

# ANNUAL PROGRESS REPORT

(1<sup>st</sup> January 2021 -31<sup>st</sup> December 2021)



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

## **PROFORMA FOR ANNUAL REPORT 2021( 1<sup>st</sup> January-31<sup>st</sup> December 2021)**

### **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	<a href="mailto:kvkdhanbad@rediffmail.com">kvkdhanbad@rediffmail.com</a> <a href="mailto:kvkdhanbadbau.2012@gmail.com">kvkdhanbadbau.2012@gmail.com</a> <b>Website--www.kvkdhanbad.org.in</b>

#### 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
<b>Sh. Lalit Kumar Das</b>		09431507690	kvkdhanbad@rediffmail.com

#### 1.4. Year of sanction of KVK: 2005

1.5. Staff Position (as on 31<sup>st</sup> December 2021)

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		00881.4 hours	Working
Tata Sumo	2006	500000	246630 km.	Working but need replacement
Motar Cycle	2016	59961	3978	Working
Motar Cycle	2016	59961	4987	Working

## C) Equipment &amp; 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.	25.01.2021	36			

\* 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 (2021)

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	30.6
		Maize	2619	25.0
		Wheat	2789	21.57
		Pigeon Pea	1787	12.2
		Mustard	7824	9.1

		Chick pea	4921	15.4			
		Potato	1219	298			
		Onion	954	192.3			
6	Mean yearly temperature, rainfall, humidity of the district	Month	Rainfall (mm)	Temperature ° C		Relative Humidity(%)	
				Maximum	Minimum	7.00A M	2.00PM
		January 2021	0.0	24.7	9.3	81.4	47.2
		February 2021	0.0	32.9	14.9	78.2	46.3
		March 2021	15.4	39.4	22.6	61.5	41.7
		April, 2021	5.1	38.7	19.8	40.8	33.2
		May, 2021	163.3	39.8	20.9	54.3	35.2
		June, 2021	426.3	37.9	20.6	52.5	34.9
		July, 2021	356.3	33.8	21.2	63.4	41.7
		August, 2021	171.6	32.7	20.4	59.8	37.6
		September, 2021	333.8	33.4	20.7	68.2	41.6
		October, 2021	103.5	35.2	21.8	73.4	46.9
		November, 2021	35.8	33.4	18.9	69.8	42.7
		December 2021	17.75	35.6	11.6	76.5	41.8
7	Production of major livestock products like milk, egg, meat etc.	<b>Category</b>	<b>Population</b>				
		<b>Cattle</b>					
		<i>Crossbred</i>	24176				
		<i>Indigenous</i>	458804				
		<b>Buffalo</b>	78806				
		<b>Sheep</b>					
		Crossbred	200				
		<i>Indigenous</i>	43166				
		<b>Goats</b>	214396				
		<b>Pigs</b>	214326				
		<i>Crossbred</i>	2054				
		<i>Indigenous</i>	686137				
		<b>Rabbits</b>	463				
		<b>Poultry</b>					
		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 (2021)

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	<b>Kharif-</b> Rice, Ragi, Sesamum, Black gram, Red gram,vegetable <b>Rabi-</b> Wheat, Mustard, Linseed, Gram, Lentil, Potato, Brinjal <b>Summer-</b> Moong, Ladyfinger, Bottle guard, Ridge guard.	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.	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	<b>Kharif-</b> Rice, Maize, Sesame, Black gram, Red gram, Vegetables. <b>Rabi-</b> Wheat, Mustard, Linseed, Gram, Lentil, Pea, Potato, Brinjal, Cauliflower, Cabbage. <b>Summer-</b> Sesame, Moong, Ladyfinger, Cucurbits.	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.	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 2021) 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, pig and goat.
7.	Popularization of IPM measures for field and Horticultural crops.
8.	Introduction of post harvest & value addition technology.
9.	Entrepreneurship development of SHG groups.

### 3. TECHNICAL ACHIEVEMENTS

#### 3.A.Summary details of target and achievement of mandatory activities by KVK during the year2021

OFT											FLD																					
No. of technologies tested:											No. of technologies demonstrated:																					
Number of OFTs			Number of farmers								Number of FLDs			Number of farmers																		
Target	Achievement	Target	Achievement								Target	Achievement	Target	Achievement																		
			SC		ST		Others		Total					SC		ST		Others		Total												
			M	F	M	F	M	F	M	F				M	F	M	F	M	F	M	F	M	F	T								
9	9	80	8	4	9	6	4	1	6	2	8	10	10	375	3	2	7	6	1	7	2	1	3	8	1	6	3	8	2	2	6	8

Training											Extension activities																												
Number of Courses			Number of Participants								Number of activities			Number of participants																									
Target	Achievement	Target	Achievement								Target	Achievement	Target	Achievement																									
			SC		ST		Others		Total					SC		ST		Others		Total																			
			M	F	M	F	M	F	M	F				M	F	M	F	M	F	M	F	M	F	T															
131	86	2990	1	1	3	1	9	7	1	1	2	30	36	1000	1	1	2	1	3	8	7	3	1	5	8	6	9	8	7	5	1	6	8	1	5	6	2	1	3

Impact of capacity building											Impact of Extension activities																														
Number of Participants trained			Number of Trainees got employment (self/ wage/ entrepreneur/ engaged as skilled manpower)								Number of Participants attended			Number of participants got employment (self/ wage/ entrepreneur/ engaged as skilled manpower)																											
Target	Achievement	Target	SC		ST		Others		Total		Target	Achievement	Target	SC		ST		Others		Total																					
			M	F	M	F	M	F	M	F				M	F	M	F	M	F	M	F	M	F	T																	

Seed production (q)					Planting material (in Lakh)				
Target		Achievement			Target		Achievement		

Livestock strains and fish fingerlings produced (in lakh)*					Soil, water, plant, manures samples tested (in lakh)				
Target		Achievement			Target		Achievement		

\* Give no. only in case of fish fingerlings

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	1	1000	6	5.38	5.21		
Seminar/conference/ symposia papers	2	250	-	-	-	-	-
Books	-	-	-	-	-	-	-
Bulletins							
News letter							
Popular Articles							
Book Chapter							
Extension Pamphlets/ literature	11	1800					
Technical reports	4	100					
Electronic Publication (CD/DVD etc)	-	-					
TOTAL	18						

## 3.1.1 Achievements on technologies assessed and refined

**OFT-1**

1	Title of On farm Trial	<b>EFFICACY OF ESTABLISHMENT METHODS ON PRODUCTIVITY AND PROFITABILITY IN RICE (IR64DRT)</b>
2	Problem diagnose	High production cost & labour crisis during transplanting of rice
3	Details of technologies selected for assessment/ refinement	Farmer Practice- Transplanting Technological option <sub>1</sub> - Sowing of dry seeded rice by zero till seed cum fertilizer drill . Technological option <sub>2</sub> - Sowing of sprouted seed by drum seeder after puddling
4	Source of Technology	Department of Agril. Engg., BAU, Ranchi
5	Production system and thematic area	Rice – Pulse - fallow , Resource Conservation Technology
6	Performance of the Technology with performance indicators	
7	Final recommendation for micro level situation	The yield in case of farmer practice i.e. transplanting of rice is more than other two option but the BC ratio in case of sowing of rice by drum seeder after puddling is greater than the other two option hence may be benefited to the farmers for rice cultivation in medium land situation.
8	Constraints identified and feedback for research	During on farm trial it was found that the plastic drum seeder is more profitable to the farmer in case of direct sowing of rice.
9	Process of farmers participation and their reaction	The use of plastic drum seeder is easy to use but need practice before using in the field for sowing

*Thematic area:* Resource Conservation Technology

Problem definition: High production cost & labour crisis during transplanting of rice

Technology assessed: Suitability of implements for direct seeded rice

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 weeds /sq. m	No. of tillers/plant	Length of the panicle	Wt. of 1000 grains					
Farmer Practice-Transplanting	5	14	22	22.6	20.6	29.6	24,000	55,200	31,200	2.30:1
Technological option <sub>1</sub> – Sowing of dry seeded rice by zero till seed cum fertilizer drill .		19	15	21.1	19.7	23.1	18,500	43,100	24,600	2.33.:1
Technological option <sub>2</sub> – Sowing of sprouted seed by drum seeder after puddling		16	19	21.7	20.4	28.4	20,,500	53,000	32,500	2.58:1

Results: The yield in case of farmer practice i.e. transplanting of rice is more than other two option but the BC ratio in case of sowing of rice by drum seeder after puddling is greater than the other two option hence may be benefited to the farmers for rice cultivation in medium land situation.



Sowing of paddy by *Zero tillage seed cum fertilizer drill*



Sowing of Paddy by *Drum seeder after puddling*



Farmer Practice- Transplanting



Technological option 1 - *Sowing of dry seeded rice by zero till seed cum fertilizer drill*



Technological option 2 - *Sowing of sprouted seed by drum seeder after puddling*

**OFT-2**

1	Title of On farm Trial	<b>PERFORMANCE EVALUATION OF DRIP IRRIGATION WITH MULCH TOMATO</b>
2	Problem diagnose	Low production of tomato due to irrigation water crisis
3	Details of technologies selected for assessment/refinement	Farmers Practice (FP) : Furrow irrigation without mulch. Technology option-I : Drip Irrigation in paired row without mulch. Technology option-II : Drip irrigation in paired row with plastic (Silver- Black) 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 <sup>3</sup> )	Yield (q/ha)	Cost of Cultivation (Rs./ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B C Ratio
Farmers Practice (FP) - Furrow Irrigation without mulch.	6	Crop Standing							
Technology option-I - Drip Irrigation in paired row without mulch									
Technology option-II - Drip irrigation in paired row with plastic (Silver- Black) mulch									

Results:



**Farmers Practice (FP) : Furrow irrigation without mulch**



**Technology option-I & Technology option-II: Drip Irrigation in without mulch. & with mulch**

**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.
3.	Details of technologies selected for assessment/refinement	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 + KMS(0.5%)
4.	Source of Technology	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 & underutilized fruits 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.

## Nutrition value Of Jackfruit(per 100gms)

Nutrients	Protein(gm)	Minerals(gm)	Carbohydrates(gm)	Energy(Kcal)	Calcium(mg)	Phosphorus(mg)	Iron(mg)
<b>Jackfruit</b>	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	Cost of cultivation (Rs./Kg)	Gross return (Rs/kg)	Net return (Rs./kg)	BC ratio
		Taste Flavour Colour Texture General Acceptability								
		After 2 months	After 4 months	After 6 months						
Farmers /Farmwomen Practice – Fresh used as vegetables /fruits /making pickles	6	Fair	Fair	Fair	40-45%	50Kg	2000.00	3600.00	1200.00	1.8:1
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.	6	Fair	Fair	Fair	20-25%	50Kg	2500.00	8750.00	4750.00	7:2
T2 – Preparation of Jackfruit Chips. Preparation of Chips By Blanching of cut pieces +Sun drying followed by addition of Salt + one pinch Turmeric + KMS(0.5%)	6	Good	Good	Fair	20%	50Kg	1250.00	3750.0	2500.0	:2

**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 Maize/Madua based Balahar (Children 's food) for School Going Children Health& Nutrition
2.	Problem diagnosed	Lack of knowledge of Locally Nutritional rich foods which leads poor choice of food leads to poor health and Nutrition of School Going children.
3.	Details of technologies selected for assessment/refinement	<p><b>Farmers practice</b> Inadequate dietary pattern unbalanced intake of nutrients and no weaning / healthy food practices.</p> <ul style="list-style-type: none"> <li>● <b>T.O.1</b> Roasted malted maize flour 50 gm + roasted green gram flour 25 gm +sugar/jaggery 20 gm + Til/groundnut roasted 10 gm + with 1/2 cup milk.</li> <li>● <b>T.O.2</b>Roasted madua flour 50 gm + roasted green gram flour 25 gm +sugar/jaggery 20 gm + Til/groundnut roasted 10 gm + with 1/2 cup milk.</li> </ul>
4.	Source of Technology	AICRP Directorate of maize research, ICAR (Quality Protein Maize products for human nutrition by Usha Singh, DRRPCAUI)
5.	Production system and thematic area	<ul style="list-style-type: none"> <li>● Weaning food for children (6 months -3 years)</li> <li>● Low cost malted , ready to eat (RTE) for quality protein rich food</li> <li>● Value addition</li> </ul>
6.	Performance of the Technology with performance indicators	<ul style="list-style-type: none"> <li>● Technical Indicator</li> <li>•Organoleptic assessment on 5 point acceptability scale.</li> <li>•Nutritional content of enriched products per 100gm.</li> <li>•Frequency of feeding of weaning food (in No.)</li> <li>•Change in processing practices</li> <li>•Adaption of Maize/Madua in food practices ( in Kg/day)</li> <li>•Change in anthropometric measurement in selected children <ul style="list-style-type: none"> <li>● Economic indicator: BC ratio</li> </ul> </li> </ul>
7.	Final recommendation for micro level situation	it is recommended that Maize/madua based balahar is nutritious & delicious for children & among the SHGs were promoted for income generation and can be initiated as entrepreneurship development among the rural youth and SHGs.
8.	Constraints identified and feedback for research	Unaware of rich source of nutritional importance of locally available nutria cereals.
9.	Process of farmers participation and their reaction	Farmwomen were happy to adopt this easy techniques in farm family for children Health and Nutrition by locally available balahar.

*Thematic area:*

Problem definition: Lack of Dietary Knowledge which leads poor choice of food leads to poor health nutrition of children

Technology assessed: Assessment of Maize/Madua based Balahar/Weaning food for child health Nutrition

Table: 1

Technology option	No of trials	Shelf Life			incidence of microbial Spoilage (%)	Production /unit	Cost of cultivation (Rs./Kg)	Gross return (Rs/kg)	Net return (Rs./kg)	BC ratio
		Organoleptic acceptability in terms of Taste (%)	Organoleptic acceptability in terms of color (%)	Organoleptic acceptability in terms of General Acceptability (%)						
<b>Farmers Practice-</b> Inadequate dietary pattern unbalanced intake of nutrients and no weaning / healthy food practices.	10	40	50	50	30-40%	10Kg	40.00	80.00	40.00	2:1
<b>Technological Option-1</b> Roasted malted maize flour 50 gm + roasted green gram flour 25 gm +sugar/jaggery 20 gm + Til/groundnut roasted 10 gm + with 1/2 cup milk.	10	60	60	65	20-30%	10Kg	50.00	125.00	75.00	2.5:1
<b>Technological Option-2</b> Roasted madua flour 50 gm + roasted green gram flour 25 gm +sugar/jaggery 20 gm + Til/groundnut roasted 10 gm + with 1/2 cup milk.	10	80	70	75	10-20%	10Kg	65.00	200.00	135.00	2.7:1

Result: Balahar prepared from Madua rich in Calcium & Iron were liked by the children of age group 5 10 years of age and mothers were also appreciated For income generation among SHGs, (T3)was found more remunerative and nutritive through SHGs were more accepted & profitable. There were significant change in anthropometric measurement of children compared to control group.

\*\* BCR= GROSS RETURN/GROSS COST



## OFT-5

1 .	<b>TITLE OF ON FARM TRIAL</b>	<b>Content Analysis of the Low literate Farmers friendly print literature</b>
2 .	Problem diagnose	Low readership among farmers
3 .	Details of technologies selected for assessment/refinement	Farmers Practice (FP) : Low reading habit of extension literature Technology option-I Print Literature provided by KVK in local language Technology option-II : Print Literature provided by Krishi Vigyan Kendra
4 .	Source of Technology	BAU. Ranchi
5 .	Production system and thematic area	<b>Rice - fellow -fellow</b>
6 .	Performance of the Technology with performance indicators	
7 .	Final recommendation for micro level situation	
8 .	Constraints identified and feedback for research	Farmers have no reading or very little reading habit due to illiteracy and lack of good literature in local language. KVK providing the technical literature in local dialect to understand the technology of the production
9 .	Process of farmers participation and their reaction	

*Thematic area: Capacity Building*

Problem definition: Low reading habit among farmers

Technology assessed:

<b>Farmers Practice</b>	Low reading habit of extension literature
<b>Technological Option 1:</b>	Print Literature provided by DAO and others
<b>Technological Option 2:</b>	Print Literature provided by Krishi Vigyan Kendra in local language

Table:

Technology option	No. of trials	Content of the literature	Format of the literature	Level of knowledge gained			Extent of increase in readership			Extent of adoption of farmers practices
				%	Paired t test		% increase	Paired t test		
					Pre	Post		Pre	Post	
Farmers Practice (FP) : Low reading habit of extension literature	10	Poor	Unsystematic	21	13.13**	16.08**	16%	0.82	0.86	26%
Technology option-I Print Literature provided by DAO and Others		Good	Systematic	39	14.28**	18.53**	34%	0.96	0.96	41%
Technology option-II : Print Literature provided by KVK in local language		Very good	Well designed	51	16.47**	24.51**	46%	1.72	1.82	53%

Results: The gross return and net return is higher in case of farmers using printed literature provided by the KVK in local language than the print literature provided by the NGO and DAO to the farmers. Therefore print media in local language not only increase level of knowledge, but also increase extent of readership habit among farmers,

## OFT-6

1	<b>TITLE OF ON FARM TRIAL</b>	Study of Effectiveness of Visual Based Social Media ‘WhatsApp for control of loose smut in paddy																												
2	Problem diagnose	Lack of technical and quick knowledge sharing social media among farmers																												
3	Details of technologies selected for assessment/refinement	<b>Farmers Practice</b> : No. use of any media Technology option-I : Dissemination of agricultural technologies without visual based social media Technology option-II : Visual Based Social Media ‘WhatsApp																												
4	Source of Technology	IGKV, Raipur																												
5	Production system and thematic area	<b>Rice - fellow –fellow and Capacity building</b> Information Communication Technology																												
6	Performance of the Technology with performance indicators	<table border="1"> <thead> <tr> <th>Treatments</th> <th>Yield (q/ha)</th> <th>Cost of cultivation (Rs./ha)</th> <th>Gross return (Rs/ha)</th> <th>Net return (Rs./ha)</th> <th>B C Ratio</th> </tr> </thead> <tbody> <tr> <td>Farmers Practice</td> <td>27</td> <td>23,000</td> <td>43200</td> <td>20,200</td> <td>1.87:1</td> </tr> <tr> <td>T<sub>1</sub></td> <td>37</td> <td>23,000</td> <td>59200</td> <td>36200</td> <td>2.57:1</td> </tr> <tr> <td>T<sub>2</sub></td> <td>42</td> <td>24,500</td> <td>67200</td> <td>42700</td> <td>2.74:1</td> </tr> </tbody> </table>	Treatments	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	B C Ratio	Farmers Practice	27	23,000	43200	20,200	1.87:1	T <sub>1</sub>	37	23,000	59200	36200	2.57:1	T <sub>2</sub>	42	24,500	67200	42700	2.74:1				
Treatments	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	B C Ratio																									
Farmers Practice	27	23,000	43200	20,200	1.87:1																									
T <sub>1</sub>	37	23,000	59200	36200	2.57:1																									
T <sub>2</sub>	42	24,500	67200	42700	2.74:1																									
7	Final recommendation for micro level situation	The social media WhatsApp is very effective in control of loose smut in paddy and hence the yield and B : C ration increased																												
8	Constraints identified and feedback for research	Farmers admitted that WhatsApp based social media was found very good and quick in problem solving and tech dissemination																												
9	Process of farmers participation and their reaction																													

## Thematic area: Capacity Building

Problem definition: Low reading habit among farmers

Technology assessed:

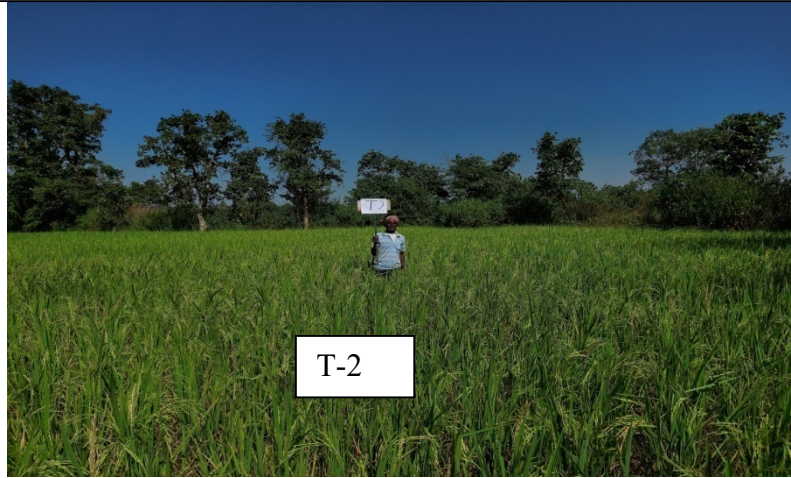
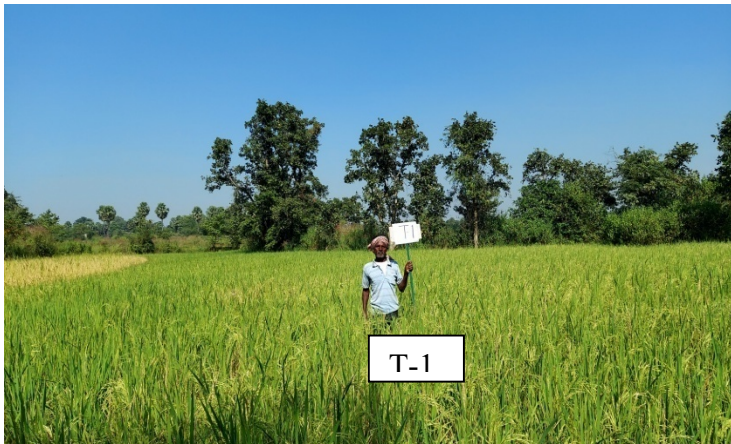
<b>Farmers Practice</b>	<b>Farmers Practice</b> : No. use of any media
<b>Technological Option 1:</b>	Technology option-I : Dissemination of agricultural technologies without visual based social media
<b>Technological Option 2:</b>	Technology option-II : Visual Based Social Media 'WhatsApp

**Table. Responses found as per performance indicators of the trial**

Parameters (1-6)						
SN	1. Content of Message	2.Time of Message sent	3.Type of Message	4.No of words/ message	5.Langu age of the message	6.Crop stage when message sent
1	सोयाबीन के खेत की मेड़ों से घास व झाड़ुओं को साफ़ करने का कायय करें ।	15-06-2021	Text Message	15	Hindi	(Pre-Sowing)
2	सोयाबीन के उन्नत बीज की बोनी कीटनाशी दवा थायोमेथॉक्झाम ७० डब्लू एस ३ग्रा/इकग्रा की दर से उपचाररत करे करें ।	20-06-2021	Text Message and video	21	Hindi	(Pre-Sowing)
3	सोयाबीन केखेत में पीले रों ग केप्रपोंच रोड़पत करें तथा सफ़ेद मक्खी की सोंख्या ज्यादा होने पर सुबह शाम ३ फुट चौड़ी व १०-१२ फुट लम्बी ग्रीश लगी पीली पट्टी खेत में चलाकर सोंख्या इनयोंड़ित करें ।	15-07-2021	Text Message and picture both	38	Hindi	After germination
4	सोयाबीन फसल में सफ़े द मक्खी के प्रकोप की स्थथड़त में कीटनाशी दवा इडमडक्लोइड १७.८ एस एल २५० इमली/हे की दर से ५००-६०० लीटर पानी मेें घोल बनाकर इड़काव करें ।	20-08-2021	Text Message	31	Hindi	Vegetative growth stage

**Parameters (7-11)**

7.Visibility of the content	8.Applicability of the WhatsApp Message	9.Need of the WhatsApp Message	10.Impact of the WhatsApp Message	11.Feedback
<ul style="list-style-type: none"> <li>• Easy to read (91.25 %)</li> <li>• Easy to understand completely (88.75 %)</li> <li>• Picture, video) was Easy to understand (92.50 %)</li> </ul>	<p>38.75 % Farmers applied the whats app Message information in the field for control of loose smut in paddy</p>	<p>82.50% farmers realized the message as highly needful</p>	<ul style="list-style-type: none"> <li>• Input Saving –labour and chemical</li> <li>• Yield Increased</li> <li>• Total Saving of money, time and labour</li> <li>• Cost of Message very less</li> </ul>	<p>Farmers admitted that WhatsApp based social media was found very good and quick in problem solving and tech dissemination</p>



## OFT-7

1.	<b>TITLE OF ON FARM TRIAL</b>	<b>Management of Chilli Leaf Curl Disease in Kharif Season</b>
2.	Problem diagnose	(i) More infestation of leaf curl disease. (ii) Less market Value.
3.	Details of technologies selected for assessment/refinement	<b>Farmers Practice (FP)</b> : Spraying of Rogar @ 2 ml/l of water after disease incidence <b>Technology option-I</b> : Two Spray of Imidacloprid 17.8 SL @ 1 ml/ 3 liter of water at 10 days intervals <b>Technology option-II</b> : Two Spray of Acetamiprid 20% SP @ 1 gm/lit of water at 10 days of intervals.
4.	Source of Technology	Department of A Plant Pathology, BAU Ranchi
5.	Production system and thematic area	Vegetables-Pulse , Disease Management
6.	Performance of the Technology with performance indicators	<b>Crop standing</b>
7.	Final recommendation for micro level situation	The treatment TO1, Two sprays of imidacloprid 17.8 SL@ 1ml/3lit of water at 10 days intervals is more effective than famers practice and treatment number two i.e. two spray of Acetamiprid 20% SP @1gm/1Litre of water at 10 days of intervals.
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	

*Thematic area:*

Problem definition:

Technology assessed:

Table:

Technology Assesses	Technical Parameters							Economic Parameters		
	Disease incidence	Average Plant height (cm)	No. of branches/ plant	No. of fruits / plant	Average weight of fruit (10 of 100 fruit weight)	Yield/ plant /plot and /ha (green fruit)	Early yield (first two picking	Gross income (Rs/ha	Net income (Rs./ha)	B.C Ratio
<b>Farmer practice</b> :- Spraying of Roger@ 2ml/lit water after disease incidence	Crop Standing									
<b>TO1</b> – Two sprays of imidacloprid 17.8 SL@ 1ml/3lit of water at 10 days intervals.										
<b>TO2</b> – Two sprays of Acetamiprid 20% SP @ 1gm/ 1 lit of water at 10 days of intervals.										

Results-

Farmer Practice

T-1



T-2

OFT -8

1	<b>TITLE OF ON FARM TRIAL</b>	<b>Yield performance of Oyster mushroom by different supplements.</b>
2	<b>Problem Identified:</b>	Low yield of Oyster mushroom.
3	<b>Details of technologies selected for assessment/ refinement</b>	Farmers Practice –Only use Spawn and Paddy straw. TO <sub>1</sub> – Paddy Straw + Good Quality Chick Pea Dal + Spawn. TO <sub>2</sub> – Wheat Straw and Spawn.
4	<b>Source of Technology:</b>	B.A.U, Ranchi /B.A. U Sabour
5	<b>Production system and thematic Area:</b>	Mushroom production
6	<b>Performance of the Technology with performance indicators</b>	
7	<b>Final recommendation for micro level situation</b>	Paddy straw + Good quality Chick Pea dal powder + Spawn
8	<b>Constraints identified and feedback for research</b>	Paddy straw + Good quality Pigeon Pea dal powder + Spawn is best .
9	<b>Process of farmers participation and their reaction</b>	Oyster Mushroom perform best in Paddy straw + Good quality Pigeon Pea dal powder + Spawn

*Thematic area: Mushroom Production*

Problem definition: Low yield of Oyster mushroom.

Technology assessed:

<b>Farmers Practice</b>	Only use Spawn and Paddy straw.
<b>Technological Option 1:</b>	Paddy Straw + Good Quality Chick Pea Dal + Spawn
<b>Technological Option 2:</b>	Wheat Straw and Spawn

Table:

Technology option	No. of trials	Spawn run period	Days require for first harvesting	No. of Flushes	Average yield / bag in gram	Spawn run period
Farmers Practice (FP) : Only use Spawn and Paddy straw.	10	19.71	25.28	2	1770.85	19.71
Technology option-I Paddy Straw + Good Quality Chick Pea Dal + Spawn		16.42	22	2.8	3041.28	16.42
Technology option-II : Wheat Straw and Spawn		17.28	24.14	2.71	2706.71	17.28

Results: Paddy straw + Good quality Chick Pea dal powder + Spawn



**Farmer Practice**



TO-1



TO2-

## OFT-9

1.	<b>TITLE OF ON FARM TRIAL</b>	<b>Assessment of adoption of soil health card based fertilizer application</b>
2.	Problem diagnose	Farmers are not using soil health card for fertilizers application.
3.	Details of technologies selected for assessment/refinement	<b>Technological option 1:</b> Farmers are not using soil health card for fertilizers application <b>Technological option 2:</b> Adoption of Soil Health Card based fertilizer application by farmers and constrains faced in adoption of SHC based fertilizer used.
4.	Source of Technology	SAU (Swami Keswanand Rajasthan Agricultural University), Bikaner
5.	Production system and thematic area	Rainfed upland and fertilizer management
6.	Performance of the Technology with performance indicators	<ol style="list-style-type: none"> <li>1. Adoption</li> <li>2. Knowledge</li> <li>3. Attitude related to Soil Health Card</li> </ol>
7.	Final recommendation for micro level situation	Farmer were not aware about the right producers involved in the adaption of Soil Health Card, so in order to mitigate these constrains farmers may be mede aware about the importance of SHC by state government through training and awareness camps. Govt. should take the necessary step to ensure availability of mobile testing vans and micro nutrients in the village.
8.	Constraints identified and feedback for research	<ol style="list-style-type: none"> <li>1. Lack of education among farmers</li> <li>2. Lack of support from family members</li> <li>3. Lack of awareness regarding Soil Health Card</li> <li>4. Lack of knowledge about importance of micro nutrient</li> <li>5. Unavailability of micro nutrient in market</li> <li>6. Lack of motivation</li> <li>7. Price of fertilizer is very high</li> </ol>
9.	Process of farmers participation and their reaction	30 non beneficiary respondents were participated and 30 beneficiaries responded were participated in this study. All 60 respondents were well participated in two villages (Salpatra and Shitalpur)

**Thematic area:** Fertilizer Management

**Problem definition:** Farmers are not using soil health card for fertilizers application

**Technology assessed:**

<b>Technological Option 1:</b>	Farmers are not using soil health card for fertilizers application
<b>Technological Option 2:</b>	Adoption of Soil Health Card based fertilizer application by farmers and constrains faced in adoption of SHC based fertilizer used.

**Table:**

Technology option	No. of trials	Adoption level	Knowledge	Attitude	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
<b>Technological option 1:</b> : Farmers are not using soil health card for fertilizers application	2	12%	20%	15%	30 q/ha	25000	56040	31040	2.24:1
<b>Technological option 2:</b> Adoption of Soil Health Card based fertilizer application by farmers and constrains faced in adoption of SHC based fertilizer used.		27%	35%	32%	42 q/ha	27000	74720	47720	2.76:1

Results: The yield and BC ratio of by adopting soil health card based fertilizer application by farmers give better result in case of rice crop.

## 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 Productio	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 <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O					
01	Wheat	Rabi	Irrigated	-	-	-	Paddy	13.11.2021	-	74	8	

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









Maize (Fodder)										
Sorghum (Fodder)										
Others (Pl.specify)										
<b>Total Fodder Crops</b>										

#### 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	10.11.2021	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 (2021-22) 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 2021-22**

**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	Groundnut	Local	8.6	390	153	1240	TG 37A + Line Sowing + Seed treatment	64	20	16.5	11.4	14.1	55.20	68.11	32.85
02	Sesame	Local	3.6	80	90	390	RT-346 + Line sowing +Seed Treatment + IPM	57	20	5.8	4.1	4.9	29.54	28.89	11.71
03	Mustard	Local	-	-	-	-	Pusa-30 + Line Sowing + Use of Sulphur @	82	30	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	Groundnut – TG 37A	28180	250 kg	Rs. 55.50/Kg	70 kg/ household	50 kg	<ul style="list-style-type: none"> <li>• Use for own consumption</li> <li>• Farming</li> <li>• Education</li> <li>• Social activity</li> </ul>	70 Man days/House hold
02	Sesame – RT-346	9770	100kg	Rs.73.00/kg	10kg/household	10kg	<ul style="list-style-type: none"> <li>• Use for own consumption</li> <li>• Health</li> <li>• Education</li> <li>• Social activity</li> </ul>	35 Man days/House hold
03	Mustard -	-	-	-	-	-	-	-

	Pusa-30							
4	Linseed - Varsha	-	-	-	-	-	-	-

#### 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
01	Groundnut – TG 37A+ Line Sowing + Seed treatment	Suitable in upland in Kharif	Yield is good	Yes	No	Acceptable to all farmers of group	No
02	Sesame – RT-346 + 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-30 + Line Sowing + Use of Sulphur @ 20 kg/ha	-	-	-	-	-	-
04	Linseed - Varsha + 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	More Branching	Good	Suitable in up land
Yield	Pod 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
<b>01 Groundnut</b>	<b>Training</b>	<b>13.07.2021 , KVK</b>	<b>36</b>
	<b>Field Day</b>	<b>20.09.2021, Salpatra</b>	<b>18</b>
<b>02 Sesame</b>	<b>Training</b>	<b>24.07.2021</b>	<b>37</b>
	<b>Field Day</b>	<b>29.10.2021</b>	<b>16</b>
<b>03 Mustard</b>	<b>Training</b>	<b>27.10.2021 Sijua</b>	<b>56</b>
	<b>Field Day</b>	<b>-</b>	
<b>04 Linseed</b>	<b>Training</b>	<b>30.11.2021, Gorga</b>	<b>28</b>
	<b>Field Day</b>	<b>-</b>	

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

### a. Crop- Groundnut



### b. Crop: Sesame:





## CLUSTER FRONTLINE DEMONSTRATION OF PULSE CROP (2021-22) 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 2021

### 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	Chati					Rajiv Lochan +Line sowing + Seed treatment + IPM	33	10	Crop is Standing					
02	Green Gram	Local	6.3	220	210	970	HUM-16 + Line Sowing + Seed treatment + IPM	35	10	10.1	8.7	9.4	36.47	36.9	19.37
03	Black Gram	Local	5.2	180	130	530	WBU-109 + Line sowing + Seed treatment + IPM	29	10	8.9	6.8	7.7	35.7	38.46	23.81

**Season: Rabi & Summer 2021-22****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	-	-	-	-	RVG 201 +Line sowing+ Seed treatment with rizobium	34	10	Crop is Standing					
02	Lentil	Local	-	-	-	-	IPL-316 +Line sowing+ Seed treatment with rizobium	32	10	Crop is Standing					
03	Green Gram (Summer)	Local	-	-	-	-	HUM-16 + Line sowing + Seed treatment	-	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- HUM-16	9400 kg	200 kg	70/kg	360 kg	400 kg	<ul style="list-style-type: none"> <li>• Use for own consumption</li> <li>• Medicine</li> <li>• Education</li> </ul>	66 Man days/House hold
03	Black Gram WBU-109	7700 kg	150 kg	55/kg	300 kg	350 kg	<ul style="list-style-type: none"> <li>• Use for own consumption</li> <li>• Medicine</li> <li>• Education</li> </ul>	54 Man days/House hold
04	Chick Pea RVG 201 + 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 HUM-16 + Line Sowing + Seed treatment + IPM	Yes	Yes	Yes	No	Yes	No
04	Black Gram WBU-109 + Line sowing + Seed treatment + IPM	Yes	Yes	Yes	No	Yes	No
05	Chick Pea RVG 201 +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
<b>01 Pigeon Pea</b>	<b>Training (KVK) Field Day</b>	<b>07.07.2021, Salpatra</b>	<b>37</b>
		<b>05.10.2021, Susunalia</b>	<b>19</b>
<b>01 Green Gram</b>	<b>Training (KVK) Field Day</b>	<b>02.07.2021, Jatakhuti</b>	<b>37</b>
		<b>29.09.2021, Baliapur Purvi</b>	<b>21</b>
<b>01 Black Gram</b>	<b>Training (KVK) Field Day</b>	<b>05.07.2021, Chutiario</b>	<b>37</b>
		<b>01.10.2021 Shikhargoda</b>	<b>18</b>
<b>02 Chick Pea</b>	<b>Training (KVK) Field Day</b>	<b>16.10.2021, Chainpur</b> -	<b>28</b> -
<b>03 Lentil</b>	<b>Training (KVK) Field Day</b>	<b>03.11.2021, KVK Dhanbad</b> -	<b>30</b> -
<b>04 Green Gram (Summer)</b>	<b>Training (KVK) Field Day</b>	-	-

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

a. Crop – Pigeon Pea



Black Gram

Green Gram



**a. Crop : Chick Pea****b. 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			
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Enterprise development	2	10	24	34	0	2	2	0	1	1	10	27	37
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													
<b>TOTAL</b>	<b>13</b>	<b>164</b>	<b>112</b>	<b>276</b>	<b>23</b>	<b>20</b>	<b>43</b>	<b>11</b>	<b>16</b>	<b>27</b>	<b>198</b>	<b>148</b>	<b>346</b>

### C) Extension Personnel (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													
Value addition	1	0	20	20	0	9	9	0	10	10	0	39	39
Integrated Pest Management													
Integrated Nutrient management	1	37	6	43	0	0	0	0	0	0	37	6	43
Rejuvenation of old orchards													
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													
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	17	12	29	5	0	5	0	0	0	22	12	34
Gender mainstreaming through SHGs													
<b>TOTAL</b>	<b>3</b>	<b>54</b>	<b>38</b>	<b>92</b>	<b>5</b>	<b>9</b>	<b>14</b>	<b>0</b>	<b>10</b>	<b>10</b>	<b>59</b>	<b>57</b>	<b>116</b>











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				
Household food security														
Women and Child care														
Low cost and nutrient efficient diet designing														
Production and use of organic inputs														
Gender mainstreaming through SHGs														
Crop intensification														
<b>TOTAL</b>	<b>2</b>	<b>16</b>	<b>12</b>	<b>28</b>	<b>15</b>	<b>1</b>	<b>16</b>	<b>24</b>	<b>1</b>	<b>25</b>	<b>55</b>	<b>14</b>	<b>69</b>	

### G) Consolidated table (ON and OFF Campus)

#### i. Farmers & Farm Women

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			
<b>I. Crop Production</b>													
Weed Management													
Resource Conservation Technologies	2	30	8	38	6	2	8	8	3	11	44	13	57
Cropping Systems													
Crop Diversification	1	24	8	32	5	0	5	6	0	6	35	8	43
Integrated Farming													
Water management	3	51	29	80	7	2	9	9	0	9	67	31	98
Seed production													
Nursery management													
Integrated Crop Management													
Fodder production													
Production of organic inputs													
Others, (cultivation of crops )	5	79	18	97	15	5	20	59	2	61	153	25	178
<b>TOTAL</b>	<b>11</b>	<b>184</b>	<b>63</b>	<b>247</b>	<b>33</b>	<b>9</b>	<b>42</b>	<b>82</b>	<b>5</b>	<b>87</b>	<b>299</b>	<b>77</b>	<b>376</b>
<b>II. Horticulture</b>													
<b>a) Vegetable Crops</b>													
Integrated nutrient management													
Water management	4	70	25	95	12	0	12	19	6	25	101	31	132
Enterprise development													
Skill development													
Yield increment	1	20	0	20	1	0	1	3	0	3	24	0	24
Production of low volume and high value crops													
Off-season vegetables													
Nursery raising													
Exotic vegetables like Broccoli													
Export potential vegetables													
Grading and standardization													
Protective cultivation (Green Houses, Shade Net etc.)													
Others, if any (Cultivation of Vegetable)	4	70	15	85	12	14	26	7	0	7	89	29	118
<b>TOTAL</b>	<b>9</b>	<b>160</b>	<b>40</b>	<b>200</b>	<b>25</b>	<b>14</b>	<b>39</b>	<b>29</b>	<b>6</b>	<b>35</b>	<b>214</b>	<b>60</b>	<b>274</b>



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			
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency													
Soil and Water Testing	6	62	42	104	8	4	12	53	7	60	123	53	176
Others, if any													
<b>TOTAL</b>	<b>6</b>	<b>62</b>	<b>42</b>	<b>104</b>	<b>8</b>	<b>4</b>	<b>12</b>	<b>53</b>	<b>7</b>	<b>60</b>	<b>123</b>	<b>53</b>	<b>176</b>
<b>IV. Livestock Production and Management</b>													
Dairy Management													
Poultry Management													
Piggery Management													
Rabbit Management													
Disease Management													
Feed management													
Production of quality animal products													
Others, if any (Goat farming)													
<b>TOTAL</b>													
<b>V. Home Science/Women empowerment</b>													
Household food security by kitchen gardening and nutrition gardening	4	3	71	74	2	23	25	0	3	3	5	97	102
Design and development of low/minimum cost diet													
Designing and development for high nutrient efficiency diet	1	0	6	6	0	7	7	0	8	8	0	21	21
Minimization of nutrient loss in processing													
Gender mainstreaming through SHGs													
Storage loss minimization techniques													
Enterprise development													
Value addition	5	16	70	86	6	37	43	10	16	26	32	123	155
Income generation activities for empowerment of rural Women													
Location specific drudgery reduction technologies	2	0	26	26	0	22	22	0	0	0	0	48	48
Rural Crafts	1	0	0	0	2	2	4	5	23	28	7	25	32
Capacity building													
Women and child care													
Others, if any	1	30	4	34	17	6	23	3	14	17	50	24	74
<b>TOTAL</b>	<b>14</b>	<b>49</b>	<b>177</b>	<b>226</b>	<b>27</b>	<b>97</b>	<b>124</b>	<b>18</b>	<b>64</b>	<b>82</b>	<b>94</b>	<b>338</b>	<b>432</b>
<b>VI. Agril. Engineering</b>													
Installation and maintenance of micro irrigation systems													
Use of Plastics in farming practices	1	13	8	21	1	1	2	5	1	6	19	10	29
Production of small tools and implements													
Repair and maintenance of farm machinery and implements	1	1	1	2	0	0	0	21	3	24	22	4	26
Small scale processing and value addition	1	4	16	20	2	0	2	3	0	3	9	16	25
Post-Harvest Technology	2	8	14	22	6	12	18	7	24	31	21	50	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			
Formation and Management of SHGs	2	0	42	42	0	0	0	0	0	0	0	42	42
Mobilization of social capital													
Entrepreneurial development of farmers/youths													
WTO and IPR issues													
Others, if any													
<b>TOTAL</b>	<b>2</b>	<b>0</b>	<b>42</b>	<b>42</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>42</b>	<b>42</b>
<b>XI Agro-forestry</b>													
Production technologies													
Nursery management													
Integrated Farming Systems													
<b>TOTAL</b>													
<b>XII. Others (Pl. specify) Bee Keeping</b>	1	10	01	11	0	0	0	2	0	2	12	1	13
<b>TOTAL</b>	<b>65</b>	<b>73</b>	<b>6</b>	<b>587</b>	<b>23</b>	<b>1</b>	<b>0</b>	<b>281</b>	<b>307</b>	<b>9</b>	<b>6</b>	<b>117</b>	<b>206</b>

## 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	53	23	76	2	0	2	1	5	6	56	28	84
Bee-keeping	2	24	11	35	2	0	2	1	1	2	27	12	39
Integrated farming													
Seed production													
Production of organic inputs													
Planting material production													
Vermi-culture													
Sericulture													
Protected cultivation of vegetable crops	2	0	28	28	0	16	16	0	3	3	0	47	47
Commercial fruit production													
Repair and maintenance of farm machinery and implements	1	14	13	27	3	0	3	0	0	0	17	13	30
Nursery Management of Horticulture crops													
Training and pruning of orchards													
Value addition	2	4	36	40	3	7	10	0	6	6	7	49	56
Production of quality animal products													
Dairying													
Sheep and goat rearing	2	66	2	68	14	0	14	10	0	10	90	2	92



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 security													
Women and Child care													
Low cost and nutrient efficient diet designing													
Production and use of organic inputs	1	17	12	29	5	0	5	0	0	0	22	12	34
Gender mainstreaming through SHGs													
Crop intensification													
Others if any													
<b>TOTAL</b>	<b>5</b>	<b>70</b>	<b>50</b>	<b>120</b>	<b>20</b>	<b>10</b>	<b>30</b>	<b>24</b>	<b>11</b>	<b>35</b>	<b>114</b>	<b>71</b>	<b>185</b>

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

Discipline	Clientele	Title of the training programme	Duration in days	Venue (Off / On Campus)	Number of participants			Number of SC/ST		
					Male	Female	Total	Male	Female	Total
Ext	Soil health card	Pf	3	On	27	6	33	19	4	23
Ext	Vermi compost Production Technology and organic farming	PF	1	Off	34	4	38	7	0	7
Ext	Soil Testing and its importance in fertilizer Management	Pf	1	Off	33	-	33	11	0	11
Head	Vermi compost production	Pf	2	Off	20	11	31	16	3	19
Engg	Water Management in Rabi Crops	PF	1	Off	28	6	34	11	2	13
Ext	Summer Production Technology	Pf	1	Off	38	-	38	5	0	5
PP	Brinjal Insect pest Control	PF	1	On	22	8	30	3	3	6
H Sc	Design and Development of low cast recipe	PF	2	Off	-	21	21	0	15	15
Hsc	Nutrition	PF	1	Off	-	30	30	0	17	17

	Gardening									
H Sc	Value addition of Soyabean	RY	3	On	7	18	25	3	6	9
Spon	Bee Keeping	RY	3	On	7	2	9	2	0	2
Ext	Bee Keeping	RY	3	On	20	10	30	1	1	2
PP	Disease of Tomato	PF	1	Off	21	9	30	9	0	9
Engg	Different Irrigation methods in Rabi vegetables	PF	1	Off	35	10	45	11	3	14
Ext	Production of Vermi compost	Pf	1	Off	20	-	20	6	0	6
Engg	Water Management in Rabi crops	Pf	1	On	26	3	29	4	0	4
Ext	Formation of SHG and its economic activities	PF	1	On	-	30	30	0	0	0
PP	Integrated pest and disease management	Pf	3	On	33	2	35	4	0	4
Engg	Cultivation of vegetables through drip irrigation	RY	3	On	17	13	30	3	0	3
Spon	Compost making by use of Parthenium	Pf	2	On	21	29	50	9	9	18
Ext	Formation of SHG of Mushroom	Pf	1	Off	-	12	12	0	0	0
PP	Mushroom production	RY	1	Off	9	11	20	2	0	2
Spon	Compost making by use of Parthenium	Pf	2	On	20	30	50	0	0	0
H Sc	Food and Nutrition Security	Pf	2	Off	-	20	20	0	0	0
H Sc	Value addition of Tomato for income generation	Pf	1	Off	9	13	22	4	7	11
Spon	Compost making by use of Parthenium	Pf	2	On	33	17	50	8	2	10
H Sc	Grading & Packing of fruits and vegetables	RY	2	Off	17	16	33	11	12	23
PP	Mushroom Cultivation Techniques	RY	5	On	25	5	30	0	1	1
Spon	Compost making by use of Parthenium	Pf	2	On	21	29	50	19	0	19
Ext	Scientific cultivation of cucurbits	Pf	1	Off	28	-	28	7	0	7

H Sc	Farm women empowerment through agricultural implements	Pf	2	On	-	24	24	0	0	0
Ext	Soil sample collection Techniques and its importance	PF	1	Off	50	3	53	31	3	34
Spon	Compost making by use of Parthenium	Pf	2	On	45	5	50	20	0	20
Ext	Production techniques of summer vegetables	RY	5	On	2	23	25	0	0	0
H. Sc	Crop cutting harvesting and value addition & marketing	PF	2	Off	12	27	39	7	24	31
H Sc	Value addition of seasonal vegetables	PF	1	On	23	7	30	12	0	12
PP	Disease of Tomato	PF	1	Off	17	8	25	0	8	8
H Sc	Value addition of Tomato For SHGs Entrepreneurship	PF'	2	Off	-	35	35	0	0	0
Engg	Water management in summer vegetables	PF	3	On	21	9	30	6	0	6
H Sc	Nutritional Gardening & Food security & Mushroom value addition	EF	3	On	-	39	39	0	19	19
Engg	Production Techniques of Green gram	Pf	1	Off	33	-	33	23	0	23
Engg	Production Technology of Black gram	Pf	1	Off	35	-	35	18	0	18
Ext	Organic farming	Pf	1	On	35	8	43	11	0	11
Ext	Cultivation of tomato through organic farming	Pf	1	On	24	-	24	4	0	4
Engg	Production Technology of Pigeon Pea	Pf	1	Off	22	15	37	10	2	12
Ext	Soil sampling and soil testing	Pf	8	On	3	17	20	0	0	0
H Sc	Food Processing for income generation	Pf	1	Off	9	16	25	5	0	5
H Sc	Agri-preneurship development	Ry	4	On	-	21	21	0	3	3
Engg	Production technology of Ground nut	Pf	1	On	34	2	36	12	2	14

HSc	Tomato Processing	Pf	1	On	14	14	28	4	4	8
Ext	Soil sampling and soil testing	Pf	8	On	1	25	26	0	3	3
Ext	Soil sampling and soil testing	Pf	8	On	10	1	11	0	1	1
Engg	Production Technology of sesame	Pf	1	Off	29	8	37	11	3	14
HSc	Kharif crops Post harvest management	Ef	1	Off	12	12	24	12	2	14
HSc	Food and Nutrition Security by Nutrition gardening	Pf	1	Off	5	17	22	2	2	4
Ext	Soil Testing	RY	8	On	10	6	16	0	0	0
Engg	Rain water harvesting techniques for short and long duration	Pf	1	Off	25	7	32	7	3	10
Spon	Training of Input Dealers	EF	10	On	37	6	43	0	0	0
H Sc	Organic Nutrition Farming	Ef	1	On	22	12	34	5	0	5
Ext	Training on Vegetable cultivation	Pf	1	Off	23	7	30	7	2	9
HSc	Importance food and nutrition for farmers	Pf	1	On	52	24	76	20	20	40
PP	Mushroom cultivation Techniques	RY	5	On	22	7	29	1	2	3
PP	Spawn Production Techniques	RY	15	On	-	5	5	0	2	2
HSc	Nutrition Garden for food and nutrition security	Pf	1	Off	0	30	30	0	7	7
Ext	Insect and pest management in paddy	Pf	1	Off	32	-	32	31	0	31
Ext	Bee Keeping	Pf	3	On	12	1	13	2	0	2
Engg	Rain water harvesting Techniques	Pf	1	Off	19	6	25	7	2	9
HSc	Tree plantation for nutria garden	EF	1	On	-	29	29	0	10	10
HSc	Nutri- Garden Design and layout	RY	7	On	-	28	28	0	14	14
Engg	Use and maintenance of plant protection Equipments	Pf	1	Off	22	4	26	21	3	24

HSc	Nutri Garden	RY	1	Off	-	19	19	0	5	5
HSc	Drudgery reduction of farm Women	Pf	1	Off	-	24	24	0	22	22
HSc	Post Harvest management of Kharif Crops	Pf	1	Off	9	23	32	6	12	18
PP	Disease of brinjal and its managements	Pf	1	Off	-	32	32	0	12	12
HSc	Value Addition of millets for food and nutritional security	RY	4	On	-	31	31	0	7	7
PP	Training of Extension functionaries	EF	1	Off	43	2	45	27	0	27
Ext	Five days training programme on goat and poultry farming	RY	5	On	47	1	48	15	0	15
Ext	Five days training programme on goat and poultry farming	RY	5	On	43	1	44	9	0	9
Engg.	Water management in vegetable crop	PF	3	On	22	5	27	8	3	11
PP	SWI method and disease management in wheat production	PF	1	Off	11	15	26	11	15	26
H.Sc.	Low cost vegetable technique of vegetable	PF	2	On	-	-	22	0	12	12
Engg.	Water management in vegetable crop	PF	3	On	23	7	30	6	0	6
H.Sc.	Bamboo Handicraft for Enterpanureship development	PF	1	Off	7	25	32	7	25	32
H.Sc.	Value addition of tomato	PF	2	Off	-	47	47	0	31	31
Engg.	Water management in Rabi crop	PF	3	On	13	22	35	1	0	1
PP	Disease and pest management in vegetable	PF	1	Off	5	25	30	0	0	0
Engg	Vegetable Production through Drip system	PF	2	Off	19	10	29	6	2	8
PP	Disease and pest management in	PF	1	Off	-	18	18	0	0	0

	Tomato, Brinjal and Pea									
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## 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	47	17	64	Production unit	11	22	12
Bee Keeping	Bee Keeping	Bee Keeping	3	27	12	39	-	-	-	-
Goat rearing	Goat Farming	Goat Farming	5	90	2	92	-	-	-	-

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

## I) Sponsored Training Programmes

Sl.	Title	Thematic area	Month	Duration (days)	Client PF/R/Y/EF	No. of courses	No. of Participants										Sponsoring Agency
							Male			Female			Total				
							Others	SC	ST	Others	SC	ST	Others	SC	ST	Total	
1	Bee Keeping	Bee Keeping	Jan	3	RY	2	24	2	1	11	0	1	35	2	2	39	DHO
2	Compost making by use of Parthenium	Organic Manure Production	Feb & March	2	PF	5	84	0	56	99	0	11	183	0	67	250	State Govt.

### 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	-	-	-	-	-	-	-	-	-	-	-
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	32	552	126	678	19	-	-	-	552	126	678
Method Demonstrations	13	241	82	323	12	-	-	-	241	82	323
Farmers Seminar											
Workshop	4	168	87	255	5	24	5	29	192	92	284

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	1326	988	338	1228	19	-	-	-	988	338	1326
Scientific visit to farmers field	245	1221	576	1797	14	18	2	20	1239	578	1817
Farmers visit to KVK	1845	1569	276	1845	11	-	-	-	1569	276	1845
Diagnostic visits	2090	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											
Mahila Mandals Conveners meetings											
Special Programmes (specify)											
Sankalp Se Siddhi											
Swatchta Hi Sewa											
Any Other (Specify)											
Total											

### B. Other Extension activities

Nature of Extension Activity	No. of activities
Newspaper coverage	31
Radio talks	0
TV talks	0
Popular articles	0
Extension Literature	12
Other, if any	

### C. Celebration of important days

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 <sup>th</sup> Jan.)	1	12	8	20	15	8	3	11	20	11	31
International Women's Day (8 <sup>th</sup> Mar.)	4	13	46	59	12	3	1	4	16	50	66
Ambedkar Jayanti (14 <sup>th</sup> Apr.)											
International Yoga Day (21 <sup>st</sup> Jun.)	1	14	8	22	13	09	3	12	23	11	34
Independence Day (15 <sup>th</sup> Aug.)	1	32	16	48	12	10	3	13	42	19	61
Parthenium Awareness Week (16 <sup>th</sup> to 22 <sup>nd</sup> Aug.)	8	156	41	197	11	14	6	20	170	47	217
Hindi Diwas (14 <sup>th</sup> Sep.)	2	15	7	22	3	7	1	8	22	8	30
Gandhi Jayanti (2 <sup>nd</sup> Oct.)	1	18	11	29	14	7	3	10	25	21	46
Mahila Kisan Diwas (15 <sup>th</sup> Oct.)	1	2	35	37	5	1	2	3	3	37	40
World Food Day (16 <sup>th</sup> Oct.)	1	25	19	44	6	6	2	8	31	21	52

Vigilance Awareness Week (27 <sup>th</sup> Oct. to 2 <sup>nd</sup> Nov.)	7	178	56	234	16	8	2	8	186	58	244
National Unity Day (31 <sup>st</sup> Oct.)	1	15	1	16	0	9	1	10	24	2	26
World Science Day (10 <sup>th</sup> Nov.)											
National Education Day (11 <sup>th</sup> Nov.)	4	8	17	25	2	6	2	8	14	19	33
National Constitution Day (26 <sup>th</sup> Nov.)	2	25	8	33	3	6	3	9	31	11	42
World Soil Day (5 <sup>th</sup> Dec.)	1	38	0	38	5	6	2	8	43	8	51
Kisan Diwas (23 <sup>rd</sup> Dec.)	1	44	1	45	6	8	6	14	52	7	59

### C. 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
1	26.08.2021	Food and Nutrition for Farmers	Interaction of Hon'ble AM	108	8	0	116
2	17.09.2021	Poshan Vatika Mahabhiyan and Tree Plantation	Interaction of Hon'ble PM	163	8	0	171
3	28.09.2021	Dedication to the Nation of 35 Crop Varieties and ICAR –National Institute on Biotic Stress Management Raipur	Interaction of Hon'ble PM	224	12	0	236
4	26.11.2021	National Campaign on the theme “ Agriculture and Environment: The Citizen Face	Interaction of Hon'ble PM	114	9	0	123
5	16.12.2021	Natural Farming	Interaction of Hon'ble PM	319	8	0	327

### 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
<b>Total</b>								

#### *KVK farm*

Crop	Variety	Quantity of seed (q)	Value (Rs)	Number of farmers to whom seed provided			
				SC	ST	Other	Total
Paddy	IR-64D	30q	123000				
Paddy	Rajendra Massoori	40q	164000				
Mustard	Pusa-26	2q	20400				
Wheat	DBW-187	4q	18400				
<b>Grand Total</b>		<b>76 q</b>	<b>325800</b>				

### 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
<b>Vegetable seedlings</b>							
Cauliflower	Madhuri	2000	5000				
Cabbage	Green Soccer	2000	5000				
Tomato	Laxmi F1	2000	5000				
Brinjal	No 801 F1	2000	5000				
Chilli							
Onion							
Others							
<b>Fruits</b>							
Mango	Dushahri, Langra, Amrapali, Malika	1000	70000				
Guava	Allahabadi safeda, Lalit, L-49	2000	120000				
Lime							
Papaya							
Banana							
Others							
<b>Ornamental plants</b>							
Medicinal and Aromatic							
Plantation							
Spices							
Turmeric							
Tuber							
Elephant yams							
Fodder crop saplings							
Forest Species							
Others, pl.specify							
<b>Total</b>		<b>11000</b>	<b>210000</b>				

### 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.						
<b>Total</b>						

**Production of livestock materials**

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

**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 Reports

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

Summer/Spring 2021						
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## 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				
2019				
2020				
2021				

## iv) Infrastructure Development

Item	Progress
Seed processing unit	
Seed storage structure	

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

Item	Title	Author's name	Number	Circulation
Research paper	Role of Hydroponics towards Quality Vegetable Production: An Overview	Satya Prakash, Rajat Singh, A.R Kumari & Adarsh Kumar Srivastava	International Journal of Current Microbiology and Applied Sciences <b>ISSN: 2319-7706 Special Issue-10 pp. 252-259</b>	
Seminar/conference/ symposia papers				
Books	Programmes and Schemes in agriculture	Adarsh Kumar Srivastava Ashok Kumar	ISBN978-81-925875-6-8	500
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	Technical bulletin	500



		Kumar		
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.	Dr. A .K. Srivastava		1000
	Integrated pest management in veg	Sri Navin Kumar		1000
	Grain storage at Household level	Dr.Rajeev Kumar Smt. Anjali Mishra		1000
	.Farmation of Self Help Groups and their Function	Dr. A .K. Srivastava		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 Poshan Ki Awashyakta	Dr. Seema Singh		1000
	Hari Pattedar Sabjion ka Paustik rup se Matawa	Dr. Seema Singh		1000
	Annual Report. 20-21			50
	Annual Action Plan -2021-22			50
	Dhan dhanya dhanbad – an impact assessment of KVK, Dhanbad	KVK Dhanbad		100
	SRI—A Film on SRI Technology by KVK, Dhanbad			100
Technical reports				
Electronic Publication (CD/DVD etc)				
TOTAL				

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.					
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	Anil Hansda
Address	Basaha, Post- Guwakola, Block –Tundi, Dhanbad 828142
Contact details (Phone, mobile, email Id)	6201941385
Landholding (in ha.)	6 ha
Name and description of the farm/ enterprise	Vegetables Farming - Tomato, Pea, beans, chillies, Melons and Papaya
Economic impact	Gross Annual income about Rs. 15,00,000 ( Fifteen Lakh)/ Year. Before four year he was earning about 600000 per annum after that he started cultivation of melons and papaya. He has no problem in selling the vegetable and fruits fetching remunerative price from other farmers
Social impact	By adopting vegetable, melons and papaya cultivation in the field he is respected by other farmers and farmers are consulting him for any problem in their field
Environmental impact	Due to practicing of vegetable, melons and papaya farming mostly he used organic fertilizer, FYM and organic insecticide which has very less side effect and ecofriendly to the environment.
Horizontal/ Vertical spread	12-15 farmers adopted the vegetable farming
 	

## 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	Flame photometer	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
179	0	179

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	179	42	179	89500
2.	Water	1	1	1	500
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	World Soil Health day	51	0	-	43	43

## 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.)
2	0	600	254	4

## 3.13. Technology week celebration

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

## 3.14. RAWE/ FETprogramme - is KVK involved? (Y/N)

No of student trained	No of days stayed
23	15

ARS trainees trained	No of days stayed

## 3.15. List of VIP visitors (Minister/ MP/MLA/DM/VC/ZilaSabbhadipati/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	2159	31		
System of wheat intensification	238	22		
Seed treatment	816	28		
Seed production	212	35		
Commercial flower production	71	9		
Mushroom production	669	21		
Vermi-culture and composting	432	24		
Soil Sampling	192	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	279	8		

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	2492 ha.
Mushroom cultivation	137

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 mushroom rose 12kg/day
Technical Components of the Enterprise	The technical expertise and spawn 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 8-10 person after seeing his unit also working towards mushroom production and taken training from the KVK Dhanbad
Horizontal spread of enterprise	
	

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.
Alamin Gramin Mahila Sishu Kalyan Kendra, Jharkhand State Office, Kanke, Ranchi	Joint training programme.
Krishi Bikash Shilpa Kendra, Birbhum(W.B)	Joint training programme.

5.2. List of special programmes 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	12.10.2021	DAO, Dhanbad	8,00,000.00

(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 (Sq. mt)	Details of production			Amount (Rs.)		Remarks		
				Variety/breed	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	-	50950.			
2000							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.	Bio-fertilizer unit	-	-	Yet to be started							
4.	Mushroom unit	2012-13	-	Oyster spawn		83Kg		10825			
5.	Value addition	2007	-	Training started	-	-					
6.	Sewing & knitting	2007	-	Training started	-						
7.	Seed processing	2010-11	-	Paddy,		122.43 quintal		20813			
8.	Integrated Farming	2017-18		Duck egg sale							
9	Soil Testing	2007-08		Soil Test		80 sample		40000			
10	Vermi compost	2007-18		Vermi compost vermi		40 Kg		400			

1	Fabrication Unit	2007-08		Custom Hiring					-
1	Technology Park	2007-08		Vegetables					860
		Total							<b>167383</b>

### 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	25.06.2020	Nov.2020	1.25	IR-64D	F/s	30	98000	123000	
Paddy	26.06.2020	25.11.2020	1.25	Rajendra Massori	F/S	40	110000	164000	
Mustard	08.11.2020	March 2020	1.0	Pusa-26	F/s	1.01	7500	10200	
Wheat	14.11.2020	04.2020	0.5	DBW-187	F/S	4	13125	18400	

### 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 staffquarters:

Date of completion:

Occupancy details:

Months	Q I	QII	Q III	QIV	Q V	QVI

## 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 <sup>st</sup> April 2013
	Kharif	Rabi	Kharif	Rabi	

## 7.4. Utilization of KVK funds during the year 2021(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 <sup>st</sup> April	Income during the year	Expenditure during the year	Net balance in hand as on 1 <sup>st</sup> April of each year (Kind + cash)
2019	565921	1394747	624121	1336547 + Kind
2020	1336547	450884	969975	817456+ Kind
2021	-	-	-	-

#### 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 activity	Season	With line department	With ATMA	With both
Soil Health Card Preparation	68	Rabi & Kharif Season	DAO, Dhanbad, VLW	PD,BTM ATMA	Both
Village Seed Production	Seed Village in Kharif	Rabi & Kharif Season	DAO, Dhanbad, VLW	DAO, Dhanbad, VLW	Both
International Soil Health Day	1	-	DAO, Dhanbad, VLW	DAO, Dhanba, VLW	Both
Crop Cutting Programme	2	Rabi & Kharif Season	DAO, Dhanbad	-	-
Rabi work shop	1	Rabi	DAO	-	-
Kharif work shop	1	Kharif	DAO	-	-

#### 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 YuvaKendra(NYK) Training

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

## 9.2. PPV &amp; FR Sensitization training Programme

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

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

Type of message	No. of messages	No. of farmers covered
Crop		
Livestock		
Fishery		
Weather		
Marketing		
Awareness		
Training information	2	24348
Other		
<b>Total</b>	3	24348

## 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 (SMSs)	No. of Farmers
1.				
2.				
3.				
4.				

5.				
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## 9.6. a. Observation of Swachha Bharat Programme/Pakhwara

Date/ Duration of Observation	Activities undertaken	No. of Participants			
		Staffs	Farmers	Others	Total
16- 31.12.2020	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),	7	476	12	488

## b. Details of Swachhta activities with expenditure

Activities	Number	Expenditure (in Rs.)
1. Digitization of office records/ e-office	10	
2. Basic maintenance	8	
3. Sanitation and SBM	14	
4. Cleaning and beautification of surrounding areas	11	
5. Vermicomposting/ Composting of biodegradable waste management & other activities on generate of wealth for waste	18	
6. Used water for agriculture/ horticulture application	6	
7. Swachhta Awareness at local level	13	
8. Swachhta Workshops	2	
9. Swachhta Pledge	2	
10. Display and Banner	6	
11. Foster healthy competition	0	
12. Involvement of print and electronic media	6	
13. Involving the farmers, farm women and village youth in the adopted villages (no of adopted village)	36	
14. No. of Staff members involved in the activities	12	
15. No of VIP/VVIPs involved in the activities	0	

16. Any other specific activity (in details)	---	
<b>Total</b>	<b>144</b>	

## 9.7. Observation of National Science day

Date of Observation	Activities undertaken

## 9.8. Programme with SeemaSurakshaBal/ 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

Date of programme	No. of Union Ministers attended the programme	No. of Hon'ble MPs (Lok Sabha/ 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 Zila Panchayat	Distt. Collector/ DM	Bank Officials	Farmers	Govt. Officials, PRI members etc.	Total		

## 9.11. Details of Swachhta Hi Sewapgramme 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	3	32		
2	Organize cleaning of streets, drains and back alleys through awareness drives	2	39		
3	Organize waste collection drives in household and common or shared spaces	2	23		
4	Conduct door –to-door meeting to drive behavior change with respect to sanitation behaviors	3	59		
5	Organize awareness	3	41		

	campaigns around better sanitation practices like using a toilet, hand washing, health and hygiene awareness etc.				
6	Perform Swachhata related Nukkad Nataks/ street plays, folk song and dance performances	1	28		
7	Conduct Village or School – level rallies to generate awareness about sanitation	1	13		
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	1	3		
10	Mobilize community to build compost pits, Where organic matter decomposes to form manure	1	31		



## 9.12. Details of MahilaKisan Divas programme organized

Sl. No.	Activity	No. of villages Involved	No. of Participants	No. of VIPs	Name (s) of VIP(s)
1	Group discussion, debate, completion, prize distribution	8	53	-	-

## 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	8,00,00.00	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	8	149	1. Paddy cultivation through SRI method or plastic drum seeder. 2. Bunding for water retention. 3. Use of cono weeder for weeding.

						4. Ridge Furrow method should be followed for proper germination 5. Conservation of soil moisture. 6 Mechanical weeding 7. Staking for Dolichos Bean
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#### 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.)		



## Crop Management

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 2021

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

## b) Award received by Farmers in year 2021

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 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 (up-to 15.03.2018)					
II (up-to 24.04.2018)					
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, if undertaken during 2017-18, 2019, 2020 and 2021

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.)
2017-18							
2019							
2020							
2021							

b) Information on Skill Development Training Programme (**Other than ASCI or less than 200 hrs.**, if any) if undertaken during 2021

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
Dr Seema Singh	1	QPM based Balahar for School Going Children	Nutri Garden	4	50	Sensitization at School level for Boys and Girls Students

## 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.	Baghmara,	Backyard/Kitchen	10	1800	10

	Birsingpur, Rakhitpur Shitalpur	garden			
2.		Community level			
3.	Dangi	Terrace Garden/Roof Gardeing	1		2
4.		Vertical Garden			
TOTAL					

#### Nutritional Output from Nutri-garden

Vegetables	Production ( kg)per 10 Sq.meter	Protein (gm)	Energy (Kcal)	Calcium (mg)	Iron (mg)	Vitamin A (Carotene ug)	Vitamin C (mg)
Brinjal	30	420	7200	5400	270	0	3600
Tomato	32	288	6400	15360	128	112000	8640
Cabbage	20	360	5400	7600	80	240000	24800
Cauliflower	20	520	6000	6600	300	6000	11200
Chilli	15	435	4350	4500	180	26250	16650
Broccoli	10	360	3200	1030	110	315000	11300
Fenugreek	5	220	2450	19750	835	117000	2600
Spinach	20	-	-	30	,81	2813	8.4
Coriander	5						
Beetroot	20	-	-	14	0.67	30	3.1
French bean	15	2	26	50	1	5	2.1
Radish	30	-	-	14	0.2	4	8.6
Potato	28	-	-	26	1.87	17	16.6
Mustard leaves	15	-	-	155	16.3	2622	33

## b. Details of Bio-fortified crops in Nutri-Smart village

Name of Nutri-Smart Village	Season	Activity (OFT/FLD)	Category of crop (cereal/ pulses/oilseed/ fruits & veg./ others)	Name of Crop	Variety	Area (ha)	No. of beneficiaries

## c. Value addition in Nutri-Smart village

Name of Nutri Smart Village	Name of Crop/ veg./ fruits/ other	Name of Value added product	Activity (OFT/FLD)	No. of farmers/ beneficiaries
<b>Baghmara</b>	<b>Jackfruit, Potato</b>	<b>Pickles, Chips</b>	<b>OFT/FLD</b>	<b>30</b>

## d. Training programmes in Nutri-Smart village

Name of Nutri Smart Village	Area of Training	No of courses	No. of beneficiaries
Birsingpur, Sheetalpur	Food And Nutrition	5	50



## e. Extension activities under NARI Project

Name of Nutri-Smart Village	Title of Activity	No. of activities	No. of beneficiaries
Birsingpur Sheetalpur	Mahila Krishak Goshthi	4	40



**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 benefitted									Any other, if any (pl. specify)	
		SC		ST		Others		Total				
		M	F	M	F	M	F	M	F	T		

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

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

26. Good quality action photographs of overall achievements of KVK during the year (best 10)





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