				SC	ST	Other	Total	
Dairy animals								
Cows								
Buffaloes								
Calves								
Others (Pl. specify)								
Small ruminants								
Sheep								
Goat								
Other, please specify								
Poultry								
Broilers								
Layers								
Duals (broiler and layer)								
Japanese Quail								
Turkey								
Emu								
Ducks								
Others (Pl. specify)								
Piggery								
Piglet								
Hog								
Others (Pl. specify)								
Fisheries								
Indian carp								

Exotic carp						
Mixed carp						
Fish fingerlings						
Spawn						
Others (Pl. specify)						
Grand Total						

3.5. b. Seed Hub Programme-“Creation of Seed Hubs for Increasing Indigenous Production of Pulses in India”

i) Name of Seed Hub Centre:

Name of Nodal Officer :	Smt. Rita lal
Address :	P.O. Shandkarpr, Sitakund Road, Beside Sadar Block, Munger-811201
e-mail :	mungerkvk@gmail.com
Phone No. :	7019790873
Mobile :	

ii) Quality Seed Production of Pulses

Season	Crop	Variety	Production (q)			Category of Seed(F/S, C/S)
			Target	Area sown (ha)	Production	
Kharif 2021						
Rabi 2021	Lentil	IPL316	750	82	502.43	C/S
	Chickpea	RVG202	250	45	143.20	C/S
Summer/Spring 2021						

iii) Financial Progress

Year	Opening Balance (1 st April)	Fund Utilized	Fund Earned (by seeds sale)	Interest gained/ Subsidy received if any	Closing Balance (31 st December 2022,)	Remarks (if any)
2018-19	21,86,974	35,88,830	37,09,575	1,35,722	65,48010	
2019-20	65,48010	3,42,4175	43,18,586	1,94,884	74,42,421	
2020-21	90,42,421	19,77,230	22,57,734	1,11,005	95,14,893	
2021-22	95,14,893	3068316	1809220	19524	82,75320	
2022-23	82,75,320	-	-	-	59,06000	

iv) Infrastructure Development

Item	Progress
Seed processing unit	All work completed
Seed storage structure	

3.6. (A) Literature Developed/Published (with full title, author & reference)

Item	Title	Authors name	Number	Circulation
Research paper				
Seminar/conference/symposia papers			-	-
56th ISAE Convention on "Agricultural Engineering Innovation for Global Food Security" and "International Symposium on India@2047"	Assessment of irrigation methods of water management in paddy cultivation	Er. Ashok Kumar SMS(Agril Engg.) Smt. Rita lal , Mukesh Kumar, Dr vinod Kumar,	2000	2000
Books				
Krishak Samachar	4	Shri Mukesh Kumar Dr. Vinod Kumar, Er. Ashok Kumar	4000	
Successful entrepreneur	Mushroom Products	Smt. Rita lal	1000	800
Bulletins				
News paper	Dainik Jagran, Prabhat Khabar, Hindustan & Dainik Bhaskar	Sri Mukesh Kumar, Dr. Vinod Kumar & Ashok Kumar Jan 2022–December 2022	210	mass
News letter				
Popular Articles	5	Shri Mukesh Kumar Dr. Vinod Kumar, Er. Ashok Kumar	5	

Book Chapter						
Extension Pamphlets/ literature	10		Shri Mukesh Kumar Dr. Vinod Kumar, Er. Ashok Kumar	10000	10000	
Technical reports	Annual Progress Report, 2022 SAC Meeting Report, Extension Council Report		Smt. Rita lal (Senior scientist and head ,KVK,Munger) and Er. Ashok Kumar SMS(Agril Engg.)	4 52 4	2 52 4	
Electronic Publication (CD/DVD etc)	-		-	-	-	

N.B.: Please enclose a copy of each. In case of literature prepared in local language please indicate the title in English

(B) Details of HRD programmes undergone by KVK personnel:N/A

Sl. No.	Name of programme	Name of course	Name of KVK personnel and designation	Date and Duration	Organized by
1.					
2.					
3.					
4.					

3.7. Success stories/Case studies, if any (two- or three-pages write-up on 1-2best case(s) with suitable action photographs)

Name of farmer	Yashoda Devi
Address	Vill – Tilkari, Tetia bamber ,
Contact details (Phone, mobile, email Id)	6202529621
Landholding (in ha.)	2.25 ha
Name and description of the farm/ enterprise	“Earn more by adopting mushroom cultivation”. Smt. Yashoda Devi is an energetic, laborious and innovative women farmer. She has felt her family responsibility. So, She had contacted with KVK’s scientists. She has achieved motivation to start self employment by taking training from KVK, Munger. She has started mushroom with 100 bags

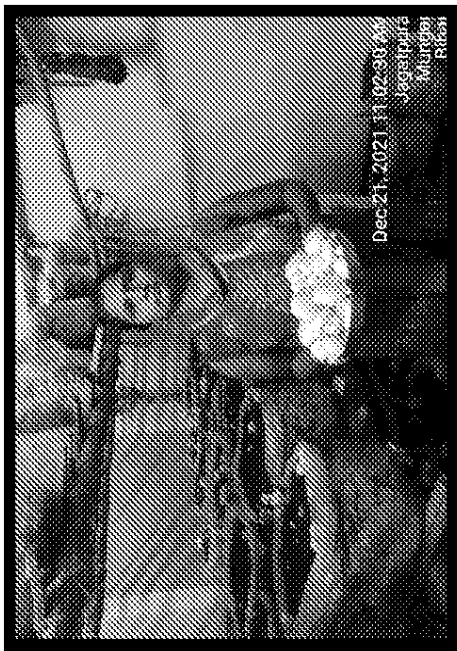
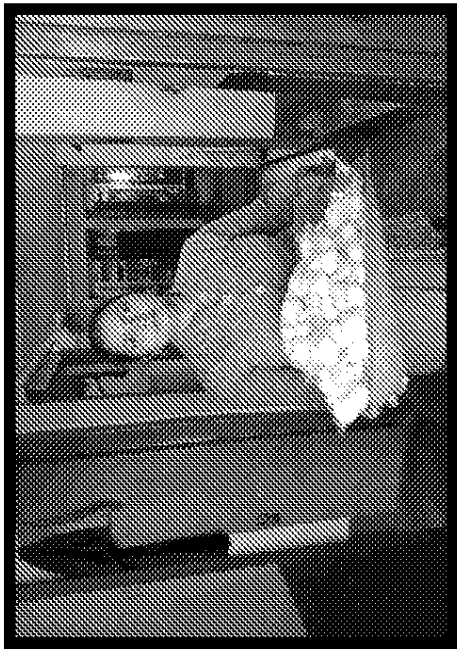
and yielded 1 quintal and returned Rs.10,000=00. She has taken training on mushroom cultivation, farming and other topics at KVK,Munger. KVK Scientist told her for doing agriculture and gives her training. After taking training, she has started agric. practice at home. After training she has started mushroom production with 1000 bag and earned Rs 285000.. She is an enthusiastic and leading youth of her village.

Economic impact	Crop/ Live Stock/ Fish/ Enterprise	Area(acre) No.	Cost of Production (Rs. Per year)	Return (Rs. Per year)	Net Income (Rs. Per year)
	Mushroom cultivation	1000 bag	15000	300000	285000
	Bee keeping	50 box	45000	525000	480000

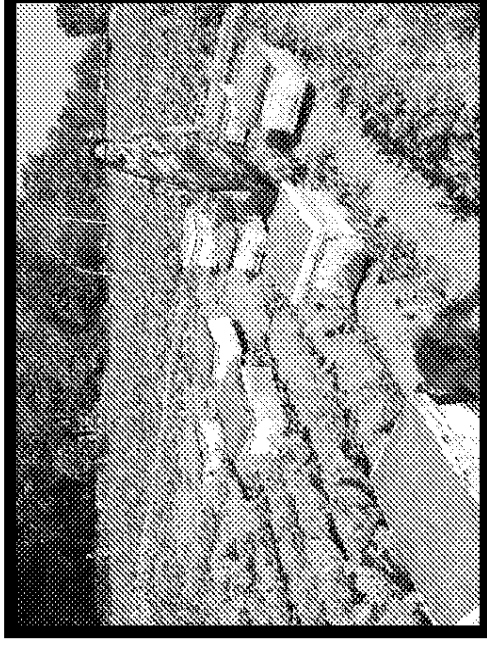
Social impact
By the adoption of mushroom production she has increased his farm production. She increased her family income. She educated her children in good school and colleges

Environmental impact
Tilkari village is one of the remote village of Munger districts. It is 75 KM away from district head quarter. But KVK Munger worked there and intervenes technically. Now all 220 household growing the mushroom and marketing it in both local and distant market. Recycling of rice straw and wheat husk using in mushroom cultivation. After full completion of the mushroom cultivation they use residues of husk and straw for vermicompost. Vermicompost ultimately used in crop production. Decreases the need of chemical fertilizer. Ultimately it helps in environment and ecosystem.

Horizontal/ Vertical spread
She is proving a model role for other youths in her village. She has taken action by providing training to 100 farmers by Paddy cultivation of Paddy. Mushroom- Trained 100 women farmer now She has put 300 Mushroom bags. Her mushroom production unit's size is increasing 5-10 % per year and investment of farm women also increase slightly 5-12 % per year in mushroom production. She also producing 20 quintal honey with 50 boxes of bee keeping. She is also motivating other neighbouring women to produce honey by bee keeping. At present she is earning Rs.480000/= by bee keeping.



Dec 21, 2021 11:02:30 AM
Jagatpura
Murder
Rishi



(A) Case study

A case study for the disseminated line sowing / planting of different crops.

Er. Ashok Kumar, SMS, Agril. Engg.
 Mukesh Kumar, SMS (Horticulture) And
 Vinod Kumar SMS, Agronomy)

Line sowing of different crops or plants is essential for reducing the agricultural input cost and increasing the net income from farms. This innovative farming technology is essential for doubling the farmers income. It is a technique to sow or plant most of seed or plantlets by innovative agricultural implements like Hand hoe, dibbler, seeder, multi crop seed drill, multicrop seed /plantlets planter ,vegetable transplanter, sugarcane planter, rice transplanter, potato planter, raised bed planter, happy seeder inclined plane planter, raised bed planter, zero tillage, rotary till seed cum fertilizer driller or other agricultural implements. line sowing is a technique to sow seed in line (seed drill) maintaining only row to row distance Not

plant to plant distance, where as planting is a type of line sowing in which seeds / plantlets are sown / transplanted inline maintaining row to row distance and plant to plant distance. This technology provides proper space for spreading the canopy of crops/ plants in maturity stage.It provides appropriate amount of Sunlight and aeration to crops. This technology reduces lodging of crops it also reduces (20- 30%)the input cost and enhances (25 - 30%)yield of crops with best quality.It reduces the exploitation/ overuse of natural resources soil water and air. This technology is sustainable profitable and eco -friendly for farming . A few years before farmers have been showing their loss by broadcasting methods investing more quantity of seeds. Transplanting of rice or vegetables is not being performed in line by most of farmers.They were achieving less deteriorated quality of yield by investing more inputs. Some farmers are following Bullock drawn funnel seed drill to Sow wheat in line but that was tedious task and was using high quantity of seed rate.

Recent, farmers have been sowing / transplanting most crops of crops in line with the help of manual or power operated agril. Implements.The farmers of Munger have been Sewing most of the crops in line like wheat, lentil, chickpea, maize, rice ,vegetable horticultural crops and others. They have obtained 25 to 30% more yield in wheat, maize, lentil, chickpea, rice, vegetable, fruit and other crops. They have found less input cost 20-30% in line showing.They have saved 20 to 25% seeds by seeding transplant inline. They have saved 15-25% fertilizer with seed cum fertilizer drill machine. They have saved 15 to 30% labour inline showing. They have saved 20 to 25% irrigation water and other agri inputs.In average they have saved 20- 30% agril. Inputs.In comparison to traditional method of cultivation of different crops.This technology is not only helpful to reduce cost of cultivation of different crops but also helpful to conserve our natural resources like soil, water & air.It provides us sustainable, profitable and eco-friendly farming.

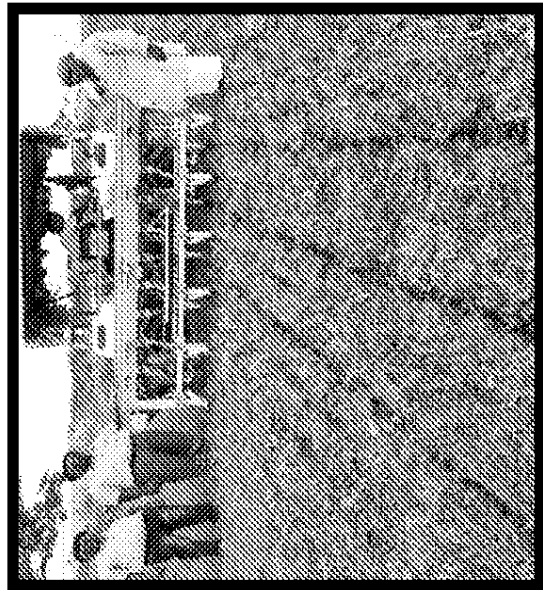
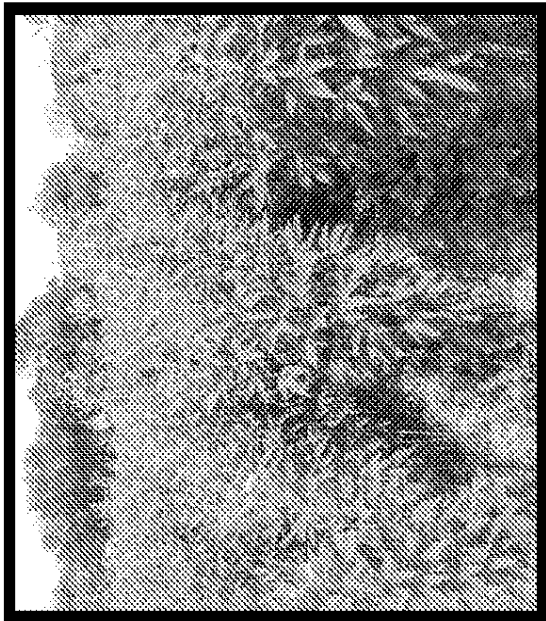
It averts blindly application of chemical fertilizers, insecticides, pesticides, herbicides or other chemical in farming.This technology is also helpful to conserve 20- 40% energy in farming. Line showing crops are Sowing by only one operation of tractor drawn happy seeder or zero tillage machine. It saves 50 - 75% energy by showing one time operation of tractor than three or four times operation of tractors in traditional methods of sowing mechanical methods of line sowing saves agriculture inputs like seed, water, time and performs that operation with the best quality. The most of the line sowing implements performs more than one agricultural operation in one operation of tractor. It saves the time & energy.

The line sown crops yield more with best marketable agril. Produce because less infestation of insect pest occur on crops due to availability of appropriate quantity of sunlight & air in all crops. Less lodging of crops occurs in line sown crops. Therefore, the quality of produce is better than traditionally sown crops. This technology has been disseminated by conducting FLDs in scaling up smart agriculture through mainstreaming climate smart village in Bihar project. This technology had also been popularized by conducting seed production programme under seed hub project.

KVK, Munger has disseminated line sowing innovative technology among farmers by conducting OFT, FLD, training, Kisangoshi, Kisanchaupal and other extension technologies.

The following farmers are adopting line sowing technology under following activities performed by KVK, Munger.

Sl.No.	Name of project/FLD	Name of line sown crops	No. of farmers	Area (acre)	Net extra income Obtained due to line sowing (Rs/acre)
1	FLD of agric. Engg	Wheat after harvesting	15	20	2500
2	CFLD(Pulse)Seed hub	Redgram	175	100	3000
		Lentil	105	100	3000
		Chickpea	183	100	3500
		Fieldpea	42	80	3000
3	Climate Smart Village Project	Lentil(by zero tillage)	155	60	3200
		Wheat(by zero tillage)	450	180	2300
		Wheat by raise bed planter	180	72	2500
		Hybrid maize by raise bed planter	250	100	3200
4	FLD by rice transplanter by & other motivated by KVKs scientist	Rice	330	150	2200
5	ITC & other NGOs conducted FLD on line sowing . Farmer motivated by KVK scientists.		450	220	3100
6	Other Agencies	Vegetable & other horticultural crops	1530	1240	3500
Total			3865	2422	



3.8. Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year

Sl. No.	Name/ Title of the technology	Name/ Details of the Innovator(s)	Brief details of the Innovative Technology
1.	Preparation of Jaivik product	Rinki Devi, at Baurna, Bangalwa, Dharhara, Munger	To reduce ill effect on edible agril. Produce. Bio pesticides is prepared by mixing and decomposing 5 kg Cow dung, 5 liter cow urine, 200 gm ghee, 2kg kurunj leaves, 2 kg neem leaves, ½ kg green chili & garlic paste in 50 liter water during 20 days. Decomposed liquid is filtered through cotton cloth & bio pesticide achieved. 2-3 liter bio pesticide mixing with 100 liter water is sprayed in different crops through cut fan or flat fan nozzle sprayer.

3.9. a. Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs)

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1	Ajwayeen (Scorn seed) seeds & pulses	Sowing of ajwayeen, oilseeds by broadcasting method after receding of flood water in 2-7' deep muddy plain area of diara land	To sow crop in time in problematic area in diara land. No any alternative method of sowing is applicable in swampy diara land.
2	Sowing of Millets	In cracked soil of diara land sowing of millet, wheat is done by local made manual operated zero till machine	To sow millet in wet plain area after receding flood water
3	Sowing of Maize & Wheat	Sowing of maize is done by manually operated bhoka or dibbler & wheat is broadcasted on surface and seed grains are swipped with broom in cracks	To sow maize and wheat in diara lands in problematic soil area after receding of flood water.

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
4	Planting of Pointed gourd	The vines of pointed gourd are planted in sandy & hard muddy area of diara land with the help of manual operated local made rambha (khanti)	To plant pointed gourd vines & other cucurbitaceous vegetables in diara land by rambha (khanti).
5	Pointed gourds & other cucurbitaceous vegetables	A local kash made tati (wind break) is made in north west side of field in diara land to protect crops from deposition of sand.	To check deposition of sand on leaves of crops and control wind erosion of soil in diara lands
6	Water source	Split bamboo, m.s. ring, coconut strings rope are used to make low cost casine pipe in diara land to install bamboo boring to achieve shallow depth's ground water to use it for irrigation.	To create water source for irrigation in diara land at low cost.
7	Bio Control	Spraying of cow dung, urine and cow dung's ash as repellent for insects in crops. Use bio control like panchparni, panch gavya & other to control insect's pests.	To protect crops damage from frost, micro-organism & insects.
8	Maize	Cut the upper portion of maize crops	To get green fodder for animals & to reduce mature time for cob of rabi maize
9	Water lift Method	Use of charsa (one swinging pot / bucket is bonded/tied with string/rope and drawn by two men in two sides of water channel) & lathakuri (don) for irrigation in paddy grown area.	To irrigate paddy & other crops in sloppy & hilly plain area. There is no water source rather than dug well or water pertaining gully.
10	Cattle Management	Use of bamboo's leaves for cow after delivery of the calf	To expels placenta properly in short time.
11	Poultry Management	In rural area, use of manually made multi stories poultry house under backyard poultry production.	To construct low cost earthen/mud made multi stories Darwa (poultry house) in rural area.

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
12	Household Security	Earthen made multi opening to put pot and one opening chulha is made in rural area by which fuel is inserted..	To use maximum thermal energy for efficient house work like cooking & parboiling of paddy and curing of turmeric .
13	All Crops	Use effigy (putla of man) or dead crow body in the field	To protects crop from animal, birds & thieves.
14	Nursery raising	Use plastic tunnel (rain shelter) to grow nursery	To grow fruit (papaya), vegetables & other crop's nursery in rainy season under poly tunnel
15	Straw Storage	Making two span heap structure of house with the help of paddy straw bundles	To storage paddy straw in open area to use as animal fodder.
16.	Nursery raising & crop growing	Spreading of ash over canopy of crops	To control red beetle on cucurbetecious vegetable and others .
17.	Production of worm for production of vermin compost	Uses soil pitcher & rotten cow dung to rear worm and produce vermin wash	To produce worm & vermin wash
18.	Plastic sheet	Covering the fruit bananas' bunch, papayas with polythene	To save it from birds & mature fruits in shortly span
19.	Pitcher irrigation	In diara area and in hilly plain area pitcher is used to irrigate horticulture crops by buried it in rhizosphere & put water in pot & cover it.	To save water from evaporation
20.	All crops	Spraying of cow dung & urine as repellent.	To save vegetable from chemical residue effect.

b. Give details of organic farming practiced by the farmer

Sl. No.	Crop / Enterprise	Area (ha)/ No. covered	Production	No. of farmers involved	Market available (Y/N)
1.	Vegetable	18	725 quintal	22	No
2.	Pulse (lentil & pigeonpea)	25	250 quintal	45	No

3.10. **Indicate the specific training need analysis tools/methodology followed by KVKs**

Identification of courses for farmers/farm women :Contact / Semi structured schedule and

PRA survey in village. The scientists had interacted with farmers to know the titles of training which they have needed to take technical knowledge.

- Rural Youth / In service personnel : Contact / Group Discussion and asking individual for their need. They had prepared action plan of Rabi and Kharif Karmshala as well as in Officers' Training & Knowledge test

Subject matter specialists of KVK have gone to village to search & survey the different types of information's, related to agriculture & agricultural allied activities. They have tried to find scope of development of agricultural activities & scope of development of entrepreneurship. They have interacted with farmers, rural youth & rural women about their hunger related to know technical knowledge of agril. And cattle farming. After discussion, they decided training's topics, FLD, OFT and other KVK's activities for that village. They have known about village infrastructure, natural resources like soil, irrigation facility pasture land, orchard, agril. Implements, social, economical and educational level of kisan. They have taken knowledge about the agricultural practices performed by them. They have collected data related to socio economic and culture of farmers. On the basis of above collected data scientist have made strategy to treat innovative methods and technologies to scale up the farm income of famers. The KVK has selected 10 villages beside NH-80 under "Scaling up climate smart agriculture through mainstreaming climate smart villages in Bihar , Project. The digital data related to agriculture, infrastructure, climatic calamities, land use pattern have been collected and to be analysed for formulating project activities in future. A project on Climate Resilient Agriculture programme & paramparagat Krishi Yojna project are implemented by KVK. For this KVK has surveyed farmers field & activated project's activities.

Field activities

The scientists of KVK had surveyed adopted village & other villages of district during Krishi Mahotsav (Kharif & Rabi), FLD, OFT, PRA survey & other training programmes. In Kharif season, farmers were convinced by scientists to cultivate short duration crop/variety of paddy & other crops in medium & hilly plain areas in drought situation. Paddy cultivators were motivated to plant one or two seedling in one heel and transplant in row by manuals transplanter, power operated paddy transplanter or paddy wheat seeder. At tillers emergence time, standing water should be drained and field capacity level water should maintain in paddy field so that more no. of tillers will emerge. The scientists of KVK had solved their problems related to nutrient management, leaf blight and insect pest disease problem in paddy cultivation. The scientists of KVK had motivated farmers to adopt DSR technology in paddy cultivation . They are motivated to use happy zero till seed cum fertilizer drill machine to sow paddy in drought

situation and wheat timely, after harvesting of paddy. They have also been motivated to use rotary tillers instead of rotavator. Because rotavator creates compactness in soil in below 6" beneath soil profile.

Survey was conducted by SMS (Hort.) in operational area. He had taught farmers to cultivate horticultural crops rather than cereal crops to achieve maximum returns from per unit area. He had solved problems related to fruit, vegetable & spice cultivation. He had convinced farmers to cultivate mentha in garma season as cash crop to achieve more profits.

SMS (Agril. Engg.) had surveyed operational area of KVK. He had found four types of land use pattern in district like hilly/sloppy, hill plain, tal & diara land. He had suggested to manage watershed for livelihood and agriculture in hilly area. He had suggested farmers about construction of merdhabandi / checkdam and for water harvesting structure like farmpound, WAT, to conserve soil and water. They have also been motivated to adopt contour farming, strip farming, afforestation and other soil & water control structures for this area. He had advised farmers to adopt sprinkler & drip irrigation, mechanization, water management and processing of Agriculture Produce & precision farming. He had motivated farmers to adopt above technologies for doubling farmers' income. He has recommended farmers to purchase paddy-wheat cutter, power tillers, rotary tiller, multi-crop planter/seed drill/zero till seed cum fertilizer drill, paddy transplanter, weeder, knapsack sprayer/other sprayer, Reaper /combine harvester & multi-crop thrasher to perform agricultural operation in precise form in short time and investing low cost. These implements perform agricultural operations shortly and mitigate quantitative & qualitative loss of agricultural produce and save agricultural product in erratic change of climatic situations. This is helpful to double the farmer's income on erratic change in climate change situation.

The Scientist of KVK has visited frequently farmer fields of 25 selected climate smart villages to conduct climate resilient agricultural interventions to sustain agricultural production and productivity in climate change situations. The scientist has also visited several fields of farmers during field day, soil sample collection, Kisan chaupal, poshan mah, Seed production and in other programmes.

The home Scientist had surveyed and advised women to generate self-employment through small cottage industry like Tailoring, embroidery, fruit & vegetable preservation & value addition in agricultural produce. For this you should take training in KVK, Munger to develop their skill. She has emphasized to home food security by enhancing kitchen garden, adopting value addition in agricultural produce & adopting mushroom production.

The agronomist had surveyed & suggested farmers to adopt scientific practice & package of different crops. He motivated farmers to adopt SRI method & DSR cultivation & green manuring. He convinced farmers to do seed production. He has provoked them to produce self seed in training, OFT & FLD conducted by KVK have to accelerate seed replacement rate in operational area. He has given CFLD on pulse & oilseed. He have been producing more pulse seeds under seed hub establishment project in collaboration with farmers. Scientists of KVK, Munger have

visited operational village and advised farmers to enrich soil by green manuring. They had motivated farmers to use liquid bio fertilizer, bio pesticides to produce agricultural product health friendly and eco-friendly. Soil testing should be done for proper nutrient management in crop production.

The farmers were convinced by KVK's scientist to adopt integrating farming system. mushroom culture, vermin culture, livestock management, goat rearing, poultry production, dairy production, construction of bio gas plant, food processing, bee keeping, nursery raising, graft, booting & budding process, use of poly house, vermin compost production repair of farm implements water management and construction of farm pond for achieving self-employment for their livelihood. These technologies are helpful to double the farmer's income.

- i. Number of villages adopted : 05
- ii. No. of farm families selected : 151
- iii. No. of survey : 15

3.11. a. Details of equipment available in Soil and Water Testing Laboratory

Sl. No	Name of the Equipment	Qty.	Cost
1	Water Distillation still / Plant	1	48000.00
2	Stabilizer (Automatic voltage stabilizer)	1	4000.00
3.	Refrigerator	1	---
4.	Electrical Balance &	1	77000.00
5.	Accessories		21000.00
6	Physical Balance	1	6500.00
7.	Conductivity Meter CM – 180	1	10170.00
8.	Horizontal shaker	1	25425.00
9.	Willey Mill Grinder	1	25425.00

10	Kheldahi Digestion and Distillation system	1	30510.00
11	Digital P.H. Meter Model L-1, 127	1	10170.00
12.	Spectro photo meter scarring minis pace	1	61000.00
13.	Flame Photometer Madaleu – 361	1	47,460.00
14	Hot Plate (Thermostatic)	1	9040.00
15	Hot Air Oven	1	15259.00
16	STFR	1	86000.00

3.11.b. Details of samples analyzed so far:

Number of soil samples analyzed		
Through mini soil testing kit/labs	Through soil testing laboratory	Total
405	0	405

3.11.c Detail of Soil, Water and Plant analysis at KVK

Sl.	Analysis	No. of Samples analyzed	No. of Villages	No. of Farmers	Amount realized (Rs.)
1.	Soil	405	12	405	95175
2.	Water				
3.	Plant				
4.	Fertilizers				
5.	Manures				
6.	Food				
7.	Others (if any)				

3.11.d. Details on World Soil Day

Sl. No.	Activity	No. of Participants	No. of VIPs	Name (s) of VIP(s)	Number of Soil Health Cards distributed	No. of farmers benefitted
1	5	96	0	-	65	75

3.12. Activities of Rain Water Harvesting structure and micro irrigation system

No of training programme	No. of demonstrations	No. of plant material produced	Visit by the farmers (No.)	Visit by the officials (No.)
5	1	45	12	1

3.13. Technology week celebration-N/A

Type of activities	No. of activities	Number of participants	Related crop/livestock technology

3.14. RAWE/FET programme - is KVK involved? (Y/N) Y

No of student trained	No of days stayed
29	240

3.15. List of VIP visitors (Minister/ MP/MLA/DM/VC/ZilaParishad/Other Head of Organization/Foreigners)

Date	Name of the person	Purpose of visit
26.04.2022	MLA, Sri Pranav Kumar	To participate in Kisan bhagidari Prathmikta hamari
12.05.2022	Sri Navin Kumar Singh ,DM, Munger	To visit KVK Activities & Pond renovation
16.07.2022	Sri Rajeev Kumar SinghMLA,Tarapur,	ICAR foundation day
15.09.2022	Dr.R.N.Singh, ADEE,BAU,Sabour	To attain SAC Meeting
15.09.2022	BAIF, MUNGER	To attain SAC Meeting
15.09.2022	Asst. DIRECTOR PLANT PROTECTION, MUNGER	To attain SAC Meeting
15.09.2022	Sumit kumar Singh DDM,NABARD	To attain SAC Meeting
15.09.2022	Asst. DIRECTOR Horticulture	To attain SAC Meeting
15.09.2022	Asst. DIRECTOR Agril. Engg.	To attain SAC Meeting
15.09.2022	LDM,Uco, bank, Munger	To attain SAC Meeting
15.09.2022	Deputy, Director, ATMA, Munger	To attain SAC Meeting

4. IMPACT

4.1. Impact of KVK activities (Not to be restricted for reporting period).

Sl. No.	Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
				Before Rs./Unit)	After (Rs./Unit)
1.	Area expansion under grafted mango orchard	95	9	22100	24200
2.	Seed Treatment with Chemicals & bio agents	1580	40	13200	14900
3.	Cultivation of improved varieties in cereals oilseeds, pulses, vegetables & more fruits.	1520	45	16000	16800
4.	Fruit & Vegetables Preservation	87	9	1700	1800
5.	Water management	190	18	21400	22300
6.	Mechanization	1110	35	45000	47000
7.	Nursery raising in polyhouse	85	9	26100	27200
8.	Land leveling	55	10	9800	10100
9.	Sowing/Transplanting in row	1790	35	18100	19200
10.	DSR	780	27	17000	18100
11.	Fertigation	280	12	12000	13500
12.	PHT	130	18	11100	12100
13.	Natural Farming	52	8	9500	9910

NB: Should be based on actual study, questionnaire/group discussion etc. with ex-participants

4.2. Cases of large scale adoption

(Please furnish detailed information for each case)

Horizontal spread of technologies	
Technology	Horizontal spread
Area expansion under grafted mango orchard	Previous year area under grafted mango was 1120 ha which is increased to 1210 ha during 2022
Seed Treatment with Chemicals & bio agents	Previous year about 40 % farmers are following this technology now latest year 2022, 48 % farmers are following this technology.
Cultivation of improved varieties in cereals oilseeds, pulses, vegetables & more fruits.	30-40% Seed replacement rate was followed by farmer in cereal crops which is enhanced to 35-45% in year 2022.
Fruit & Vegetables Preservation	8% to 9% fruit/ vegetable preservation was accelerated in year 2022
Water management	Water management through innovative surface irrigation & through hi-tech irrigation (drip & sprinkler) is followed by farmer with 5 % more than previous year.
Mechanization	Farm mechanization has been enhanced by end users from 22% to 25% during 2022.
Land levelling	Land leveling through laser guided land leveler is adopted by 1-2% farmers.
Climate resilient technology	From 6% to 8% adoption of Climate resilient technology

4.3. Details of impact analysis of KVK activities carried out during the reporting period

Name of Scientific Technology / Skill Transferred	No. of Trainees	% of adoption	Change in Income (Rs./Unit)	
			Before Training	After Training
Cultivation of pulse	105	10	12000	14000
Scientific cultivation of okra, brinjal, tomato, Parwal & oal	98	15	126000/ acre	130000/ acre
Preparation of Guava jelly	25	3	1400	1500
Water management in Field crops	98	16	14000	14400
Sowing of wheat by zero till seed cum fertilizer drill machine	850	25	48000	51000
Preparation of Jam	30	2	1500	1650
Use of DSR	475	18	64000/ha	68000/ha
Preparation of mixed mushroom pickles	18	5	1400	1610
Production of Mushroom	175	15	1900	2200
Protected cultivation	35	5	17000	19000
Mechanization	245	10	29000	31000
PHT management	55	19	39000	41000
Natural Farming	425	5	9500	9900

4.4. Details of innovations recorded by the KVK

Thematic area	Production or Organic inputs & its uses
Name of the Innovation	Preparation of Ghana amarit & its uses
Details of Innovator	Prakash Kumar Singh at Piyparpur, Tarapur, Munger
Back ground of innovation	Rotting of cow dung is done for 10 days and breaks into small pieces.
Technology details	Preparation of bio pest control measure. ½ kg besan, 1 litre chhacha, ½ kg juggery are mixed with rotten cow dung. This is used 50-60 q/ha by soil manipulation. 2-3 lit/100 lit water is sprayed with flat fan nozzle in one acre crops.
Practical utility of innovation	Ghanamrit is used in vegetable & other crops for enhancing soil fertility & chemical residue free. High quality agril. produce.

4.5. Details of entrepreneurship development

Entrepreneurship development	
Name of the enterprise	Mushroom production
Name & complete address of the entrepreneur	Smt. Bina Devi, At- Tilkari, Block- Tetia Bamber, Munger. Mobile no- 966127422, Aadhar no- 604304273229
Intervention of KVK with quantitative data support:	She has been trained to produce mushroom since 2013. She has also been taken to BAU, Sabour by KVK'S Scientists for training on Mushroom production techniques. She has modified pressure cooker into low cost autoclave to produce spawn of oyster mushroom. KVK's scientists have helped her to modify it and also helped to take mother organism from solan Himachal Pradesh. At present, she has been producing 80 quintal oyster mushroom & 120kg mushroom spawn with help of 8 local women groups annually.
Time line of the entrepreneurship development	She was completely unaware about mushroom. After taking training & exposure visit, she knew completely about importance & source of self employment giver mushroom production. She has started mushroom production with twenty bags only. After that she had started increasing order. She has been enlarging mushroom production with employing other near by rural women in this activity. The details of entrepreneur of mushroom production are below.

	Year	Capacity growing	Mushroom	employment	Net income annum (Rs)	pre
Technical Components of the Enterprise	2015	twenty – 100 bags		self	3000	
	2016	100-200 bags		Self + Husband	9000	
	2017	200-500 bags		self + husband+ son	38000	
	2018	1000-2000		Self + one	150,000	
	2019	2000-3000		Self + two	2,80,000	
	2020	3000-3500		Self + two	3,10,000	
	2021	3500-4000		Self + 3 labourer	3,25,000	
	2022	4000-5000		Self + 4 labourer	3,50,000	
Beside this she has engaged more than 800 rural human by constitute big self help group.						
Different types of agril. Machineries like zero tillage, self propelled reaper, combine harvester, egg hatcher, mentha processing plant, rice transplanter, vermicompost unit, honey bee box and mentha distillation plant.						
Status of entrepreneur before and after the enterprise	She was a house wife and no earning. She had started with twenty bags with returns only Rs 3000 per annum. At present she is giving four rural women employment & producing 80 quintal mushroom 120 kg spawn annually. Beside this she has also been engaging more than eight hundred rural women in this occupation.					
Present working condition of enterprise in terms of raw materials availability, labour availability, consumer preference, marketing the product etc. (Economic viability of the enterprise):	At present she has been producing 80 Quintal oyster mushroom & 120kg spawn. She has sold her product in local market & in district head quarter. She dries in solar dryer & in other dryer & preserve it in form of mushroom dust. She has also consumed it or by adding valve in it and prepared products like pickle, pokara & other food. The economical feasibility of this technology is very good for employment generation for rural women by investing low capital. Samosa of Mushroom fetched international glory for Indian dish .					
Horizontal spread of enterprise	Slightly increasing upward.					

4.6. Any other initiative taken by the KVK

1. Natural farming has been initiated through training & FLD
2. Rain water harvesting & it judicious application in agriculture under Jal Shakti abhiyaan.
3. Land leveling by laser guided land leveler under land leveling abhiyan 2022.
4. Vocational training programmes (more than 5 days) have been started for skill development Under BSDM training programme & RPL.

5. Development of demonstration plots of CRA Programme.
6. Production of quality seed and make availability to farmers has started under seed hub & CFLD programme by establishing seed processing machine and constructing storage. structure.
7. Extension of innovative agril. technologies has been started through video conferencing, audio visual & other multimedia means like facebook, whats app, youtube & SD cards.
8. Farmers advisory & other technical assistance for other agril. allied persons has started.

5. LINKAGES

5.1. Functional linkage with different organizations of district.

	Nature of linkage
DAO, MUNGER	Training, mechanization farm, Rabi, Kharif mahotsav
JDA, MUNGER	Kisan gosthi & workshop
DDM NABARD	Training & Kisan gosthi
ITC, MUNGER	Training, field visit & Demonstration
DFO, Munger	Training
Asst. Director Soil Conservation	Training & Demonstration
ATMA, MUNGER	Training & field visit, exhibition, scientist farmers meet, SREP preparation
BAIF, MUNGER	Training & field visit
Asst. DIRECTOR PLANT PROTECTION, MUNGER	Training & field visit
Asst. DIRECTOR Horticulture	Training & field visit
Asst. DIRECTOR Agril. Engg.	Training & field visit

5.2. List of special programme undertaken during 2022 by the KVK, which have been financed by ATMA/ Central Govt/ State Govt./NABARD/NHM/NFDB/Other Agencies (information of previous years should not be provided)

a) Programmes for infrastructure development- N/A

6.3. Performance of Production Units (bio-agents / bio pesticides/ bio fertilizers etc.,) -N/A

Sl. No.	Name of the Product	Qty. (Kg)	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1.					

6.4. Performance of instructional farm (livestock and fisheries production) -N/A

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1.							
2.							
3.							

6.5. Utilization of hostel facilities

Accommodation available (No. of beds) -29

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
4	29 for 240 days	6960	
Total :	29 for 240 days	6940	

(For whole of the year)

6.6. Utilization of staff quarters

Whether staff quarters has been completed: Yes

No. of staff quarters: 6+4

Date of completion: 1990

Occupancy details: C- type

Months	Q I	QII	Q III	QIV	Q V	QVI	Q VII
	Block1				Block2		
January 2022 To December 2022	Sri Mukesh Kumar, Senior scientist & Head	Dr.Vinod Kumar, SMS Agron., KVK, Munger	Sri Prem Chandra Maurya, Programme Assist. Computer	Vacant on April 2021	Er. Ashok Kumar SMS Agril. Engg.	Vacant on December 2020	Sri Prahalad Kumar, Programme Assist. Lab

Occupancy details: D- type

Months	Q I	QII	Q III	QIV
January 2022 To December 2022	Dharmendra Kumar, Stenographer, KVK, Munger	Jitendra Kumar, Driver, KVK, Munger	Sanjeev Kumar Singh ,Driver, KVK, Munger	Vacant

7. FINANCIAL PERFORMANCE

7.1.Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
Saving	UCO Bank, Munger	Bekapur, Munger	04280200020074

7.2. Utilization of funds under CFLD on Oilseed (*Rs. In Lakhs*)

Item	Released by ICAR		Expenditure		Unspent balance as on -
	Kharif	Rabi	Kharif	Rabi	

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7.3.Utilization of funds under CFLD on Pulses (*Rs. In Lakhs*)

Item	Released by ICAR		Expenditure		Unspent balance as on 1 st April 2013
	Kharif	Rabi	Kharif	Rabi	

7.4. Utilization of KVK funds during the year 2022(Not audited)

KRISHI VIKGYAN KENDRA, MUNGER**ICAR Proforma for Budget 2022-23 (1st April to 31st Dec'22)**

Components		Amount sanctioned in 2022-23	Amount released in 2022 - 23	Actual Expen. from 1 Apr. to 31st Dec' 2022
Salary :				
1	Pay & Allowance	133,21,044.00	133,21,044.00	82,71,672.00
TOTAL - A		133,21,044.00	133,21,044.00	82,71,672.00
General (Recurring)				
1	T.A.	75,000.00		73,013.00
2	H.R.D.	15,000.00		15,000.00
Contingency			7,13,747.00	
a	Stationary, telephone, postage and other office charges, POL, repair of vehicle, tractor and equipment	300,000.00		2,53,671.00
b	Training of Farmers	155,000.00		35,910.00
c	Training materials (Posters, charts, demonstration material including chemical etc. required for conducting the training			58,366.00
d	Training of Extension functionaries			-
	Training of Rural Youth			21,990.00
e	Frontline demonstration other than Pulses and oilseeds	30,000.00		29,365.00
f	On-farm testing (on need based, location specific and newly generated information in the major production systems of the year	60,000.00		59,729.00
g	Soil and water testing lab.	31,000.00		30,680.00
h	Maintenance of building	8,000.00		7,775.00
i	Extension activities/Exhibition, Kisan Mela etc.	41,000.00		40,108.00

TSP Contingency	-	-	-
TOTAL (B)	7,15,000.00	7,13,747.00	6,56,906.00
C. Capital (Non Recurring)	-	-	-
Total (A+B+C)	1,40,360,44.00	1,40,34,791.00	89,28,578.00

KRISHI VIKGYAN KENDRA, MUNGER

Proforma for SCSP Budget 2022-22 (1st April to 31st Dec'22)

Components	Amount sanctioned in 2022-23	Amount released in 2022 - 23	Actual Expen. from 1 Apr. to 31st Dec' 2022
SCSP General	1,25,000.00	1,00,000.00	63,740.00
SCSP Capital	1,50,000.00	97,500.00	1,00,000.00
TOTAL (B)	2,75,000.00	1,97,000.00	1,63,740.00

Proforma for Budget Misc. Scheme 2022-23 (1st April to 31st Dec'22)

Components	Amount sanctioned in 2022-23	Amount released in 2022 - 23	Actual Expen. from 1 Apr. to 31st Dec' 2022
Misc. Schemes			
1 CFLD OILSEED	2,80,000.00	NIL	2,40,369.00
2 CFLD PULSES	5,40,000.00	2,55,621.00	4,62,703.00
3 CRA PROJECT	12,00,000.00	20,00,000.00	7,84,868.00
4 IFS Fund		8,39,400.00	
5 NHM Mali Training 6 Month		4,97,374.00	1,68,796.00
6 NHM Small Nursery	-	182,951.00	14,700.00
7 BSDM Training Fund	-	433,622.00	0.00
8 PKVY Project	-	179538.00	0.00
9 Natural Farming	10,68,000.00	2,67,800.00	1,66,125.00
10 RPL Gardner Training Fund	-	2,13,573.00	0.00
11 Climate Smart Village		65,947.00	65,947.00

7.5. Status of **Revolving fund** for last three years

Year	Opening balance as on 1st January	Income during the year	Expenditure during the year	Net balance in hand as on 31 st December
2019	1023595.74	1653876.90	1022721.16	1654751.48
2020	1654751.48	833991.00	930742.72	1557999.76

2021	1557999.76	1348393.00	1277665.98	1628726.78
2022	1628726.78	1750045.00	1167820.82	2210950.56

7.6.

(i) Number of SHGs formed by KVKs - 01

(ii) Association of KVKs with SHGs formed by other organizations indicating the area of SHG activities.-

FLD of CRA Project, Training and awareness program.

(iii) Details of marketing channels created for the SHGs

The member of different SHGs have been linked with NABARD, Gramin Bank and other nationalized bank by opening account number of SHGs. NABARD has given financial support to different new and previous existing SHGs. They have produced products and sold it to ATMA, office or other local whole seller shop. They were registered in ATMA. They have been linked to self produce in different distance market by ATMA, Munger.

7.7. Joint activity carried out with line departments and ATMA

Name of activity	Season	With line department	With ATMA	Both
Training	Rabi 2022	ADPP, Munger	-	-
Kharif & rabi Mahotsav	Kharif & rabi 2022	DAO	ATMA	Both
Training	Kharif & rabi 2022	-	ATMA	-
Training & Field visit	Kharif & rabi 2022	DAO, Munger	-	-
Training, Field visit & Development of demonstration unit	Kharif & rabi 2022	ITC, Munger, Pravah, Munger	-	-
Training	Kharif & rabi 2022	BAO, Munger & other blocks	ATMA	Both
Training & Work shop	Kharif & rabi 2022	DAO, Munger	ATMA	Both
Workshop	Kharif & rabi 2022	JDA, Munger	-	-
Training	2022	UCO RSETI, Munger	ATMA	Both
Refinement of Technology	2022	ATMA	-	ATMA
Training	2022	CWC, Safiabab Munger		
Training	2022	AD Aril Engg. & soil conservation		

8. Other information

8.1. Prevalent diseases in Crops- N/A

Name of the disease	Crop	Date of outbreak	Area affected (in ha)	% Commodity loss	Preventive measures taken for area (in ha)
Wilt	Lentil & chickpea	15.10.2022	425	10	Seed treatment & foliar application of fungicides 240 ha

8.2. Prevalent diseases in Livestock/Fishery –N/A

Name of the disease	Species affected	Date of outbreak	Number of death/ Morbidity rate (%)	Number of animals vaccinated	Preventive measures taken in pond (in ha)

9.1. Nehru YuvaKendra(NYK) Training- N/A

Title of the training programme	Period		No. of the participant		Amount of Fund Received (Rs)
	From	To	Male	Female	

9.2. PPV & FR Sensitization training Programme –N/A

Date of vaccination programme	Resource Person	No. of participants	Registration (crop wise)	
			Name of crop	No. of registration

9.3. **mKisan**Portal (National Farmers' Portal/ SMSPortal)-N/A

Type of message	No. of messages	No. of farmers covered
Crop		
Livestock		
Fishery		
Weather		
Marketing		
Awareness		
Training information		
Other		
Total		

9.4. KVK Portal and Mobile App – N/A

Sl. No.	Particulars	Description
1.	No. of visitors visited the portal	
2.	No. of farmers registered in the portal	
3.	Mobile Apps developed by KVK	
4.	Name of the App	

5.	Language of the App	
6.	Meant for crop/ livestock/ fishery/ others	
7.	No. of times downloaded	

9.5 Kisan Mobile Advisory Services (KMAS) –N/A

Sl. No.	Discipline	No. of Advisories	No. of Messages (text+ videos)	Total messages	No. of Farmers
1.	Crop				
2.	Livestock				
3.	Weather				
4.	Marketing				
5.	Awareness				
6.	Enterprises				
7.	Others				
8.	Total				

9.6. a. Observation of Swachha Bharat Programme/Pakhwara

Date/ Duration of Observation	Activities undertaken	No. of Participants			
		Staffs	Farmers	Others	Total
16	98	9	485	22	507+ 9 stall
					516

b. Details of Swachhta activities with expenditure

Activities	Number	Expenditure (in Rs.)
1. Digitization of office records/ e-office	11	18500
2. Basic maintenance	17	
3. Sanitation and SBM	5	
4. Cleaning and beautification of surrounding areas	7	
5. Vermicomposting/ Composting of biodegradable waste management & other activities on generate of wealth for waste	8	
6. Used water for agriculture/ horticulture application	3	
7. Swachhta Awareness at local level	7	
8. Swachhta Workshops	0	
9. Swachhta Pledge	22	
10. Display and Banner	4	
11. Foster healthy competition	1	
12. Involvement of print and electronic media	4	
13. Involving the farmers, farm women and village youth in the adopted	6	

villages (no of adopted village)		
14. No. of Staff members involved in the activities	9	
15. No of VIP/VVIPs involved in the activities	0	
16. Any other specific activity (in details)	0	
Total	104	18500

9.7. Observation of National Science Day

Date of Observation	Activities undertaken
28.02.2022	Awareness programme about importance of science in our life has organized for rural farmer KVK,Munger

9.8. Programme with SeemaSurakshaBa/ BSF- N/A

Title of Programme	Date	No. of participants

9.9. Agriculture Knowledge in rural school -

Name and address of school	Date of visit to school	Areas covered	Teaching aids used
Middle school, lakdakola bangalwa, Dharhara, Munger	21.10.2022	Weed management in agriculture & importance of cleaning	Pumplet & lecture
Prathmik school Baurna , Dharhara	21.10.2022	Importance & benefits of cleanliness	Pumplet & Poster

Give good quality 1-2 photograph(s)

9.10. Details of 'Pre-Rabi Campaign' Programme- N/A

Date of programme	No. of Union Ministers attended the programme	No. of Hon'ble MPs (Loksabha/Rajyasabha) participated	No. of State Govt. Ministers	Participants (No.)							Coverage by Door Darshan (Yes/No)	Coverage by other channels (Number)
				MLAs Attended the programme	Chairman ZilaPanchayat	Distt. Collector/ DM	Bank Officials	Farmers	Govt. Officials, PRI members etc.	Total		

9.11. Details of Swachhta Hi Sewa programme organized –N.A

Sl. No.	Activity	No. of villages Involved	No. of Participants	No. of VIPs	Name (s) of VIP(s)
1.	9	9	432	0	0

9.12. Details of Mahila Kisan Divas programme organized

Sl. No.	Activity	No. of villages Involved	No. of Participants	No. of VIPs	Name (s) of VIP(s)
1.	Awareness Programme	1	45	0	0

9.13. No. of Progressive/Innovative/Lead farmer identified (category wise)

Sl. No.	Name of Farmer	Address of the farmer with contact no.	Innovation/ Leading in enterprise
1.	Yashoda Devi	At-Tilkari, tetia bamber, Munger Ph-6202529621	Mushroom Production
2.	Rinki Devi	At Baurna, Bangalwa, Dharhara, Munger	Bio pesticides(Natural Farming)

9.14. Revenue generation-N/A

Sl.No.	Name of Head	Income(Rs.)	Sponsoring agency

9.15. Resource Generation:-N/A

Sl.No.	Name of the programme	Purpose of the programme	Sources of fund	Amount (Rs. lakhs)	Infrastructure created

9.16. Performance of Automatic Weather Station in KVK –N/A

Date of establishment	Source of funding i.e. IMD/ICAR/Others (pl. specify)	Present status of functioning

9.17. Contingent crop planning

Name of the state	Name of district/KVK	Thematic area	Number of programmes organized	Number of Farmers contacted	A brief about contingent plan executed by the KVK
Bihar	Munger	Cropping system, Water management and vegetable cultivation	07	188	Life saving irrigation for standing crop . Sowing of short duration vegetable or paddy in draught area. In draught situation millets & short duration vegetables / paddy are recommended to cultivate.

10. Report on Cereal Systems Initiative for South Asia (CSISA)-N/A

- a) Year:
b) Introduction / General Information:

Experiment	Title	Objective	Treatment details	Date of sowing	Replication	Result with photographs
Experiment 1						
Experiment 2						
Experiment 3						
...						
..						
Others (If any)						

11. Details of TSP- N/A

- a. Achievements of physical output under TSP during 2021

Sl.	Activities	Physical Achievement	
1)	Trainings	No. of Trainings/Demos	No. of beneficiaries
a.	Farmer		
b.	Women		
c.	Rural Youths		
d.	Extension Personnel		
2)	OFT	No. of OFTs	No. of beneficiaries
3)	FLD	No. of FLDs	No. of beneficiaries
4)	Mobile agro- advisory to farmers	No. of advisory	No. of beneficiaries
5)	Other activities		

a.	Participants in extension activities (No.)	
b.	Production of seed (q)	
c.	Production of Planting material (No. in lakh)	
d.	Production of Livestock strains (No. in lakh)	
e.	Production of fingerlings (No. in lakh)	
f.	Testing of Soil, water, plant, manures samples (Nos.)	
g.	Asset creation (Number; Sprayer, ridge maker, pump set, weeder etc.)	
h.	No. of other programmes (Swachha Bharat Abhiyaan, Agriculture knowledge in rural school, Planting material distribution, Vaccination camp etc.)	

b. Fund received under TSP in 2022-23 (Rs. In lakh):

c. Achievements of physical outcome under TSP during 2022

Sl. No.	Description	Unit	Achievements
1	Change in family income	%	
2	Change in family consumption level	%	
3	Change in availability of agricultural implements/ tools etc.	No. per household	

d. Location and Beneficiary Details during 2022

District	Sub-district	No. of Village covered	Name of village(s) covered	ST population benefitted (No.)		
				M	F	T

12. Details of SCSP

Sl.	Activities	Physical Achievement	
1)	Trainings	No. of Trainings/Demos	No. of beneficiaries
a.	Farmer	4	130
b.	Women	1	30
c.	Rural Youths	1	35
d.	Extension Personnel	0	0
2)	OFT	No. of OFTs	No. of beneficiaries
		0	0
3)	FLD	No. of FLDs	No. of beneficiaries
		4	120
4)	Mobile agro- advisory to farmers	No. of advisory	No. of beneficiaries
		28	28
5)	Other activities		
a.	Participants in extension activities (No.)		332
b.	Production of seed (q)		0
c.	Production of Planting material (No. in lakh)		0
d.	Production of Livestock strains (No. in lakh)		0
e.	Production of fingerlings (No. in lakh)		0
f.	Testing of Soil, water, plant, manures samples (Nos.)		0

13. Progress report of NICRA KVK (Technology Demonstration component) during the period
(Applicable for KVKs identified under NICRA) –N/A

Natural Resource Management

Name of intervention undertaken	Number s under taken	No of unit s	Area (ha)	No of farmers covered / benefitted									Remarks
				SC		ST		Othe r		Total			
				M	F	M	F	M	F	M	F	T	

Crop Management / Production

Name of intervention undertaken	Area (ha)	No of farmers covered / benefitted										Remarks
		SC		ST		Other		Total				
		M	F	M	F	M	F	M	F	T		

Livestock and fisheries

Name of intervention undertaken	Number of animals covered	No of units	Area (ha)	No of farmers covered / benefitted								Remarks	
				SC	ST		Other		Total				
				M	F	M	F	M	F	M	F	T	

Institutional interventions

Name of intervention undertaken	No of units	Area (ha)	No of farmers covered / benefitted									Remarks
			SC		ST		Other		Total			
			M	F	M	F	M	F	M	F	T	

Capacity building

Thematic area	No of Courses	No of beneficiaries									
		SC	ST		Other			Total			
		M	F	M	F	M	F	M	F	T	

Extension activities

Thematic area	No of activities	No of beneficiaries								
		SC	ST	Other			Total			
		M	F	M	F	M	F	M	F	T

Detailed report should be provided in the circulated Performa

14.a) Awards/Recognition received by the KVK in year 2022 –

Sl. No.	Name of the Award	Conferring Authority	Amount	Purpose

b) Award received by Farmers in year 2022

Sl.	Name of the Award	Name of the Farmer	Address	Contact No.	Aadhar No.	Amount	Purpose	Conferring Authority
1.	Innovative farmer	Diwakar Singh	At Dadrijala, Sangrampur, Munger	9006529988		0.0	For, Innovation/IFS Model	BAU, Sabour

15. Any significant achievement of the KVK with facts and figures as well as quality photograph

16. Number of commodity based organizations/ farmers' cooperative society/ FPO formed/ associated with during last one year (Details of the group/society may be indicated)

Sl. No.	Name of the organization/ Society	Trust Deed No.& date	Date of Trust Registration Address	Proposed Activity	Commodity Identified	No. of Members	Financial position (Rupees in lakh)	Success indicator

17. Integrated Farming System (IFS)

A) Details of KVK Demo. Unit

Establishment of IFS Model –III, Repair work of old existing dairy farm /goatry will be done by DWP, BAU, Sabour.

B) Details of KVK Demo. Unit

Sl. No.	Module details (Component-wise)	Area under IFS (ha)	Production (Commodity-wise)	Cost of production in Rs. (Component-wise)	Value realized in Rs. (Commodity-wise)	No. of farmer adopted practicing IFS	% Change in adoption during the year
		0.4					

COMPONENTS

1. A cropping farm of 0.75 acre size
2. A dairy unit
3. A goatry unit
4. Vermi-compost unit of 4 beds.

ESTIMATE OF EXPENDITURE

A. NON RECURRING

Sl. No.	Particulars	(Rs. In lakh.)
1.	Cultivation of crops in 0.75 acre of land	0.60
2.	Vermi- Compost 04 pit @(10x3x2.5 ft.) with shed	0.60
3.	Making arrangement for water	1.00
4.	Construction of dairy units (20x15 ft.)	2.00
5.	Construction of goat shed	1.60
6.	Purchasing of Equipments / Utensils / Vehicles	0.25
Total		6.05

B. RECCURING

Sl. No.	Particulars	(Rs. in lakh.)
1.	Purchasing of 2 cow @ 60000 per cow	1.20
2.	Purchasing of 24 kg earth worms @ 250 per kg	0.06
3.	Purchasing of feeds for cattle	0.40
4.	Purchase of feed for goat	0.30
5.	Purchasing of drugs and Vaccines	0.10
6.	Operating cost (one worker @ 7000) for 12 months	0.84
6.	Miscellaneous cost and other unforeseen expenditure	0.25
Total		3.15

Grand total =A + B = 6.05+ 3.15= 9.20 lakh(Rupees nine lakh twenty thousand only)

C) Activities under IFS

Sl. No.	Component Name	No. of Components established	Area (ha)	No. of Activities		No. of farmers benefited	
				Demo	Training	Demo	Training
1.	Vermicompost	1	90 sq. feet	2	4	0	60
2.	Wheat		0.4	0	0	0	0
3.	Elephant footyam		0.1	0	0	0	0
4.	Turmeric		0.05	0	0	0	0

18. Technologies for Doubling Farmers' Income

Sl. No.	Name of the Technology	Brief Details of Technology (3- 5 bullet points)	Net Return to the farmer (Rs.) per ha per year due to the technology	No. of farmers adopted the technology in the district
1	Seed production	➤ Quality seed production. ➤ High yielding variety. ➤ Foundation seed / stress resistant variety of seed	Rs.19000	32
2	Vermicompost production	➤ Saving of fertilizer cost ➤ Soil fertility management. ➤ Chemical residual free produce production.	Rs 135000	28
3	Mushroom production	➤ Food security ➤ Employment generation ➤ Low cost land less activity	Rs 125000	55
4	Mechanization	➤ Input cost saving ➤ Time saving ➤ Quality of agril. operation performer	Rs 135000	44
5	Plantlet production	➤ Quality plant production. ➤ Employment generation ➤ Expansion of high revenue generating food crop area	Rs 145000	42

19. Report on Digital Farming Initiatives in Agriculture/ Digital Ag. Extension Service- N/A

Phase	Database prepared/ covered for		KVK level Committee		Various activity conducted for farmers
	Total no. of villages	Total no. of farmers	Date of formation	Name of members	
I					
II					
Total					

20. Information on Visit of Ministers to KVKs, if any –N/A

Date of Visit	Name of Hon'ble Minister	Name of Ministry	Salient points in his/ her observation (2-3 bulleted points)

21. a) Information on ASCI Skill Development Training Programme, undertaken during 2022 –N/A

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)	Fund utilized for the training (Rs.)
2022							

b) Information on Skill Development Training Programme (**Other than ASCI or less than 200 hrs.**, if any) if undertaken during 2022 –N/A

Thematic area of training	Title of the training	Duration (in hrs.)	No. of participants									Fund utilized for the training (Rs.)
			SC		ST		Other		Total			
			M	F	M	F	M	F	M	F	T	

22. Information of NARI Project(if applicable)

Name of Nodal Officer	No. of OFT on specified aspects	Title(s) of OFT	No. of FLD on specified aspects	No. of capacity development programme on specified aspects	Total no. of farm women/ girls involved in the project	Details of Issues related to gender mainstreaming addressed through the project
Smt Rita lal	0	0	5	4	15	To eradicate mal nutrition in women & Children.

Progress Information of NARI Project

a. Details of established Nutrition Garden in Nutri-Smart village

Sl.	Name of Nutri-Smart Village	Type of Nutrition Garden	Number	Area (sqm)	No. of beneficiaries
1.	Gogachak, Tarapur	Backyard/Kitchen garden	5	1500	5
2.	Chaffa, Asarganj				
3.	Neerpur, Bariyarpur				
4.	Amari, Dharhara				
5.	Madhopur, Munger				

[illegible][illegible][illegible]

KVK	No. of entrepreneurial units established	No. of Training programs organized	No. of rural youth trained		No. of youth established units	
			Male	Female	Male	Female

Sl. No.	Name of the programme	Date of the programme	Venue	Purpose	No. of participants
