

ANNUAL PROGRESS REPORT

(1st April 2022 -31st March 2023)



KRISHI VIGYAN KENDRA
DHANBAD, BALIAPUR FARM
DIST. - DHANBAD-828201
BIRSA AGRICULTURAL UNIVERSITY
RANCHI, JHARKHAND.

PROFORMA FOR ANNUAL REPORT 2021(1st April-31st March 2023)

1. GENERAL INFORMATION ABOUT THE KVK

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

Name and address of KVK	Telephone		E-Mail
	Office	FAX	
Krishi Vigyan Kendra, Dhanbad Baliapur farm, Dhanbad-828201	Office 09431507690	FAX	kvkdhanbad@rediffmail.com kvkdhanbadbau.2012@gmail.com Website--www.kvkdhanbad.org.in

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

Name and address of Host Organization	Telephone		E mail
	Office	FAX	
Birsa Agricultural University, Ranchi, Jharkhand.	0651-2450849	0651-2450525	

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Sh. Lalit Kumar Das		09431507690	kvkdhanbad@rediffmail.com

1.4. Year of sanction of KVK: 2005

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	Sh. Lalit Kumar Das	I/C Senior Scientist& Head	Agril. Extn.	57700-182400	15.07.2019	Permanent	SC
2.	Subject Matter Specialist	Dr. Rajeev Kumar	Scientist	Agril. Engg.	68900-205500	11.12.2007	Permanent	Gen
3.	Subject Matter Specialist	Dr. Seema Singh	Scientist	Home Science	57700-182400	01.04.2019	Permanent	Gen
4.	Subject Matter Specialist	Dr. Navin Kumar	Scientist	Plant Protection	57700-182400	11.12.2007	Permanent	Gen
5.	Subject Matter Specialist	Vacant	-	-	-	-----		-
6.	Subject Matter Specialist	Vacant	-	-	-	-----		-
7.	Subject Matter Specialist	Vacant	-	-	-	-----		-
8.	Programme Assistant	Sri Raman Kr. Srivastava	Programme Assistant	Agriculture	35400-112400	01.07.2009	Permanent	Gen
9.	Computer Programmer	vacant	---		-	-	-	-
10.	Farm Manager	Sri Sanjay Kumar	Farm Manager	Agriculture	35400-112400	01.03.05	Permanent	Gen
11.	Accountant / Superintendent	-		-	-	-		
12.	Stenographer	-			-	-		
13.	Driver	Sri Hem Prasad Manjhi	Contractual		9000		Contractual	ST
14.	Driver	Sri Girdhari Mahto	Contractual		9000	-	Contractual	OBC
15.	Supporting staff	Sri Shyamal Sarkar	Contractual	-	7000	-	Contractual	Gen
16.	Supporting staff	Sri Ram Prasad Murmu	Contractual	-	7000	-	Contractual	ST

1.6. Total land with KVK (in ha):

S. No.	Item	Area (ha)
1	Under Buildings	1.0
2.	Under Demonstration Units	1.0
3.	Under Crops	4.5
4.	Orchard/Agro-forestry	1
5.	Others with details	2.5
	Total	10.0

Total area should be matched with breakup

1.7. Infrastructure Development:

A) Buildings and others

S. No.	Name of infrastructure	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					Before 31.03.2007		Use	ICAR
2.	Farmers Hostel					-do-		Use	ICAR
3.	Staff Quarters (6)					-do-		Use	ICAR
4.	Piggery unit								
5	Fencing								
6	Rain Water harvesting structure					Incomplete		Not	ICAR
7	Threshing floor					Before 31.03.2007		Use	B.A.U
8	Farm godown								
9.	Dairy unit								
10.	Poultry unit								
11.	Goatry unit								
12.	Mushroom Lab								
13.	Mushroom production unit					Before 31.03.2007		Use	B.A.U
14.	Shade house								
15.	Soil test Lab					Before 31.03.2007		Use	ICAR
16	Others, Please Specify					Before 31.03.2007		Use	ICAR

* 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	Present status
Tractor with trolley	2006	--	1702.2 hours	Working but need repairing
Tractor with trolley	Provided by BAU Ranchi		01204.7 hours	Working
Tata Sumo	2006	500000	256584 km.	Working but need replacement
Motar Cycle	2016	59961	2879 km	Working
Motar Cycle	2016	59961	8259 km	Working

C) Equipment & AV aids

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
a. Lab equipment				
b. Farm machinery				
c. AV Aids				
Desktop Computer set	2006	--	Not Working	ICAR
Xerox	2007	--	Not working	ICAR
Digital Camera	2007	14512.50	Not Working	ICAR

D) Farm implements

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
Diesel Pump set Big – 5 H.P	2006	-	Working	
Spraying Machine (Gatour)	2006	-	Working	
Disc plough	2009	-	Working	
Multi purpose seed drill	2009	-	Not working	
Grass cutter	2009	-	Not working	
M. B. Plough	2009	-	Working	
Seed cum fertilizer drill	2009	-	Not working	
Rotary Tiller	2009	-	Working	
Power sprayer	2009	-	Not working	
Cage wheel nut bolt type	2009	-	Working	

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.	04.07.2022	35	Improve the co-ordination with NGO's & line departments for improvement of income generation of farmers of Dhanbad district	In collaboration with NABARD, Dhanbad & FPO (Nirsa block & Tundi block) established and 4 FPO has to be establish in this year.	
			At least establish one acre of land for organic farming and one acre of land for natural farming in KVK farm	KVK, Dhanbad established one acre land for Pigeon pea crop in organic farming and one acre land for Mustard crop in Natural Farming	
			Establish one acre of land for millets farming in KVK farm	Ragi vriety A-404 is cultivated in one acre land of KVK, Dhanbad	
			Mushroom production should be promoted for self-employment of farm women	In training and demonstration Mushroom spawn	

				production promoted to the farmers and farm women for self-employment and at least 200 farmers and farm women are involved in Mushroom cultivation	
			Farm women should be trained for value addition of crop, so that they may get appropriate cost of crop	At least 150 farm women trained for value addition of crop	
			Drip irrigation technology should be promoted in the district for cultivation of Horticultural crops	With the help of line department farmer of Dhanbad district uses Drip irrigation technology in about 500 ha for the cultivation of vegetables, flowers and other horticultural crops. Training on Drip irrigation technology is also organize time to time during 2022 80 farmers were benefited with the training programme.	
			Training and demonstration should organize to promote new variety of oilseeds and pulses	For the promotion of oilseed and pulse crop 10 training programme were conducted beside this demonstration programme of new variety of oilseed and pulses were conducted in 170 ha area in which 472 farmers were benefited.	
			Animal Husbandry department / Fishery department should linked with KVK to make more benefit for farmers and farm women	In collaboration with District fisheries Department vegetable seeds were distributed in 27 ha of land in Topchanchi Block of Dhanbad and they were also benefited with the technological solutions.	
			Grafting, Budding & Air layering should promoted through training & demonstration	110 Farmers and youths were trained in Grafting, Budding & Layering and 24 RAW students of BAU Ranchi were also trained.	
			Plantation should be promoted in Barren land in collaboration with DHO, Dhanbad	Plantation programme are started in barren land with the collaboration with DHO, Dhanbad.	

** Salient recommendation of SAC in bullet form*

Attach a copy of SAC proceedings along with list of participants

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

Sl. no.	Item	Information		
1	Major Farming system/enterprise	Agriculture + Livestock, Agriculture + Livestock + Poultry Agriculture + Horticulture Agriculture + Horticulture + Sericulture Agriculture + Fisheries + Duckery + Poultry		
2	Agro-climatic Zone	Zone – 7 Sub zone – IV		
3	Agro ecological situation	Sandy loam, rainfed, undulating	Soils are light textured having undulating topography & crops are grown under rainfed situation. No irrigation facility is available.	
		Sandy loam, undulating, irrigated.	Soils are light textured having undulating topography with irrigation facility. The sources of irrigation are mainly wells and tanks.	
		Clay soil, rainfed.	Soils are heavy textured, rich in organic matter and fertile. Crops are grown under rainfed situation. Only life saving irrigations is available.	
		Heavily soil, undulating, rainfed / forest	Soils are heavy textured having undulating topography with no irrigation facility. Most of lands are under forest. Crops are grown under rainfed situation.	
4	Soil type	Stony & gravelly	Found near the foot hills. Thickness of soil is very less. Used only for recreation purpose and picnic spots.	
		Sandy soil	Locally known as balu found near the river soils. They are coarse textured having less water holding capacity & deficient in plant nutrients.	
		Loamy soil	Found near the hills. They are medium textured soil having low water holding capacity. These soils are under cultivation of various types of crops.	
		Clay soil	Found near the tanks and rivers. They are heavy textured soil having high water holding capacity. These soils are fertile & very productive. Various type of crop and vegetables are grown.	
5	Productivity of major 2-3 crops under cereals, pulses, oilseeds, vegetables, fruits and others	Crop	Area (ha)	Productivity (Qtl /ha)
		Rice	42155	27.5
		Maize	2619	24.0
		Wheat	2817	25.0
		Pigeon Pea	1787	12.0
		Mustard	7824	9.1
		Chick pea	4718	15.0
		Potato	1248	263.0
Onion	903	190.2		

6	Mean yearly temperature, rainfall, humidity of the district	Month	Rainfall (mm)	Temperature ° C		Relative Humidity(%)	
				Maximum	Minimum	7.00A M	2.00PM
		January 2022	7.7	24.7	9.3	81.4	47.2
		February 2022	64.0	32.9	14.9	78.2	46.3
		March 2022	0.0	39.4	22.6	61.5	41.7
		April, 2022	0.0	38.7	19.8	40.8	33.2
		May, 2022	51.1	39.8	20.9	54.3	35.2
		June, 2022	136.2	37.9	20.6	52.5	34.9
		July, 2022	125.7	33.8	21.2	63.4	41.7
		August, 2022	284.6	32.7	20.4	59.8	37.6
		September, 2022	183.8	33.4	20.7	68.2	41.6
		October, 2022	77.7	35.2	21.8	73.4	46.9
		November, 2022	0.0	33.4	18.9	69.8	42.7
		December 2022	0.0	35.6	11.6	76.5	41.8
7	Production of major livestock products like milk, egg, meat etc.	Category		Population			
		Cattle					
		<i>Crossbred</i>		24176			
		<i>Indigenous</i>		458804			
		Buffalo		78806			
		Sheep					
		Crossbred		200			
		<i>Indigenous</i>		43166			
		Goats		214396			
		Pigs		214326			
		<i>Crossbred</i>		2054			
		<i>Indigenous</i>		686137			
		Rabbits		463			
		Poultry					
		Hens					
		<i>Desi</i>		177167			
		<i>Improved</i>		59932			
		Ducks		14141			
		Turkey and others		411			

Note: Please give recent data only

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

Sl. No.	Name of Taluk	Name of the block	Name of the villages	Major crops & enterprises	Major problems identified (crop-wise)	Identified Thrust Areas
Sl.No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Dhanbad	Baliapur	Shitalpur	Kharif- Rice, Ragi, Sesame, Black gram, Red gram, vegetable Rabi- Wheat, Mustard, Linseed, Gram, Lentil, Potato, Brinjal Summer- Moong, Ladyfinger, Bottle guard, Ridge guard.	<ol style="list-style-type: none"> 1. Unavailability of quality seed. 2. Unavailability of quality insecticides. 3. Scarcity of irrigation water during Rabi & Summer. 4. Lack of knowledge about improved scientific cultivation. 5. High cultivation cost of paddy. 6. Damage of grains during storage. 	<ol style="list-style-type: none"> 1. Improvement of soil and water conservation practices. 2. Improvement in yield of mono crop rice. 3. Popularization of IPM measures for field and Horticultural crops. 4. Introduction of post harvest & value addition technology.
2.	Dhanbad	Baliapur	Salpatra	Kharif- Rice, Maize, Sesame, Black gram, Red gram, Vegetables. Rabi- Wheat, Mustard, Linseed, Gram, Lentil, Pea, Potato, Brinjal, Cauliflower, Cabbage. Summer- Sesame, Moong, Ladyfinger, Cucurbits.	<ol style="list-style-type: none"> 1. Unavailability of quality seed. 2. Unavailability of quality insecticides. 3. Scarcity of irrigation water during Rabi & Summer. 4. Lack of knowledge about improved scientific cultivation. 5. High cultivation cost of paddy. 6. Damage of grains during storage. 	<ol style="list-style-type: none"> 1. Improvement of soil and water conservation practices. 2. Improvement in yield of mono crop rice. 3. Popularization of IPM measures for field and Horticultural crops. 4. Introduction of post harvest & value addition technology.

2. c. Details of village adoption programme:

Name of the villages adopted by Sr. Scientist & Head and SMS (in year 2022) for its development and action plan

Name of village	Block	Action taken for development
Salpatra	Baliapur	Base line survey, Training, FLD and OFT
Shitalpur	Baliapur	Base line survey, Training and FLD
Baliapur Purvi	Baliapur	Base line survey , Training and FLD
Lakhipur	Kaliasol	Base line survey , Training and FLD

2.1 Priority thrust areas

S. No	Thrust area
1.	Improvement of soil and water conservation practices
2.	Management of problematic soils.
3.	Popularization of integrated nutrient management practices
4.	Improvement in yield of mono crop rice.
5.	Diversification of traditional rice-based cropping system with appropriate commercialization
6.	Breed Improvement of cattle and pig
7.	Popularization of IPM measures for field and Horticultural crops.
8.	Introduction of postharvest & value addition technology.
9.	Entrepreneurship development of SHG groups.

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	1	100	-	-	-	-	-
Books	-	-	-	-	-	-	-
Bulletins							
News letter							
Popular Articles	2	500					
Book Chapter							
Extension Pamphlets/ literature	11	1800					
Technical reports	6	120					
Electronic Publication (CD/DVD etc)	-	-					
TOTAL	20	2520					

3.1.1 Achievements on technologies assessed and refined

OFT-1

1	Title of On farm Trial	ASSESSMENT OF DIFFERENT METHODS OF IRRIGATION ON PRODUCTIVITY OF TOMATO IN MEDIUM LAND
2	Problem diagnose	Low production of tomato due to irrigation water crisis
3	Details of technologies selected for assessment/refinement	Farmers Practice (FP) : Furrow/Bed irrigation Technology option-I : Drip Irrigation with crop residue mulch. Technology option-II : Drip irrigation with plastic mulch
4	Source of Technology	Department of Agril. Engg., BAU, Ranchi
5	Production system and thematic area	Pulse – Vegetable - Vegetable , Natural Resource Management
6	Performance of the Technology with performance indicators	Crop standing
7	Final recommendation for micro level situation	
8	Constraints identified and feedback for research	
9	Process of farmers participation and their reaction	

Thematic area: Water Management in Vegetable

Problem definition: Water scarcity for vegetable production

Technology assessed: Suitability of proper water saving application for production of vegetable

Table:

Technology option	No. of trials	No. of Branch / Plant	No. of Branch/ Plant	Field water use efficiency (Kg/m ³)	Yield (q/ha)	Cost of Cultivation (Rs./ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B C Ratio
Farmers Practice (FP) – Furrow/Bed Irrigation	10	Crop Standing							
Technology option-I - Drip Irrigation with Crop residue mulch									
Technology option-II - Drip irrigation with plastic mulch									

Results:



Farmers Practice (FP) : Furrow irrigation without mulch



Technology option-I_ - Drip Irrigation with crop residue mulch



Technology option-II: Drip Irrigation with Plastic mulch

OFT-2

1.	Title of On farm Trial	Assessment of Effectiveness Extension Methods for dissemination of commercial Vegetable Production Technologies.
2.	Problem diagnosed	Low production of vegetable
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmers Practice: Without Extension Education Methods TO1: Individual contact method (farm and home visit) TO2: Group contact Method (Demonstration, Lecture, Participatory Discussion/Training) TO3: Mass Contact (Leaflet, Mobile Advisory, A/V film)
4.	Source of Technology (ICAR/AICRP/SAU/other, please specify)	BAU Ranchi
5.	Production system and thematic area	Rice-fellow- fellow and Extension Method
6.	Performance of the Technology with performance indicators	Running
7.	Final recommendation for micro level situation	
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	

Thematic area:

Problem definition:

Technology assessed:

Table:

Technology option	No. of trials	Yield component			Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		No. of effective tillers/hill	No. of spikelet per panicle	Test wt. (100 grain wt.)					
Farmers Practice									
TOi									
TOii									

Results:

Please provide all the OFTs in same format

OFT-3

1.	Title of On farm Trial	Assessment of different value addition technologies of Jackfruit for Income Generation
2.	Problem diagnosed	(a) Low market price of Jackfruit during peak season. (b) Lack of knowledge of Nutritional Value of Jackfruits
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmers /Farmwomen Practice – Fresh used as vegetables /fruits /making pickles T1 - Preparation of pickles. Preparation of Pickles By curing of raw pieces of Jackfruit (peeled) with Turmeric Powder+ salt + Acetic Acid for 10-15 days followed by addition of Spices + Oil. T2 – Preparation of Jackfruit Chips. Preparation of Chips By Blanching of cut pieces +Sun drying followed by addition of Salt + one pinch Turmeric + Spices+ KMS(0.5%)
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Home Science Department, BAU, Ranchi & Technical Bulletin No. 41, ICAR, Goa, ATARI,Patna
5.	Production system and thematic area	Value addition & Income generation
6.	Performance of the Technology with performance indicators	(a) Life & Product Recovery (b) Organoleptic Test (c) Cost/Benefit Ratio
7.	Final recommendation for micro level situation	it is recommended that preparation techniques of jackfruit pickle its labeling and packaging among the SHGs should promoted to get FSSAI number It is also recommended that the techniques of value addition can be initiated as entrepreneurship development among the rural youth and SHGs from Local to Global & underutilized fruits as Super Food for nutrition security.
8.	Constraints identified and feedback for research	Lack of Proper Market facility and unaware of rich source of nutrients present in Jackfruits.
9.	Process of farmers participation and their reaction	Farmwomen are happy to adopt this easy techniques for income generation by locally and seasonally available jackfruits in making Jackfruit pickle with labeling and packaging & also in farm family as well for household consumption.

Thematic area: Value Addition

Problem definition:

Table:

Nutrition value Of Jackfruit(per 100gms)

Nutrients	Protein(gm)	Minerals(gm)	Carbohydrates(gm)	Energy(Kcal)	Calcium(mg)	Phosphorus(mg)	Iron(mg)
Jackfruit	1.9	0.9	19.8	88	20	41	0.56

Technology assessed:

Technology option	No. of trials	Shelf Life Organoleptic Test at 5 point Scale			incidence of microbial Spoilage (%)	Production/unit(qn)	Cost of cultivation (Rs./qn)	Gross return (Rs./qn)	Net return (Rs./qn)	BC ratio
		Taste	Flavour	Colour						
		After 2 months	After 4 months	After 6 months						
Farmers /Farmwomen Practice – Fresh used as vegetables /fruits /making pickles	8	Fair	Fair	Fair	40-45%	0.5	5000.00	6000.00	1000.00	1.2:1
T1 - Preparation of pickles. Preparation of Pickles By curing of raw pieces of Jackfruit (peeled) with Turmeric Powder+ salt + Acetic Acid for 10-15 days followed by addition of Spices + Oil.	8	Fair	Fair	Fair	20-25%	0.5	4500.00	10000.00	5550.00	2.2:1
T2 – Preparation of Jackfruit Chips. Preparation of Chips By Blanching of	8	Good	Good	Fair	20%	0.5	2500.00	4500.00	2000.00	1.8:1

cut pieces +Sun drying
followed by addition of Salt
+ one pinch Turmeric +
KMS(0.5%)

Result: For income generation among Rural youth & SHGs Jackfruit pickle making with labeling and packaging (T2) was found more remunerative and nutritive Packaging through SHGs were more acceptable & profitable. Jackfruits Chips need more popularization.



Technological Option 1



Technological Option 2

OFT-4

1 .	Title of On farm Trial	Assessment of different Value addition technologies of Potatoes for entrepreneurship development through SHGs
2 .	Problem diagnosed	Low Market value during Peak Season
3 .	Details of technologies selected for assessment/refinement	T1 – Farmers Practice Preparation of Chips of potato; Peeling + Slicing+ Blanching+ Drying + Packaging T2 -) Preparation of Chips of improved variety potato; Peeling + Slicing+ Blanching(in 0.5% KMS Solution)+ Drying + Packaging T2 – (iii) Preparation of Chips of improved variety of potato; Peeling + Slicing+ Blanching(dip in 0.5% KMS Solution for 1 hr.)+ Surface Drying+ Frying + Packaging
4 .	Source of Technology	Central Potato Research Institute, ICAR, Patna
5 .	Production system and thematic area	Small Scale Industry
6 .	Performance of the Technology with performance indicators	(i) Shelf Life (ii) Organoleptic test (iii) Cost Benefit Ratio
7 .	Final recommendation for micro level situation	It can be recommended among the SHGs & Rural youth for income generation
8 .	Constraints identified and feedback for research	Lack of Group Dynamics to form the Farmers Producer Organization to become entrepreneurs
9 .	Process of farmers participation and their reaction	Rural youth are attracted towards this enterprise.

Thematic area: Small Scale Industry

Problem definition: Low Market Value During peak season

Technology option	No. of trials	Shelf Life			incidence of change in Appearance (%)	Production/unit	Cost of cultivation (Rs./Kg)	Gross return (Rs/kg)	Net return (Rs./kg)	BC ratio
		Organoleptic Test (Color, Texture, Flavor , acceptability) After 3 months	Organoleptic Test (Color, Texture, Flavor , acceptability)After 6 months	Organoleptic Test(Color, Texture, Flavor , acceptability) After 9 months						
Farmers Practice Peeling + Slicing+ Blanching+ SunDrying + Packaging	8	Fair	Fair	Fair	70-80%	10Kg	10.00	15.00	5.00	1.5:1
Preparation of Chips of improved variety potato; Peeling + Slicing+ Blanching(in 0.5% KMS Solution)+ Drying + Packaging	8	Good	Good	Fair	30%	10Kg	15.00	25.00	10.00	1.6:1
iii) Preparation of Chips of improved variety of potato; Peeling + Slicing+ Blanching(dip	8	Excellent	Good	Fair	25%	10Kg	25.00	45.00	20.00	1.8:1

in 0.5% KMS Solution for 1 hr.)+ Surface Drying+ Frying + Packaging										
------------------------------------------------------------------------------------	--	--	--	--	--	--	--	--	--	--

Result: Preparation of Chips of improved variety of potato; Peeling + Slicing+ Blanching(dip in 0.5% KMS Solution for 1 hr.)+ Surface Drying+ Frying + Packaging through SHGs were more accepted & profitable.





OFT: POTATO Based Value Addition

3.1.2 Technology Assessed by KVK (Discipline wise)

Sl. No.	Discipline	Thematic areas	No. of the technologies (Technology Interventions)	No. of trials	No. of Locations
1.	Crop Production				
2.	Livestock				
3.	Enterprises				
4.	Women Empowerment				

3.2 Achievements of Frontline Demonstrations

A. Details of FLDs conducted during the year

Cereals

Sl. No.	Crop	Thematic area	Technology Demonstrated with detailed treatments	Area (ha)		No. of farmers/ demonstration						Reasons for shortfall in achievement			
				Proposed	Actual	SC		ST		Others			Total		
1.						M	F	M	F	M	F	M	F	T	
2.	Wheat	Crop Production	Variety with line sowing	5	5	27	-	-	-	-	-	27	-	27	
3.															
4.															
5.															

Details of farming situation

Sl. No.	Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil (Kg/ha)			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
					N	P ₂ O ₅	K ₂ O					
01	Wheat	Rabi	Irrigated	-	-	-	-	Paddy	26.11.2022	Crop is standing	-	-

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
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

Pulses

Frontline demonstration on pulse 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
	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

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

Others (Pl.specify)										
Total Fodder Crops										

Technical Feedback on the demonstrated technologies

Sl. No	Crop	Feed Back

Extension and Training activities under FLD

Sl. No.	Activity	Date	No. of activities organized	Number of participants	Remarks
1.	Field days				
2.	Farmers Training	10.11.2022	1	30	
3.	Media coverage				
4.	Training for extension functionaries				

Performance of the demonstration under CFLD on Pulse and Oilseed Crops during Kharif and Rabi:

CLUSTER FRONTLINE DEMONSTRATION OF OILSEED CROP (2022-23) PERFORMANCE DATA REPORTING

1. Name of KVK:- Krishi Vigyan Kendra, Dhanbad
 3. Host Institution:- Birsa Agricultural University Ranchi
 5. District:- Dhanbad
 7. Performance of the demonstration: Good

2. Year of establishment:- 2005
 4. Address:- KVK, Baliapur, Dhanbad
 6. State:- Jharkhand

Season: Kharif & Rabi 2022-23

A. Technical Parameters:

Sl. No.	Crop demonstrated	Existing (Farmer's) variety name	Existing yield (q/ha)	Yield gap (Kg/ha) w.r.to			Name of Variety + Technology demonstrated	Number of farmers	Area in ha	Yield obtained (q/ha)			Yield gap minimized (%)		
				District yield (D)	State yield (S)	Potential yield (P)				Max.	Min.	Av.	D	S	P
01	Sesame	Local	3.7	70	80	330	N-32 + Line sowing +Seed Treatment + IPM	57	20	5.87	4.62	5.1	31.81	31.11	20.0
02	Mustard	Local	-	-	-	-	PUSA Mustard-26 + Line Sowing + Use of Sulphur @ 20 kg/ha + IPM	82	30	Crop Standing					
03	Linseed	Local	-	-	-	-	JLS-95 + Line Sowing + IPM	54	20	Crop Standing					

C. Socio-economic impact parameters

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
01	Sesame – N-32	10200	100kg	Rs.78.30/kg	10kg/household	10kg	<ul style="list-style-type: none"> • Use for own consumption • Health • Education • Social activity 	35 Man days/House hold
02	Mustard - Pusa Mustard -26	-	-	-	-	-	-	-
03	Linseed – JLS-95	-	-	-	-	-	-	-

D. Oilseeds Farmers' perception of the intervention demonstrated

Sl. No.	Technologies demonstrated (with name)	Farmers' Perception parameters					
		Suitability to their farming system	Likings (Preference)	Affordability	Any negative effect	Is Technology acceptable to all in the group/village	Suggestions, for change/improvement, if any
02	Sesame – N-32 + Line Sowing + seed treatment	Suitable in upland in Kharif	Yield is good Demand in marketing due to White colour Fruiting Start from Roots of plant	Yes	Oil Content is low in comparison to Black Til	Acceptable to all farmers of group	In proper seed rate the yield can be get maximum

03	Mustard - Pusa-26 + Line Sowing + Use of Sulphur @ 20 kg/ha	-	-	-	-	-	-
04	Linseed – JLS-95 + Line Sowing + seed treatment + IPM	-	-	-	-	-	-

E. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
Yield	Seed capsule setting start from root of the plant	Good	Yield is more than local variety

F. Extension activities under FLD conducted:

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
01 Sesame	Training Field Day	22.07.2022 KVK, Dhanbad	42
		29.10.2022	16
02 Mustard	Training Field Day	28.10.2022 KVK, Dhanbad -	52
03 Linseed	Training Field Day	28.11.2022, Shitalpur -	38

a. Sequential good quality photographs (as per crop stages i.e. growth & development)

a. Crop: Sesame:





Crop: Linseed



CLUSTER FRONTLINE DEMONSTRATION OF PULSE CROP (2022-23) PERFORMANCE DATA REPORTING

1. Name of KVK:- Krishi Vigyan Kendra, Dhanbad
 3. Host Institution:- Birsa Agricultural University Ranchi
 5. District:- Dhanbad
 7. Performance of the demonstration:- Good

2. Year of establishment:- 2005
 4. Address:- KVK, Baliapur, Dhanbad
 6. State:-Jharkhand

Season: Kharif 2022-23

A. Technical Parameters:

Sl. No	Crop demonstrated	Existing (Farmer's) variety name	Existing yield (q/ha)	Yield gap (Kg/ha) w.r.to			Name of Variety + Technology demonstrated	Number of farmers	Area in ha	Yield obtained (q/ha)			Yield gap minimized (%)		
				District yield (D)	State yield (S)	Potential yield (P)				Max.	Min.	Av.	D	S	P
01	Pigeon Pea	Local	-	-	-	-	IPA-203 + Line sowing + Seed treatment + IPM	57	20	Crop is in harvesting stage					
02	Green Gram	Local	6.3	190	180	820	Shikha + Line Sowing + Seed treatment + IPM	28	10	9.6	7.4	8.6	28.0	28.4	15.9
03	Black Gram	Local	5.4	140	120	490	IPU-2-43 + Line sowing + Seed treatment + IPM	54	20	8.7	6.6	7.9	36.8	37.9	24.3

Season: Rabi & Summer 2022-23**A. Technical Parameters:**

Sl. No	Crop demonstrated	Existing (Farmer's) variety name	Existing yield (q/ha)	Yield gap (Kg/ha) w.r.to			Name of Variety + Technology demonstrated	Number of farmers	Area in ha	Yield obtained (q/ha)			Yield gap minimized (%)		
				District yield (D)	State yield (S)	Potential yield (P)				Max.	Min.	Av.	D	S	P
01	Chick Pea	Local	-	-	-	-	GNG-1581 + Line sowing + Seed treatment with rizobium	54	20	Crop is Standing					
02	Lentil	Local	-	-	-	-	IPL-316 +Line sowing+ Seed treatment with rizobium	32	10	Crop is Standing					
03	Field Pea	Local	-	-	-	-	IPFD-12-2 + Line Sowing + Seed Treatment	27	10	Crop is Standing					
04	Green Gram (Summer)	Local	-	-	-	-	HUM-16 + Line sowing + Seed treatment	25	10	To be conducted					

C. Economic parameters

D. Socio-economic impact parameters

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
01	Pigeon Pea- IPA- 203	-	-	-	-	-	-	-
02	Green Gram- Shikha	8600 kg	200 kg	77/kg	360 kg	400 kg	<ul style="list-style-type: none"> • Use for own consumption • Medicine • Education 	66 Man days/House hold
03	Black Gram IPU-2-43	15800 kg	150 kg	66/kg	300 kg	350 kg	<ul style="list-style-type: none"> • Use for own consumption • Medicine • Education 	54 Man days/House hold
04	Chick Pea GNG-1581 + Line sowing+ Seed treatment with rizobium	-	-	-	-	-	-	-
05	Lentil IPL-316 +Line sowing+ Seed treatment with rizobium	-	-	-	-	-	-	-
06	Green Gram- (Summer)	-	-	-	-	-	-	-

E. Pulse Farmers' perception of the intervention demonstrated

Sl. No.	Technologies demonstrated (with name)	Farmers' Perception parameters					
		Suitability to their farming system	Likings (Preference)	Affordability	Any negative effect	Is Technology acceptable to all in the group/village	Suggestions, for change/improvement, if any
01	Pigeon Pea- IPA- 203 + Line sowing + Seed treatment	-	-	-	-	-	-
03	Green Gram Shikha + Line Sowing + Seed treatment + IPM	Yes	Yes	Yes	No	Yes	No
04	Black Gram IPU-2-43 + Line sowing + Seed treatment + IPM	Yes	Yes	Yes	No	Yes	No
05	Chick Pea GNG-1581 +Line sowing+ Seed treatment with rizobium	-	-	-	-	-	-
06	Lentil IPL-316 +Line sowing+ Seed treatment with rizobium	-	-	-	-	-	-
07	Green Gram- HUM-16 (Summer)	-	-	-	-	-	-

F. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
Branching of Plant	Profuse branching of the Plant.	Line sowing behind the plough give the better result in branching.	Farmers are needed to small instrument for easily sowing of chickpea.
Variety	The variety gave better result in medium land situation after harvesting of Paddy.		

G. Extension activities under FLD conducted:

Sl. No./Crop	Extension Activities organized	Date and place of activity	Number of farmer attended
01 Pigeon Pea	Training (KVK) Field Day	06.07.2022, Salpatra 29.09.2022, Baradaha	52 19
02 Green Gram	Training (KVK) Field Day	04.07.2022, KVK, Dhanbad 27.09.2022, Baliapur Paschim	28 21
03 Black Gram	Training (KVK) Field Day	05.07.2022, KVK, Dhanbad 08.10.2021 Baradaha	34 21
04 Chick Pea	Training (KVK) Field Day	02.11.2022, KVK, Dhanbad -	47 -
05 Lentil	Training (KVK) Field Day	01.11.2022, KVK Dhanbad -	27 -
06 Field Pea	Training Field Day	21.11.2022, KVK, Dhanbad	25
07 Green Gram (Summer)	Training (KVK) Field Day	-	-

c. Sequential good quality photographs (as per crop stages i.e. growth & development)

a. Crop – Pigeon Pea



b. Black Gram



c. Green Gram



d. Crop : Chick Pea



e. Crop : Lentil

J. Details of budget utilization

Crop (provide crop wise information)	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
	i) Critical input			
	ii) TA/DA/POL etc. for monitoring			
	iii) Extension Activities (Field day)			
	iv)Publication of literature			
	Total			

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			
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	1	13	8	21	0	6	6	0	7	7	13	21	34
Designing and development for high nutrient efficiency diet													
Minimization of nutrient loss in processing													
Gender mainstreaming through SHGs	1	7	7	14	2	4	6	4	3	7	13	14	27
Storage loss minimization techniques													
Enterprise development													
Value addition													
Income generation activities for empowerment of rural Women	1	2	12	14	1	4	5	2	6	8	5	22	27
Location specific drudgery reduction technologies	1	5	13	18	0	12	12	0	7	7	5	32	37
Rural Crafts	1	0	14	14	0	4	4	0	6	6	0	24	24
Capacity building													
Women and child care	1	3	12	15	0	6	6	0	4	4	3	22	25
Others, if any													
VI. Agril. Engineering													
Installation and maintenance of micro irrigation systems	1	20	3	23	0	3	3	6	0	6	26	6	32
Use of Plastics in farming practices	1	6	4	10	8	5	13	5	2	7	21	11	32
Production of small tools and implements													
Repair and maintenance of farm machinery and implements													
Small scale processing and value addition	1	2	14	16	1	6	7	1	4	5	4	24	28
Post-Harvest Technology	1	1	2	3	8	2	10	7	8	15	16	12	28
Others, if any													
VII. Plant Protection													
Integrated Pest Management	1	14	6	20	2	3	5	4	3	7	20	12	32
Integrated Disease Management	2	12	49	61	0	0	0	0	0	0	12	49	61
Bio-control of pests and	1	22	10	32	1	0	1	0	0	0	23	10	33

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				
Tailoring and Stitching														
Rural Crafts	1	0	0	0	28	14	42	0	0	0	28	14	42	
Others, if any														
TOTAL	7	51	38	89	52	23	75	20	10	30	123	71	194	

F) Extension Personnel including the sponsored training programme (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	1	12	2	14	3	0	3	2	0	2	17	2	19
Integrated Pest Management													
Integrated Nutrient management													
Rejuvenation of old orchards													
Protected cultivation technology	1	14	1	15	6	0	6	3	1	4	23	2	25
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													
WTO and IPR issues													
Management in farm animals													
Livestock feed and fodder production													
Household food & Nutrition Security security	1	0	14	14	0	7	7	0	10	10	0	31	31
Women and Child care													
Low cost and nutrient efficient diet designing & Millet Processing	1	2	11	13	0	6	6	0	2	2	2	19	21
Production and use of organic inputs													
Gender mainstreaming through SHGs													
Crop intensification/Natural FARMING	1	17	11	28	4	0	4	2	0	2	23	11	34
TOTAL	5	45	39	84	13	13	26	7	13	20	65	65	130

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				
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														
Post harvest technology and value addition														
Others, if any														
TOTAL														
III. Soil Health and Fertility Management														
Soil fertility management	2	23	8	31	7	5	12	5	4	9	35	17	52	
Soil and Water Conservation	1	12	9	21	4	2	6	0	0	0	16	11	27	
Integrated Nutrient Management	1	17	3	20	0	0	0	0	1	1	17	4	21	
Production and use of organic inputs														
Management of Problematic soils														
Micro nutrient deficiency in crops														
Nutrient Use Efficiency														
Soil and Water Testing														
Others, if any														
TOTAL	4	52	20	72	11	7	18	5	5	10	68	32	100	
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)														
TOTAL														
V. Home Science/Women empowerment														
Household food security by kitchen gardening and nutrition gardening														
Design and development of	2	13	31	44	0	13	13	0	7	7	13	51	64	

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				
Shrimp farming														
Edible oyster farming														
Pearl culture														
Fish processing and value addition														
Others, if any														
TOTAL														
IX. Production of Inputs at site														
Seed Production														
Planting material production														
Bio-agents production														
Bio-pesticides production														
Bio-fertilizer production														
Vermi-compost production	2	0	0	0	0	0	0	23	17	40	23	17	40	
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	2	0	0	0	0	0	0	23	17	40	23	17	40	
X. Capacity Building and Group Dynamics														
Leadership development														
Group dynamics														
Formation and Management of SHGs	2	17	18	35	6	14	20	0	4	4	23	36	59	
Mobilization of social capital														
Entrepreneurial development of farmers/youths	3	44	19	63	9	2	11	2	0	2	55	21	76	
WTO and IPR issues														
Others, if any														
TOTAL	5	61	37	98	15	16	31	2	4	6	78	57	135	
XI Agro-forestry														
Production technologies														
Nursery management														
Integrated Farming Systems														
TOTAL														
XII. Others (Pl. specify)														
TOTAL														
GRAND TOTAL	70	649	526	1175	192	253	445	204	193	396	1045	972	2017	

ii. RURAL YOUTH (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				
Mushroom Production	4	46	12	58	7	4	11	8	8	15	61	24	85	
Bee-keeping														
Integrated farming	3	20	28	48	9	16	25	2	14	16	31	58	89	
Seed production	1	10	2	12	8	1	9	5	1	6	23	4	27	
Production of	1	16	4	20	4	1	5	6	1	7	26	6	32	

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				
organic inputs														
Planting material production	1	10	5	15	6	2	8	3	1	4	19	8	27	
Vermi-culture	1	13	5	18	6	0	6	3	0	3	22	5	27	
Sericulture														
Protected cultivation of vegetable crops	1	16	4	20	4	1	5	6	1	7	26	6	32	
Commercial fruit production														
Repair and maintenance of farm machinery and implements	1	17	9	26	2	0	2	2	0	2	21	9	30	
Nursery Management of Horticulture crops														
Training and pruning of orchards														
Value addition														
Production of quality animal products														
Dairying														
Sheep and goat rearing	1	12	9	21	3	5	8	0	3	3	15	17	32	
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	2	2	28	30	0	17	17	0	8	8	2	53	55	
Rural Crafts	1	0	0	0	28	14	42	0	0	0	28	14	42	
Enterprise development														
Others if any (Nutrition Gardening))	1	0	18	18	0	0	0	0	4	4	0	22	22	
TOTAL	18	162	124	286	77	61	138	35	41	75	274	226	500	

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	1	12	2	14	3	0	3	2	0	2	17	2	19
Integrated Pest Management													
Integrated Nutrient management													
Rejuvenation of old orchards													
Value addition	1	2	13	15	0	12	12	0	8	8	2	33	35
Protected cultivation technology	1	14	1	15	6	0	6	3	1	4	23	2	25
Formation and Management of SHGs													
Group Dynamics and farmers organization	2	32	25	57	9	5	14	8	6	14	49	36	85
Information networking among farmers	1	17	12	29	8	4	12	7	3	10	32	19	51
Capacity building for ICT application													
Care and maintenance of farm machinery and implements													
WTO and IPR issues													
Management in farm animals													
Livestock feed and fodder production													
Household food security	1	0	14	14	0	7	7	0	10	10	0	31	31
Women and Child care													
Low cost and nutrient efficient diet designing	1	2	11	13	0	6	6	0	2	2	2	19	21
Production and use of organic inputs	1	19	11	30	4	1	5	2	0	2	25	12	37
Gender mainstreaming through SHGs													
Crop intensification	1	17	11	28	4	0	4	2	0	2	23	11	34
Others if any													
TOTAL	10	115	100	215	34	35	69	24	30	54	173	165	338

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

Discipline	Clientel e	Title of the training programme	Duratio n in days	Venue (Off / On Campus)	Number of participants			Number of SC/ST		
					Male	Female	Total	Male	Female	Total
PP	PF	Disease management of Wheat and Mustard.	2	On	21	9	30	0	2	2
Engg	PF	Use and Precaution of Different Plant Protection Equipment for Rabi Crop	2	On	21	9	30	2	2	4
PP	RY	Mushroom Production	5	On	0	40	40	0	31	31
Engg	PF	Storage of Grain on House Hold Level	2	Off	18	12	30	2	2	4
H.Sc.	PF	Importance of Nutri Garden for their Farm Families Food Nutrition & Economic security.	1	Off	17	20	37	12	0	12
PP	RY	Mushroom Production	5	On	32	8	40	0	10	10
H.Sc.	RY	Value Addition of Fruits & Vegetables for Food & Nutrition Security	5	On	7	19	26	13	0	13
Hort.	PF	On Campus Training on Nursery development for Horticultural Crops	5	On	6	25	31	6	7	13
PP		Mushroom Cultivation techniques	5	On	3	37	40	3	17	20
S.Sc.		Production Technique of Vermi Compost	3	On	23	17	40	3	6	9
Hort		Vegetable cultivation	1	Off	34	6	40	12	2	14
Hort		Production of Horticultural Crops	5	On	20	10	30	1	1	2
PP		Mushroom Cultivation techniques	5	On	31	9	40	9	0	9
PP		Mushroom cultivation techniques	5	On	35	10	45	11	3	14
Engg		Use of Farm Implements in Summer Crop Production	2	On	18	17	35	6	0	6
Hort		Training on Horticulture Crop Production	5	On	30	10	40	6	10	16
H.Sc.	EF	Nutri Garden	3	On	-	30	30	0	0	0
PP	PF	Mushroom Cultivation Techniques	5	On	0	40	40	0	8	8
H.Sc.	RY	Herbal Gulal Making	5	On	17	13	30	3	0	3
PP	PF	Disease management of vegetables	2	On	21	29	50	9	9	18
Engg	PF	Irrigation management in summer vegetable	1	Off	23	8	31	6	2	8
H.Sc.	RY	Training Program on Stitching and Tailoring	4	On	9	11	20	2	0	2
PP	PF	Insect and disease of mango and other vegetable crop.	1	Off	20	30	50	0	0	0

Engg	PF	Water management in summer vegetable	1	Off	23	8	31	6	2	8
Agron	RY	Natural Farming	5	On	9	13	22	4	7	11
Engg	PF	Importance and benefit of summer ploughing	1	Off	23	9	32	6	3	9
PP	PF	Insect and pest management of mango	1	Off	50	3	53	31	13	4
PP	PF	Insect and disease management in vegetable crop	1	Off	45	5	50	20	0	20
PP	PF	Mushroom production techniques and problem diagnose in mushroom farm	1	Off	2	23	25	0	0	0
H.Sc.	PF	Value addition	2	Off	12	27	39	7	24	31
Agron	PF	SRI technique for Paddy Cultivation	1	Off	23	7	30	12	0	12
Hort	PF	Nursery raising technique for fruit and vegetables	1	On	17	8	25	0	8	8
Agron	PF	Nursery Raising & Natural Farming	1	On	-	35	35	0	0	0
Agron	EF	Natural Farming	1	Online	21	9	30	6	0	6
Engg	PF	Rain water conservation technique	1	Off	19	13	32	3	5	8
H.Sc.	RY	Stitching and embroidery	5	On	0	33	33	0	12	12
PP	RY	Mushroom cultivation Techniques	5	On	35	-	35	18	0	18
Agron	PF	Natural Farming	5	On	35	8	43	11	0	11
Extn	PF	Contingent Plan in Agriculture	2	On	24	-	24	4	0	4
Extn	PF	Sustainable agriculture for climate change as an alternative to paddy	1	On	22	15	37	10	2	12
PP	PF	Mushroom training	5	On	3	17	20	0	0	0
A.H.	PF	Goatry Farming	3	On	9	16	25	5	0	5
Agron	EF	Millet farming	3	On	-	21	21	0	3	3
Engg.	RY	Vegetable cultivation through Drip Irrigation System	3	On	34	2	36	12	2	14
PP	PF	Disease Management of Vegetable Cultivation	3	Off	-	24	24	0	0	0
Extn	RY	Vermicomposting	3	Off	50	3	53	31	3	34
Extn.	EF	Millet Processing for Business Plan	2	Off	45	5	50	20	0	20
Engg	PF	Use of Agricultural Implements in Rabi Crop	3	On	2	23	25	0	0	0
Agron	PF	Natural Farming	2	On	12	27	39	7	24	31
PP	RY	Mushroom training	4	On	23	7	30	12	0	12
H.Sc.	EF	Gender sensitization & role of women in	2	On	17	8	25	0	8	8

		agriculture								
Extn.	RY	RAWE students Village level training	10	On	-	35	35	0	0	0
PP	PF	Disease management in Rabi crop	1	Off	21	9	30	6	0	6
Extn	PF	Training on new aspects of Agriculture	1	Off	-	39	39	0	19	19
PP	PF	Insect and pest management in vegetables and different types of crops.	1	Off	33	-	33	23	0	23
H.Sc.	PF	Bamboo handicrafts training	1	Off	35	-	35	18	0	18
H.Sc.	PF	Millet Processing for Food & Nutrition Security	1	Off	35	8	43	11	0	11
Agron	PF	Zero Budget Farming	1	Off	24	-	24	4	0	4
PP	PF	Management of diseases in different types of vegetables	1	Off	22	15	37	10	2	12
	PF	Nutrition Gardening	1	Off						
HSc	PF	Tomato Processing	1	On	14	14	28	4	4	8
Ext	PF	Soil sampling and soil testing	8	On	1	25	26	0	3	3
Ext	PF	Soil sampling and soil testing	8	On	10	1	11	0	1	1
Engg	PF	Production Technology of sesame	1	Off	29	8	37	11	3	14
HSc	EF	Kharif crops Post harvest management	1	Off	12	12	24	12	2	14
HSc	PF	Food and Nutrition Security by Nutrition gardening	1	Off	5	17	22	2	2	4

H) Vocational training programmes for Rural Youth

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 elsewhere
				Male	Female	Total	Type of units	Number of units	Number of persons employed	
Mushroom	Mushroom Cultivation	Mushroom cultivation techniques	5	61	24	85	Production unit	17	29	14
Goat rearing	Goat Farming	Goat Farming	1	15	17	32	-	-	-	-
Tailoring and Stitching	Tailoring and Stitching	Tailoring and Stitching	2	2	53	55	Production Unit	5	10	-

**training title should specify the major technology /skill transferred*

Fisheries Management										
Other										
Total										
Home Science										
Household nutritional security										
Economic empowerment of women										
Drudgery reduction of women										
Other										
Total										
Agricultural Extension										
Capacity Building and Group Dynamics										
Other										
Total										
Grant Total	12	52	96	148	32	325	357	84	421	505

3.4. A. Extension Activities (including activities of FLD programmes)

Nature of Extension Activity	No. of activities	Farmers				Extension Officials			Total		
		M	F	T	SC/ ST (% of total)	Male	Female	Total	Male	Female	Total
Field Day	5	159	64	223	18	12	6	18	171	70	241
KisanMela	1	221	138	359	23	7	5	12	228	143	371
KisanGhoshi	9	329	156	485	16	16	5	21	345	161	506
Exhibition	2	147	71	218	9	2	3	5	149	74	223
Film Show	12	552	126	678	19	-	-	-	552	126	678
Method Demonstrations	13	241	82	323	12	-	-	-	241	82	323
Farmers Seminar											
Workshop	-	-	-	-	-	-	-	-	-	-	-
Group meetings	11	403	161	564	9	8	-	8	411	161	572
Lectures delivered as resource persons	68	426	145	571	11	8	3	11	434	148	582
Advisory Services	326	988	338	1228	19	-	-	-	988	338	1326
Scientific visit to farmers field	105	651	376	1027	14	18	2	20	669	378	1047
Farmers visit to KVK	545	1569	276	1845	11	-	-	-	1569	276	1845
Diagnostic visits	990	2790	852	3642	11	18	10	20	3808	854	3762
Exposure visits											
Ex-trainees Sammelan											
Soil health Camp											
Animal Health Camp											
Agri mobile clinic											
Soil test campaigns											
Farm Science Club Conveners meet											
Self Help Group Conveners meetings											
MahilaMandals Conveners meetings											
Special Programmes (specify)											
Sankalp Se Siddhi											
Swatchta Hi Sewa											
Field Day	5	159	64	223	18	12	6	18	171	70	241
Others											
Total	2092	8635	2849	11386	190	101	40	133	9736	2881	11717

B. Other Extension activities

Nature of Extension Activity	No. of activities
Newspaper coverage	35
Radio talks	0
TV talks	0
Popular articles	2
Extension Literature	14
Electronic media	6
Animal health camp	1
Any other	12

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	M	F	Total
Republic day (26 th Jan.)	1	12	8	20	15	8	3	11	20	11	31
International Women's Day (8 th Mar.)	4	13	46	59	12	3	1	4	16	50	66
Ambedkar Jayanti (14 th Apr.)											
International Yoga Day (21 st Jun.)	1	14	8	22	13	09	3	12	23	11	34
Independence Day (15 th Aug.)	1	32	16	48	12	10	3	13	42	19	61
Parthenium Awareness Week (16 th to 22 nd Aug.)	8	156	41	197	11	14	6	20	170	47	217
Hindi Diwas (14 th Sep.)	2	15	7	22	3	7	1	8	22	8	30
Gandhi Jayanti (2 nd Oct.)	1	18	11	29	14	7	3	10	25	21	46
Mahila Kisan Diwas (15 th Oct.)	1	2	35	37	5	1	2	3	3	37	40
World Food Day (16 th Oct.)	1	25	19	44	6	6	2	8	31	21	52
Vigilance Awareness Week (27 th Oct. to 2 nd Nov.)	7	178	56	234	16	8	2	8	186	58	244
National Unity Day (31 st Oct.)	1	15	1	16	0	9	1	10	24	2	26
World Science Day (10 th Nov.)											
National Education Day (11 th Nov.)	4	8	17	25	2	6	2	8	14	19	33
National Constitution Day (26 th Nov.)	2	25	8	33	3	6	3	9	31	11	42
World Soil Day (5 th Dec.)	1	38	0	38	5	6	2	8	43	8	51
Kisan Diwas (23 rd Dec.)	1	44	1	45	6	8	6	14	52	7	59
Total	36	595	274	869		108	40	146	702	330	1032

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
01	01.01.2022	PM Samman Nidhi Programme	Interaction with Hon'ble PM	128	9	3	140
02	26.04.2022	Kisan Bhagidari Prathimikta Hamari	Intraction with Hon'ble AM	278	9	4	291
03	31.05.2022	Garib Kalyan Sammelan	Interaction with Hon'ble PM	772	9	6	787
04	16.07.2022	94 th ICAR Establishment	Intraction with Hon'ble AM	205	9	2	216
05	17.09.2022	Poshan Abhiyan and Tree	Interaction with	374	9	3	386

		Plantation	Hon'ble AM				
06	17.10.2022	PM Kisan Samman Sammelan	Interaction with Hon'ble PM	337	9	4	350

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
Total								

KVK farm

Crop	Variety	Quantity of seed (q)	Value (Rs)	Number of farmers to whom seed provided			
				SC	ST	Other	Total
Paddy	IR-64Drt	24q	105600				
Paddy	Rajendra Massoori	27.5q	121000				
Pigeon Pea	IPA-203	1.0q	12800				
Wheat	DBW-187	4.5q	20700				
Mustard	NRCHB-101	1.4q	11200				
Linseed	Priyam	1.44q	6048				
Grand Total		59.85 q	277348				

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
Cauliflower	Madhuri	3000	6000				
Cabbage	Green Soccer	2000	5000				
Tomato	Laxmi F1	2000	5000				
Brinjal	No 801 F1	2000	5000				
Chilli							
Onion							
Others							
Fruits							
Mango	Dushahri, Langra, Ambrapali, Malika	1000	70000				
Guava	Allahabadi safeda, Lalit, L-49	2000	120000				
Lime							
Papaya							
Banana							
Others							

Ornamental plants							
Ornamental plants							
Medicinal and Aromatic							
Plantation							
Spices							
Turmeric							
Tuber							
Elephant yams							
Fodder crop saplings							
Forest Species							
Others, pl.specify							
Total		12000	211000				

Production of Bio-Products

Name of product	Quantity	Value (Rs.)	No. of Farmers benefitted			
	Kg		SC	ST	Other	Total
Bio-fertilizers						
Bio-pesticide						
Bio-fungicide						
Bio-agents						
Others, please specify.						
Total						

Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers benefitted			
				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 :	
Address :	
e-mail :	
Phone No. :	
Mobile :	

ii) Quality Seed Production of Pulses

Season	Crop	Variety	Production (q)			
			Target	Area sown (ha)	Production	Category of Seed (F/S, C/S)
Kharif 2021						
Rabi 2021						
Summer/Spring 2021						

iii) Financial Progress

Fund received (2016-17, 2017-18, 2019, 2020 and 2021)	Expenditure (Rs. in lakhs)		Unspent balance (Rs. in lakhs)	Remarks
	Infrastructure	Revolving fund		
2016-17				
2017-18				
2018-19				
2019				
2020				
2021				
2022				

iv) Infrastructure Development

Item	Progress
Seed processing unit	
Seed storage structure	

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

Item	Title	Author's name	ISBN No./ISSN Copy	Circulation
Research paper				
Seminar/conference/ symposia papers				
Books				
Bulletins	Ethnic Fermented Foods and Beverages of Bihar & Jharkhand: Science History and Culture	Usha Singh, Seema Singh &		500
News letter	Versa Jal Sarakshan Evam Jharkhand Me Versa Aadharit Kheti Ki Unnat Taknik	Adarsh Kumar Srivastava, Rajeev Kumar, Lalit Kumar Das, and Navin Kumar	Technical bulletin	500
Popular Articles	Drip Sichai Pradali –Kisano Ke Liye Ek Vardhan	Rajeev Kumar, Lalit Kumar Das, Adarsh Kumar Srivastava, and Navin Kumar	Technical bulletin	500
Book Chapter	Tapak Sichai(Jal Ka Kushal Upyog)	Rajeev Kumar, Adarsh Kumar Srivastava, lalit Kumar Das and Navin Kumar	Technical bulletin	500
Extension Pamphlets/ literature	Milky Mushroom	Navin kumar, Adarsh Kumar Srivastava, Rajeev Kumar		500
	Rain water harvesting & advanced method of irrigation.	Dr. Rajeev Kumar		1000
	SHG formation, regulation & its work.	Sri Lalit Kumar Das		1000
	Integrated pest management in veg	Sri Navin Kumar		1000
	Grain storage at Household level	Dr.Rajeev Kumar		1000
	Tamater ke Parirakshit Utpad	Dr. Seema Singh & Sri Lalit Kumar Das		1000
	Bhojan ko swadist santulit aur paushtik banana me upyogi hai hari pattedar sabji	Dr. Seema Singh & Sri Lalit Kumar Das		1000
	Sabjion ka Parirakshan	Dr. Seema Singh & Sri Lalit Kumar Das Dr. Seema Singh		1000
	Mahilaon ke Liye Paustik Khadya Padardh	Dr. Seema Singh		1000

	Poshan Ki Awashyakta	Dr. Seema Singh		1000
	Hari Pattedar Sabjion ka Paustik rup se Matawa			
	Annual Report 2022			50
	Annual Action Plan -2023-24			50
	Dhan dhanya dhanbad – an impact assessment of KVK, Dhanbad	KVK Dhanbad		100
	SRI—A Film on SRI Technology by KVK, Dhanbad			100

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:

Sl. No.	Name of programme	Name of course	Name of KVK personnel and designation	Date and Duration	Organized by
1.	Online Master Trainers Training	Natural Farming	Dr. Seema Singh, Scientist (H.Sc.)	5-9 August, 2022	MANAGE, Hyderabad
2.	KVKs Trainers Training Programme for Scientists	Tasar Silk Production , Rearing & Marketing	Dr. Seema Singh, Scientist (H.Sc.)	11-15, October	Central Tasar Research & Traing Institute, Central Silk Board, Ministry of Textile Govt Of India, Ranchi, Jharkhand
3.	21 Days FDP-2022	Role Of Science & Technology in Sustainable Agriculture, Horticulture, Animal Husbandry and Allied Sectors : A Retrospective & Perspective Approach	Sh. Lalit Kumar Das, Scientist (Agril. Extn.)	9-29, Nov, 2022	ICAR-Indian Grassland and Fodder Research Institute, H.P. & NADCL, Baramulla, U.T. of J. K.
4.	21 Days FDP-2022	Role Of Science & Technology in Sustainable Agriculture, Horticulture, Animal Husbandry and Allied Sectors : A Retrospective & Perspective Approach	Dr. Seema Singh, Scientist (H.Sc.)	9-29, Nov, 2022	ICAR-Indian Grassland and Fodder Research Institute, H.P. & NADCL, Baramulla, U.T. of J. K.
5	21 Days FDP-2022	Role Of Science & Technology in Sustainable	Dr. Rajeev Kumar, Scientist (Agril. Engg.)	9-29, Nov, 2022	ICAR-Indian Grassland and Fodder

		Agriculture, Horticulture, Animal Husbandry and Allied Sectors : A Retrospective & Perspective Approach			Research Institute, H.P. & NADCL, Baramulla, U.T. of J. K.
6	21 Days FDP-2022	Role Of Science & Technology in Sustainable Agriculture, Horticulture, Animal Husbandry and Allied Sectors : A Retrospective & Perspective Approach	Dr. Navin Kumar, Scientist (Plant Protection)	9-29, Nov, 2022	ICAR-Indian Grassland and Fodder Research Institute, H.P. & NADCL, Baramulla, U.T. of J. K.

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

Fruit Cultivation Change the Life of Farmer by Increasing Annual Income after Intervention of KVK, Dhanbad

Description of farmers

Name : Sh. Lallan Sharma

**Address: Kusum Vihar,
Post- Koyla Nagar, Dhanbad 826004
Email www.lallansharma.com
Mobile Number: Phone No 8969134165
Age: 50
Education: 12
Size of land holding (in ha): 5.2**



Name and Description of the Farm/Enterprise:

Background.

- For increasing annual income, farmer Lallan Sharma established an orchard at Rampur Village of Purvi Tundi Block in 5.2 ha. The land with undulating topography was too much suited for fruit cultivation.

KVK Intervention.

- Organize training for giving technical knowledge to the farmer for fruit production and give technical suggestion for preparation of layout and establish the orchard.
- Help in procuring planting material from KVK and other places
- Regular visit by the scientist of KVK, Dhanbad
- Lallan Sharma adopt the technical suggestion of KVK, Dhanbad, Planted Mango plant & Hybrid variety of Guava, Apple ber and Papaya which helped in increasing his annual income.

Economic Impact:

Sl.No	Crop	Area (Hectare)	Yield in Quintal		Gross Income (Rs.)	
			Before KVK Intervention	After KVK Intervention	Before KVK Intervention	After KVK Intervention
01	Guava	4.0	242	297	605000	1336500
02	Apple Ber	0.4	18	29	45000	159500
03	Mango	0.4	15	32	27000	83200
04	Papaya	0.4	97	160	145000	432000
Total		5.2	372	518	822000	2011200

Social Impact:

- Observing the impact of Fruit cultivation the farmers of Dhanbad district regularly visit the farm during exposure visit.
- The workers of nearby village got employment after establishment of Orchard.
- Now a days Sri Lallan Sharma helped the farmers of Harladih and Halatanrh village of Tundi block of Dhanbad District and Pandeydih village of Giridih District to established new orchard in around 20 ha.



Environmental Impact:

Orchard establishment is one of the best option for the environment like Dhanbad district where coal dust is one of the measure problem and it helps in reducing the coal dust from the environment. It also reduces the harmful GHG emission and atmospheric carbon sequestration. So the orchard establishment is very effective and great impact on environment.

Horizontal/Vertical Impact

Initially Sri Lalan Sharma established his orchard in 4.2 ha but after seeing its result the nearby farmers of the Rampur village started planting fruit trees like mango and guava in his field. The farmers of nearby villages like Harlatanrh and Harladih of Tundi block and Pandeydih village of Giridih also establish the orchard of guava, mango and apple ber in around 20 ha area. Many more farmers of the district contact KVK and Lallan Sharma for establish new orchard in their field.



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

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)

Sl. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK

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)

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

Sl. No.	Brief details of the tool/ methodology followed	Purpose for which the tool was followed

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

Sl. No	Name of the Equipment	Qty.
1	Atomic Absorption Spectro Photo meter	1
2	pH meter	1
3	Spectro photometer	1
4	Flamephotometer	1
5	Soil Testing minikit	2

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
178	0	178

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	178	178	178	89000
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
01	Kisan Gosthi	82	4	DAO, DHO, DFO & District Co-ordinator, FPO	52	52

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.)
05	0	-	142	-

3.13. Technology week celebration

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

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

No of student trained	No of days stayed
23	10 Days

ARS trainees trained	No of days stayed

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

Date	Name of the person	Purpose of visit

4. IMPACT

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
System of rice intensification	1762	31		
Seed treatment	1816	28		
Seed production	212	35		

Mushroom production	448	21		
Vermi-culture and composting	329	24		
Soil Sampling	178	44		
Safe use of Plant protection measure	279	18		
Vegetable nursery raising	403	23		
Stitching of garments	242	14		
Wearing and knitting	67	8		
Value addition in local fruits & vegetables	421	9		
Fabrication of small agricultural tools	165	13		

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
SRI of Paddy	2754 ha.
Mushroom cultivation	142

Give information in the same format as in case studies

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

Sl. No.	Brief details of technology	Impact of the technology in subjective terms	Impact of the technology in objective terms

4.4. Details of innovations recorded by the KVK

Thematic area	
Name of the Innovation	
Details of Innovator	
Back ground of innovation	
Technology details	
Practical utility of innovation	

4.5. Details of entrepreneurship development

Entrepreneurship development	
Name of the enterprise	Mushroom Production
Name & complete address of the entrepreneur	Sarita Devi, W/o Late Neeraj Singh Krishna Nagar, Cooperative Colony Near Hanuman Mandir Saraidhela Dhanbad Phone No. 9693706519
Role of KVK with quantitative data support:	First Training from 15-19.02.17 and second training on 28.9.2018-04.10.2018 started own unit just after first training and any problem he consult with scientist
Timeline of the entrepreneurship development	He started producing initially 1kg/day and sell at Rs 180/kg after second training his production of oyster

	mashroom rose 12kg/day
Technical Components of the Enterprise	The technical expertise and spown is purchased from KVK Dhanbad. He producing oyster mushroom and milky mushroom
Status of entrepreneur before and after the enterprise	Sarita Devi 80 bags of straw at one time, which cost about Rs.5000 and harvest about 200 kg /month raw mushroom and sell at a price of Rs 200/ kg and get Rs 950/day . the net income from mushroom Rs 27,800. He told that, he average earn more than Rs 25000/ month
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 he started in 2 rooms (1000sqft) area and involved four labour and stated catering the needs and demand of the local consumers. Since he told that he earn average Rs. 25000/month in mushroom and wanted to earn Rs 25000-30000/month he enlarges the production capacity from two room to six rooms. There is no problem of marketing he faces
Horizontal spread of enterprise	8-10 person after seeing his unit also working towards mushroom production and taken training from the KVK Dhanbad

4.6. Any other initiative taken by the KVK

5. LINKAGES

5.1. Functional linkage with different organizations

Name of organization	Nature of linkage
DRDA, Dhanbad	Infrastructure & sponsored training programme.
District Agriculture Office, Dhanbad	Participation in training, FLD, Joint survey.
District Animal Husbandry Office, Dhanbad	Joint training programme & participation in meeting.
District Fisheries Office, Dhanbad	Joint training programme & participation in meeting.
District Horticulture Office, Dhanbad	Joint training programme & participation in meeting.
District Plant Protection Office, Dhanbad	Joint diagnostic survey & participation in meeting.
District Forest Office, Dhanbad	Participation in meeting.
Agricultural produce market committee (Bazaar Samiti), Dhanbad.	Joint training programme, participation in meeting & joint Krishak Gosthi.
Lead Bank Manager office, Dhanbad	Financial support from banks to trained persons for entrepreneur development.
Zonal Office, Bank of India Dhanbad	Financial support from banks to trained persons for entrepreneur development.
NABARD, Dhanbad.	Formation of SHG, Kisan Club & Training.
Tata Steel Rural Development Society, Dhanbad.	Joint training programme & participation in meeting.

5.2. List of special programme undertaken during 2021 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

Name of the programme/ scheme	Purpose of programme	Date/ Month of initiation	Funding agency	Amount (Rs.)
Strengthening soil testing laboratory	Establishment/ strengthening soil testing laboratory	16.11. 2022	DAO, Dhanbad	375000

(b) Programme for other activities (training, FLD, OFT, Mela, Exhibition etc.)

Name of the programme/ scheme	Purpose of programme	Date/ Month of initiation	Funding agency	Amount (Rs.)

6. PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl. No	Name of demo Unit	Year of estt.	Area(S q.m t)	Details of production			Amount (Rs.)		Remarks
				Variety/br eed	Produce	Qty.	Cost of inputs	Gross income	
1	Progeny Orchard	2007	1 ha	MANGO-Langra, Maldha, Dasher, Amrapali, GUAVA-Allahabad Safeda Lucknow-49	Seedling	1000 2000	-	50950 40000	
				MANGO-Langra, Maldha, Dasher, Amrapali,	Mango Fruit	150 Kg		3000.	
				Guava	Fruit	118 Kg		1185	
				Banana	Fruit	5Kg		100	
				Bamboo		2PC		200	
				Habiscus Plant		2PC		60	
2	Tissue culture	2012-13	-	Banana – Grand nine, Robusta, Martman	Plant	-			
3	Mushroom unit	2012-13	-	Oyster spawn		83Kg		10825	
4	Value addition	2007	-	Training started	-	-			
5	Sewing & knitting	2007	-	Training started	-				
6	Seed processing	2010-11	-	Paddy,		122.43 quintal		20813	
7	Integrated	2017-		Duck egg sale					

	Farming	18							
8	Soil Testing	2007-08		Soil Test		80 sample		40000	
9	Vermi compost	2007-18		Vermi compost vermi		40 Kg		400	
10	Fabrication Unit	2007-08		Custom Hiring				-	
11	Technology Park	2007-08		Vegetables				860	
		Total						167383	

6.2. Performance of Instructional Farm (Crops)

Name Of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.(q)	Cost of inputs	Gross income	
Paddy	25.06.2022	Nov.2022	1.25	IR-64D	F/s	24	98000	105600	
Paddy	26.06.2022	25.11.2022	1.25	Rajendra Massoori	F/S	27.5	110000	121000	
Pigeon Pea	22.07.2021	14.03.2022		IPA-203	C/S	1.0	9800	12800	
Mustard	08.11.2021	March 2022	1.0	Pusa-26	F/s	1.4	7500	11200	
Wheat	14.11.2021	04.2022	0.5	DBW-187	F/S	4.0	13125	20700	
Linseed	13.12.2021	23.5.2022	0.5	Priyam	C/S	1.44	5400	6048	

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

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)

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)

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
Total :			

(For whole of the year)

6.6. Utilization of staff quarters

Whether staff quarters has been completed:

No. of staff quarters:

Date of completion:

Occupancy details:

Months	Q I	Q II	Q III	Q IV	Q V	Q VI

7. FINANCIAL PERFORMANCE

7.1. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
KVK, Dhanbad	SBI Hirapur	Hirapur Dhanbad	10900477204
KVK, Dhanbad	SBI Hirapur	Hirapur Dhanbad	10900477191

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	

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

Item	Released by ICAR		Expenditure		Unspent balance as on 1 st April 2022
	Kharif	Rabi	Kharif	Rabi	

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

Sl. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances			
2	Traveling allowances			
3	Contingencies			
A				

B				
C				
D				
E				
F				
G				
H				
I				
J	Swachhta Expenditure			
TOTAL (A)				
B. Non-Recurring Contingencies				
1				
2				
3				
4				
TOTAL (B)				
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)				

7.5. Status of **Revolving fund** (Rs. in lakh) for last three years

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance in hand as on 1 st April of each year (Kind + cash)
2019	565921	1394747	624121	1336547 + Kind
2020	1336547	450884	969975	817456+ Kind
2021	817456	553658	775331	595783 + Kind
2022	595783	480991	829877	246897 + Kind

- 7.6. (i) Number of SHGs formed by KVKs
(ii) Association of KVKs with SHGs formed by other organizations indicating the area of SHG activities
(iii) Details of marketing channels created for the SHGs

7.7. Joint activity carried out with line departments and ATMA

Name of activity	Number of activities	Season	With line department	With ATMA	With both
Online Training Of Gram Pradhan/Mukhiya	02	Kharif 4-5, July, 2022	ATMA, Dhanbad	ATMA, Dhanbad	
Seminar for Progressive Farmers on Horticulture	01	20, July, 2022	District Horticulture Office	ATMA, Dhanbad	With Both
Training cum Workshop	02	18-20, Oct, 2022	DSWO & ACIC(ISM) Foundation, Dhabad		with Both

8. Other information

8.1. Prevalent diseases in Crops

Name of the disease	Crop	Date of outbreak	Area affected (in ha)	% Commodity loss	Preventive measures taken for area (in ha)

8.2. Prevalent diseases in Livestock/Fishery

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 Yuva Kendra (NYK) Training

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

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/ SMS Portal)

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

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)

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- 31.12.2022	Basic maintenance, Cleaning and beautification of surrounding areas, Vermicomposting/Composting of biodegradable waste management & other activities on generate of wealth for waste, Used water for agriculture/ horticulture application, Swachhta Awareness at local level, Swachhta Workshops, Swachhta Workshops, Involving the farmers, farm women and village youth in the adopted villages (no of adopted village),	9	312	16	337

b. Details of Swachhta activities with expenditure

Activities	Number	Expenditure (in Rs.)
1. Digitization of office records/ e-office	8	
2. Basic maintenance	10	
3. Sanitation and SBM	11	
4. Cleaning and beautification of surrounding areas	14	
5. Vermicomposting/	18	

Composting of biodegradable waste management & other activities on generate of wealth for waste		
6. Used water for agriculture/ horticulture application	5	
7. Swachhta Awareness at local level	14	
8. Swachhta Workshops	0	
9. Swachhta Pledge	2	
10. Display and Banner	6	
11. Foster healthy competition	0	
12. Involvement of print and electronic media	4	
13. Involving the farmers, farm women and village youth in the adopted villages (no of adopted village)	32	
14.No. of Staff members involved in the activities	11	
15.No of VIP/VVIPs involved in the activities	0	
16. Any other specific activity (in details)	---	
Total	135	

9.7. Observation of National Science Day

Date of Observation	Activities undertaken

9.8. Programme with Seema Suraksha Bal/ BSF

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

Give good quality 1-2 photograph(s)

9.10. Details of 'Pre-Rabi Campaign' Programme

of progr amm n Minis ters atten ded the	MPs (Loks abha/ Rajya sabha	of State Govt. Minis	Participants (No.)	by Door Darsh by other chann

				MIAs 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

Sl. No.	Activity	No. of villages Involved	No. of Participants	No. of VIPs	Name (s) of VIP(s)
1	Toilet pit – digging exercise and other toilet construction activities	2	28	0	-
2	Organize cleaning of streets, drains and back alleys through awareness drives	1	21	0	-
3	Organize waste collection drives in household and common or shared spaces	2	28		
4	Conduct door –to-door meeting to drive behavior change with respect to sanitation behaviors	1	19	-	-
5	Organize awareness campaigns around better sanitation practices like using a toilet, hand washing, health and hygiene awareness etc.	2	32	-	-
6	Perform Swachhata related Nukkad Nataks/ street plays, folk song and dance performances	1	21		
7	Conduct Village or School – level rallies to generate awareness about sanitation	1	32		
8	Make wall Paintings in public places on the theme of Swachhata	1	12		
9	Volunteer for segregation of solid waste into non-biodegradable and biodegradable waste	0	0		
10	Mobilize community to build compost pits, Where organic matter decomposes to form manure	2	23		

9.12. Details of Mahila Kisan Divas programme organized

Sl. No.	Activity	No. of villages	No. of Participants	No. of VIPs	Name (s) of VIP(s)
---------	----------	-----------------	---------------------	-------------	--------------------

		Involved	ants		
1	Group discussion, debate, completion, prize distribution	7	74	-	-

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

9.14. Revenue generation

Sl.No.	Name of Head	Income (Rs.)	Sponsoring agency
1.			
2.			
3.			

9.15. Resource Generation:

Sl.No.	Name of the programme	Purpose of the programme	Sources of fund	Amount (Rs. lakhs)	Infrastructure created
1	Establishment /Strengthening Soil Testing lab	Strengthening Soil Testing lab	DAO, Dhanbad	3,75,000	Minilab, Refill chemical, Distilled water Machine, Oven and drier, Almirah for soil chemical store, Electricity Installation

9.16. Performance of Automatic Weather Station in KVK

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
Jharkhand	KVK, Dhanbad	Crop Production	2	121	1.Paddy cultivation through SRI method or plastic drum seeder. 2. Bunding for water retention. 3. Cultivation of Pulses & Oilseeds 4. Ridge Furrow method should be followed for proper germination 5. Conservation of soil moisture.

					6 Mechanical weeding
--	--	--	--	--	----------------------

10. Report on Cereal Systems Initiative for South Asia (CSISA)

- 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

a. Achievements of physical output under TSP during 2021

Sl.	Activities	Physical Achievement	
		No. of Trainings/Demos	No. of beneficiaries
1)	Trainings		
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	6	232
b.	Women		
c.	Rural Youths		
d.	Extension Personnel		
2)	OFT	No. of OFTs	No. of beneficiaries
3)	FLD	No. of FLDs	No. of beneficiaries
		37	37
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.)		

		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

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

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

B) Activities under IFS

Sl. No.	Component Name	No. of KVKs under the Component	No. of Components established	Area (ha)	No. of Activities		No. of farmers benefited	
					Demo	Training	Demo	Training
1.								
2.								
3.								

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 adoption of the technology	No. of farmers adopted the technology in the district	One high resolution 'Photo' in 'jpg' format for each technology
1					
2					

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

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

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

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

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

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.		Backyard/Kitchen garden			
2.		Community level			
3.		Terrace Garden			
4.		Vertical Garden			
TOTAL					

KKA-I																	
KKA-II																	

C. Livestock and Fishery related activities

Name of programme	No. of Programme	Activities performed				No. of farmers benefited									No. of other officials (except KVK) attended the programme		
		No. of animals vaccinated	No. of animals dewormed	Feed/nutrient supplements provided (kg)	Any other (Distribution of animals/birds/fingerlings) [No.]	SC		ST		Others		Total					
						M	F	M	F	M	F	M	F	T			
KKA-I																	
KKA-II																	

D. Other activities

Name of programme	Activities	No. of farmers benefited									No. of other officials (except KVK) attended the programme	
		SC		ST		Others		Total				
		M	F	M	F	M	F	M	F	T		
KKA-I	Soil Health Card Distributed											
	NADEP Pit established											
	Farm implements distributed											
	Others, if any											
KKA-II	Soil Health Card Distributed											
	NADEP Pit established											
	Farm implements distributed											
	Others, if any											

Krishi Kalyan Abhiyan- III

No. of villages covered	No. of animal inseminated	No. of farmers benefited									Any other, if any (pl. specify)	
		SC		ST		Others		Total				
		M	F	M	F	M	F	M	F	T		

25. ARYA

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

26. Any other programme organized by KVK, not covered above

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

Good quality action photographs of overall achievements of KVK during the year



