KRISHI VIGYAN KENDRA BOKARO

ANNUAL REPORT

2021

5Th Zonal Workshop of KVKs

Date: 6-8 August, 2022

Venue: Rajgir International Convention Centre (RICC) Rajgir

BIRSA AGRICULTURAL UNIVERSITY, KANKE, RANCHI (JHARKHAND)

KrishiVigyan Kendra, Bokaro , AT+ P.O.- Petarwar, Dist-Bokaro, Pin- 829121

Email: kvk_bokaro@yahoo.co.in, Phone: 06549-265048

PROFORMA FOR ANNUAL REPORT2021 (1st Jan. 2021- 31st Dec.2022,)

1. GENERAL INFORMATION ABOUT THE KVK

Address	Telephone		E mail
	Office	FAX	
KrishiVigyan Kendra, Bokaro P.O.-Petarwar Pin- 829121	06549-265048 (O) 09431126991 (M)	FAX	kvk_bokaro@yahoo.co.in

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

Address	Telephone		E mail
	Office	FAX	
Birsa Agricultural University,Jharkhand, Kanke, Ranchi Pin-834006	(VC) 0651-2450500(O)	0651-2450850	vc@bauranchi.org vc_bau@rediffmail.com
	(DEE) 0651- 2450849 (O)	0651-2450525	deebauranchi@gmail.com

1.3. Name of the Programme Coordinator with phone & mobile No.

Name	Telephone / Contact		
	Residence	Mobile	Email
Sri Uday Kumar Singh	09431595179	9431126991	udaysingh72@gmail.com

1.4. Year of sanction of KVK:

(Reference of Sanction Order)
2004. Vide letter No. of ICAR- F.No. 6-5/2000-AE-1 dated 24-6-2004

1.5. Staff Position (as on 31st 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	Sr. Scientist & Head	-	-	-	-	-	-	-
2	Scientist	Sri Uday Kumar	I/C Head & Scientist	Agronomy	Basic: 95300.00	19-07-04	Permanent	Others
3	Scientist	Dr. Anil Kumar	Scientist	Horticulture	Basic: 110500.00	19-07-04	Permanent	Others
4	Scientist	Sri Vinay Kumar	Scientist	Agril. Engg.	Basic: 95300.00	20-07-04	Permanent	Others
5	Scientist	MrsNeena Bharti	Scientist	Plant Protection	Basic: 95300.00	20-07-04	Permanent	ST
6	Scientist	Dr. Nandana Kumari	Scientist	Home Science	Basic: 101100.00	19-07-04	Permanent	Others
7	Programme Assistant	Dr. Rupa Rani	Programme Assistant	Horticulture	Basic: 60400.00	16-03-05	Permanent	Others
8	Computer Programmer	Naman Kandulna	Computer Assistant	-	Basic: 58600.00	20-07-04	Permanent	ST
9	Farm Manager	-	-	-		-	-	-
10		Sunil Kr. Pandey	Audio Visual Aid	-	Basic: 58600.00		Permanent	Others
11	Accountant / Superintendent	Sri Abhay Kumar Singh	O.S.cum Accountant	-	11000.00		Contractual Staff	Others
12	Stenographer	Sri Ratnesh Kumar Mishra	Stenographer	-	9000.00		Contractual Staff	Others
13.	Driver	Sri RanchandraLohar	Driver	-	9000.00		Contractual Staff	ST
14.	Driver	Sri PanchanandMahto		-	9000.00		Contractual Staff	Others
15.	Supporting staff	Sri Ruplal Marandi		-	7000.00		Contractual Staff	ST
16.	Supporting staff	Sri Durga Prasad Mahto		-	7000.00		Contractual Staff	Others

1.6. **Total land with KVK (in ha)**

S. No.	Item	Area (ha)
1	Under Buildings & Demonstration units and other encroachment	2.0
2.	Under Crops	6
3.	Orchard/Agro-forestry (Mother plant nursery)	1
4.	Technology park	0.4
5.	Pond	0.2
	Unutilized land due to undulating	0.4
	Total	**10**

Total area should be matched with breakup

1.7. Infrastructure Development:

A) Buildings and others

S. No.	Name of building	Not yet started	Completed up to plinth level	Completed up to lintel level	Completed up to roof level	Totally completed	Plinth area (sq.m)	Under use or not*	Source of funding
1.	Administrative Building					Completed	500		I.C.A.R.
2.	Farmers Hostel					Completed	300		I.C.A.R.
3.	Staff Quarters (6)			Completed up to lintel level		Incomplete	400		I.C.A.R.
4.	Piggery unit	Not yet started							
5	Fencing					Completed			District Administration
6	Rain Water harvesting structure					Incomplete (Micro irrigation system is not installed)	120x120x10 ft pond		I.C.A.R.
7	Threshing floor					Completed			I.C.A.R.
8	Farm godown					Completed			I.C.A.R.
9.	Farm godown					Completed			District Administration
10.	Preservation unit					Completed			I.C.A.R.
11.	Dairy unit	Not started							
12.	Poultry unit	Not started							
13.	Goatary unit	Not started							

14.	Mushroom Lab	Not started							
15.	Mushroom production unit								
16.	Shade house	Not started							
17.	Soil test Lab					Completed			District Administration
18.	ATIC Centre					Completed			District Administration
19.	IT Infrastructure					Completed			I.C.A.R.
20.	Plant diagnostic lab	Not started							I.C.A.R.
21.	Irrigation channel	Not started							I.C.A.R.
22.	Deep boring	Failed							I.C.A.R.
	Others, Please Specify								

* 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
Jeep	2005	431129.00	388971 K.M.	Required to be replaced
Tractor	2006	361200.00	1921 hr	Time to time repairing is needed

C) Equipment & AV aids

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
a. Lab equipment				
Refrigerator	2007	11990.00	Good	I.C.A.R.
Food processor	2007	4995.00	Good	I.C.A.R.
Commercial gas cylinder	2008	3000.00	Good	I.C.A.R.
Weighing machine	2008	7540.00	Good	I.C.A.R.
Weighing machine	2010	12740.00	Good	I.C.A.R.
Weighing machine	2010	7260.00	Good	I.C.A.R.
Aqua soft dispenser	2012	20000.00	Good	I.C.A.R.
Crown corking machine	2013	19700.00	Good	I.C.A.R.
Tomato Pulpar	2013	29800.00	Good	I.C.A.R.
Screw type Juice Extractor	2013	22000.00	Good	I.C.A.R.
Refractometer	2013	43000.00	Good	I.C.A.R.
b. Farm machinery				

c. AV Aids				
Computer	2006	45000.00	Good	I.C.A.R.
UPS	2006	7000.00	Good	I.C.A.R.
Laser Printer	2006	8000.00	Good	I.C.A.R.
Fax Machine	2006	8000.00	Not installed	I.C.A.R.
Xerox	2007	72000.00	Not functioning	I.C.A.R.
2 KVA Stabilizer	2007	4850.00	Good	I.C.A.R.
Stabilizer 500 VA Manual Auto-cut	2007	1750.00	Good	I.C.A.R.
Camera	2005	12650.00	Good	
Camera	2007	14512.50	Not functioning properly	I.C.A.R.
LCD Projector	2007	51989.00	Good	I.C.A.R.
HAKIM Audio Visual Trolley	2007	8534.00	Good	I.C.A.R.
Projector Screen 8'x6'	2007	7550.00	Good	I.C.A.R.
15Mtrs special imported moulded VGA cable	2007	7500.00	Good	I.C.A.R.
Laser pointer torch with duel effect	2007	2200.00	Good	I.C.A.R.
AHUJA Medium Power Amplified -120 Watt	2013	8847.36	Good	I.C.A.R.
AHUJA 2 way compact PA wall Speaker	2013	8694.72	Good	I.C.A.R.
AHUJA Reflex Horn-WFA-21" Bell Dia	2013	986.84	Good	I.C.A.R.
AHUJA Driver unit –Model-AU40XT	2013	1408.77	Good	I.C.A.R.
AHUJA PA Microphone-Model AUD 101XLR	2013	1693.85	Good	I.C.A.R.

D) Farm implements

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
Seed drill cum fertilizer drill	2005	775.00	Good	I.C.A.R.
Birsaridger plough	2005	485.00	Good	I.C.A.R.
Japanese paddy weeder	2005	525.00	Good	I.C.A.R.
Drylandweeder	2005	300.00	Good	I.C.A.R.
Birsa potato digger	2005	625.00	Good	I.C.A.R.
Paddy transplanter	2006	-	Good	
Cultivator 9 tine	2006	14200.00	Good	I.C.A.R.
Land leveler	2006	8080.00	Good	I.C.A.R.
Offset disk	2006	28020.00	Good	I.C.A.R.
Trailer 4 wheel with tyre tube	2006	76500.00	Good	I.C.A.R.
Disc plough 2 furrow	2007	26995.00	Good	I.C.A.R.
Grass cutter	2007	38500	Good	I.C.A.R.
M.B. Plough	2007	26993.00	Good	I.C.A.R.
Rottary tiller	2007	88585.00	Good	I.C.A.R.
Power sprayer	2007	48500.00	Good	I.C.A.R.
Cage wheel nut bolt type	2007	5250.00	Good	I.C.A.R.
Zero till fertilizer drill	2010	-	Good	I.C.A.R.
Power Tiller	2011		Good	I.C.A.R.
Field king laser Guided Land Leveler Machine	2012		Good	I.C.A.R.

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.	**30.12.2020**	**30**			

** 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)

District level data on agriculture, livestock and farming situation (2020)

Sl. no.	Item	Information
1	Major Farming system/enterprise	1. Agriculture + Horticulture (Vegetable) + Animal Husbandry 2. Agriculture + Horticulture (Vegetable) 3. Agriculture + Animal Husbandry 4. Agriculture + Horticulture (Vegetable) + Animal Husbandry+ Fishery 5. Agriculture + Horticulture (Vegetable) + Animal Husbandry+ Lac culture 6. Agriculture + Animal Husbandry+ Lac culture 7. Agriculture + Labour
2	Agro-climatic Zone	IV- Central North Eastern Plateau Zone Characteristics: Geographical area of Zone = 41293 K.m^2 Mining dominates in central part. Damodar, Barakar, More and Ajay are the main rivers of this zone. Damodar basin is famous for coal. This zone is characterized by having humid & sub humid tropical monsoon type of climate. Average rainfall of the zone is 1320 m.m. Monsoon breaks in the second week of June. In normal years pre monsoon rains are received in the month of May about 60 m.m. Apart from this winter rain during December- February is sparse. Soil developed on Rajmahal traps are dark, heavy textured, neutral in reaction and moderately well drained to poorly drained and moderately rich in N but poor in P&K. Soils of Dhanbad&Giridih areas are light textured, moderately to slightly acidic and moderately well drained and poor in N & P and moderate to fairly rich in K. Upland Soils of Ranchi and Hazaribagh areas are gravely to sandy, shallow, acidic and of very poor fertility status where as medium land soil are yellow coloured, slightly to moderate acidic, some

		what poorly drained & moderately fertile where as the soils of Koderma side are light textured, silty in nature, yellowish to reddish in colour& neutral to moderately acidic in reaction. These are poor to moderate in N, poor in available P and rich to very rich in K. Very limited irrigation potential has been exploited in this zone. Although it is claimed that 8-9% area is irrigated. Larger part of agricultural land is rainfed. Less than 55% area comes under net cultivated area. Good forest is available on 12-13 percent land. Rice, maize, wheat, potato, linseed, rapseed and mustard, til, niger, ground nut and vegetables are major crops of the region. Climate of the Bokaro district is sub humid with water deficiency in winter. Temperature ranges from 2^0C in winter to 45^0C in hot summer. The main drainage system is Damodar&Swarnrekha rivers. Only 5-8% of net sown area is irrigated. The average annual rainfall of the district is 1275 mm. Upland soils are red to brownish red in colour, light textured, well drained, acidic in reaction and poor in organic carbon, N, Ca, Mg., P & S. Medium land soils are yellow, yellowish in colour, light to medium texture, moderately acidic and poor in N, Ca, Mg and organic matter. Whereas the low land soils are gray to grayish in colour, heavy textured, neutral to slightly alkaline in reaction, poorly drained and medium in N and organic matter. The major crops of the district are rice, maize, wheat, potato, lentil, linseed, rapseed& mustard, groundnut, potato and vegetables like ladys finger, tomato, brinjal, 8rench bean, raddish, cauliflower, cabbage & cucurbits.
3	Agro ecological situation	1. Red sandy loam, gravely undulating topography with mines and forests: Undulating topography, having red sandy loam soil, full of gravels, covered with perennial forests, having mines 2. Sandy loam rainfed: Upland sandy loam soil, no irrigation facility, agriculture only depend on rain water 3. Sandy loam irrigated: Medium land, sandy loam soil, having irrigation facility 4. Clay loam rainfed :Low land, clay loam soil, agriculture depend only rain water
4	Soil type	**1.** Stony and gravely soil: Found in the foot hill prone to intensive erosion low water holding capacity highly acidic low in fertility status and organic matter content only suitable for pasture and recreation purpose. **2.** Light texture soil (Sandy soil) : Found in upland, coarse texture soil, highly acidic in reaction, low water holding capacity, low in organic

		matter content and poor in fertility status, rich in micronutrient except Boron and Molybdenum, prone to erosion. **3.** Medium texture soil (Loamy soil): Found in medium land, soil texture is mainly sandy loam to sandy clay loam, soils are moderately acidic, poor in fertility status and low in organic matter content and water holding capacity is moderate. **4.** Fine textured soil (Clayey soil) : Heavy texture soil , found in low land, soils are fairly acidic to neutral in reaction, water holding capacity is high, organic matter content is medium and moderate in fertility status.			
5	Productivity of major 2-3 crops under cereals, pulses, oilseeds, vegetables, fruits and others	Crop			Productivity (q /ha)
		Paddy (Hybrid)			40.00
		Paddy(HYV)			28.00
		Wheat			17.10
		Maiz			16.00
		Arhar			07.20
		Gram			08.25
		Mustad			6.2
		Groundnut			7.5
		Niger			2.1
		Brinjal			259.0
		Tomato			281.0
		Cauliflower			274.0
		Cucurbitaceous			160-200
6	Mean yearly temperature, rainfall, humidity of the district	Mean yearly rainfall- 1130 mm			
7	Production of major livestock products like milk, egg, meat etc.				

2.6 (a) Details of operational area / villages (2019)

Sl. No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified(Crop wise)	Identified Thrust Area
1.	Bermo	Petarwar	Ambadih, Chargi,Jaruatanr, Bundu,Lukaiya, Koh, Jaradih, Itke, Chanpi, Angwali, Kojram, Rukam etc.	Paddy Maize Groundnut Vegetables Potato Sweet potato Onion Mustard Poultry Goatry	1. Low productivity in cereals & pulses 2. Low profitability in vegetable cultivation 3. Low productivity in poultry &goatry	1. Introduction of high yielding and hybrid varieties of paddy 2. INM & IPM in paddy 3. Introduction of disease resistant variety of vegetable

2.	Bermo	Kasmar	Durgapur, Raghunathpur, Madhukarpur, Mayapur, Kurko, Chandipur, Baraikala, Ranitanr, Manjura, Rangamati, Hisim, Kedla.	Paddy Maize Wheat Arhar Gram Niger Mustard Groundnut Vegetable Potato Sweet potato Lac Poultry Goatry	1. Low productivity in cereals & pulses 2. Low profitability in vegetable crops 3. Low productivity in poultry &goatry 4. Low productivity in oilseed crops 5. Low productivity in lac	specially in tomato &brinjal 4. Introduction high yielding variety of Arhar gram, groundnut, mustard and Niger 5.Management of soil acidity through furrow application of lime and sweet potato cultivation with integrated nutrient management 6. Income generation activity for rural youth & farm women 7. Rain water harvesting. 8. INM & IPM 9. Post harvest management, marketing & value addition 10. Farm mechanization 11. Introduction of high yielding variety of maize and wheat with integrated crop management 12. Moisture conservation and micro irrigation system 13. Breed improvement in goatry and piggery 14. Disease and feed management in poultry and goatry 15. Organic vegetable cultivation 16. Popularization of sweet corn and baby corn
3.	Bermo	Gomia	Saram, Dhedhe,Tulbul, Mahuatanr, Lalpaniya, Kander	Paddy Vegetable Maize Wheat Arhar Niger Mustard Sweet potato Poultry Goatry Lac	1. Low productivity in cereals & pulses 2. Low profitability in vegetable crops 3. Low productivity in poultry &goatry 4. Low productivity in oilseed crops 5. Low productivity in lac	
4.	Bermo	Bermo	Jaridih, Govindpur	Paddy Maize Arhar Niger Vegetable Potato Lac Goatry	1. Low productivity in cereals & pulses 2. Low profitability in vegetable crops 3. Low productivity in poultry &goatry 4. Low productivity in lac	
5.	Bermo	Chandrapura	Taranari, Narra, Telo, Jarua, Kurumba, Paranga	Paddy Maize Arhar Vegetable Potato Lac Poultry Goatry	1. Low productivity in cereals & pulses 2. Low profitability in vegetable crops 3. Low productivity in poultry &goatry 4. Low productivity in lac	
6.	Bermo	Nawadih	Alargo, Bhalmara, Chapri, Narayanpur,	Paddy Maize	1. Low productivity in	

			Penk, Kothi	Arhar Niger Vegetable Potato Lac Poultry Goatry Piggery	cereals & pulses 2. Low profitability in vegetable crops 3. Low productivity in poultry, goatry& piggery 4. Low productivity in oilseed crops 5. Low productivity in lac	17. Popularization of low volume high value vegetable crops such as broccoli, colourd capsicum, 18. Popularization of mushroom production
7.	Chas	Chas	Dharmpura, Pokhanna, Jhopro, Ulgoda, Pindrajora,KasiJharia,	Paddy Maize Wheat Arhar Gram Mustard Vegetable Poultry Goatry Lac	1. Low productivity in cereals & pulses 2. Low profitability in vegetable crops 3. Low productivity in poultry &goatry 4. Low productivity in oilseed crops 5. Low productivity in lac	
8.	Chas	Chandankiyari	Chandankiyari, Bansgari, Lanka, Machatanr, Siyaljori, Bermo	Paddy Maize Groundnut Vegetables Potato Poultry Goatry	1. Low productivity in cereals & pulses 2. Low profitability in vegetable crops 3. Low productivity in poultry &goatry 4. Low productivity in oilseed crops 5. Low productivity in lac	
9.		Jaridih	Tilaiya, Bhaski, Beldih, Araju, Gangjori, Pichri	Paddy Maize Wheat Arhar Gram Mustard Vegetable Poultry Goatry	1. Low productivity in cereals & pulses 2. Low profitability in vegetable crops 3. Low productivity in poultry &goatry 4. Low productivity in oilseed crops 5. Low productivity in lac	

(b) Details of village adoption programme:

Name of the villages adopted by Sr. Scientist & Head and Scientist in 2019 for its development and action plan

Name of village	**Block**	**Action taken for development**
Raghunathpur	Kasmar	Base line survey is completed for knowing the existing condition of the village. Problems have been identified and accordingly some steps have been taken through our mandated activities. Scientists are regularly visiting these adopted villages and providing timely advice for crops related problems.
Chandipur	Kasmar	
NauajaraJaruatanr	Petarwar	
Manjura	Kasmar	
Koh	Petarwar	
Ambadih	Petarwar	

(c) SansadAdarsh Gram Yojona

i) Name of the village under SansadAdarsha Gram Yojona:
Kochakuli, Panchayat- Pichri, Block- Petarwar

2.7 Priority thrust areas

S. No	Thrust area
1.	Popularization of Soil and water conservation techniques
2.	Intensification in crop production system
3.	Development of seed production system.
4.	Value addition of locally available fruits & vegetables.
5.	Improvement of indigenous poor breeds of livestock.
6.	Soil Fertility Management
7.	Insect pest and disease management of major crops
8.	Entrepreneurship development through mushroom, vermi compost production.
9.	Farm Mechanization

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	T				M	F	M	F	M	F	M	F	T
10	10	90	-	-	15		75		90	90		09	07	135	-	-	10	-	97	-	107		107

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	T				M	F	M	F	M	F	M	F	T
104	120	3240	269	251	552	458	1103	657	1924	1366	3290	3953		13510									

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	SC		ST		Others		Total			Target	Achievement	SC		ST		Others		Total		
		M	F	M	F	M	F	M	F	T			M	F	M	F	M	F	M	F	T
126	89	2	30	5	-	52	-	59	30	89	3953										

Seed production (q)		Planting material (in Lakh)	
Target	Achievement	Target	Achievement
110		0.05	0.61300

Livestock strains and fish fingerlings produced (in lakh)*		Soil, water, plant, manures samples tested (in lakh)	
Target	Achievement	Target	Achievement
		0.01	0.0540

* 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 public ation
Research paper							
Seminar/conference/ symposia papers							
Books							
Bulletins							
News letter							
Popular Articles							
Book Chapter							
Extension Pamphlets/ literature							
Technical reports							
Electronic Publication (CD/DVD etc)							
TOTAL							

3.1.1Achievements on technologies assessed and refined

OFT-1 Home Science

1.	Title of On farm Trial	Assessment of different kind of papaya based jam.
2.	Problem diagnosed	Low profitability due to sale at very low rate in peak season.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**F.P. :-** Consumption as bhujia by local people **T.O.1:-** Development of raw papaya jam **T.O. 2:-** Development of raw papaya & guava jam
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	IARI/ Technical Bulletin of GBPUAT, Pantnagar.
5.	Production system and thematic area	Post harvest technology
6.	Performance of the Technology with performance indicators	Given in table
7.	Final recommendation for micro level situation	
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	Their reaction were very good and cooperative.

Thematic area: Post harvest technology

Problem definition: Low profitability due to sale at very low rate in peak season.

Table: 1- Nutritive value of all three product per 100 g of concern OFT

Technical Parameters / T.O.	Protein (g)	Fat (g)	Mineral (g)	Fiber (g)	CHO (g)	Energy (g)	Calcium (mg)	Iron (mg)	Vit. C (mg)
F.P.- Raw papaya bhujia	1.86	7.41	1.17	1.07	13.20	126.23	60.80	2.58	25.90
T.O.1: Raw papaya jam	0.91	0.33	0.61	0.96	89.40	364	48.33	0.8	20.5
T.O.2: raw papaya & Guava jam	0.98	0.36	0.68	2.4	91.16	372	42.33	0.8	87.16

Table:2- Sensory evaluation of all three product on the date of preparation.

Technical Parameters / T.O.	Appearance	Colour	Flavour	Taste	Overall acceptability	Overall grading
F.P.- Raw papaya bhujia	5.12	5.34	4.89	5.56	5.22	III
T.O.1: Raw papaya jam	8.12	8.22	8.07	8.34	8.18	II
T.O.2: raw papaya & Guava jam	8.75	8.88	9.12	9.14	8.97	I

Thematic area: Value Addition

Problem definition: Jack fruit is heavily produced in local area of Bokaro district but not properly utilized due to lack of processing knowledge.

Technology assessed:

OFT-2 Home Science

1.	Title of On farm Trial	Assessment of different kind of ripe jack fruit based jam.
2.	Problem diagnosed	Jack fruit is heavily produced in local area of Bokaro district but not properly utilized due to lack of processing knowledge.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**F.P. :** Local people consume ripe jack fruit just as fruit. **T.O.1:** Preparation of jam ripe jack fruit. **Formulation - Ingredients** Jack fruit pulp 1 kg, Sugar – 700g, Citric acid 2.5g, pectin:10g **T.O. 2:** Preparation of mixed jam from ripe jack fruit, papaya, guava and mango **Formulation - Ingredients** Well ripened jack fruit pulp juice – 600 g , Mango pulp – 100 g,papaya pulp 100 g and guava pulp 100g, Citric acid-2.5 g,pectin10g.
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	The Asian Journal of Horticulture **vol.**12,Issue 1,june,2017 p160-164.
5.	Production system and thematic area	Rainfed Upland and Value Addition
6.	Performance of the Technology with performance indicators	Given in table
7.	Final recommendation for micro level situation	
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	Their reaction were very good and cooperative.

Thematic area: Value Addition

Problem definition: Jack fruit is heavily produced in local area of Bokaro district but not properly utilized due to lack of processing knowledge.

Technology assessed: Assessed

Table 1: Nutritive value of 100g of all three produce of Jack Fruit based jam.

Technology option	No. of trials	Protein (g)	Fat (g)	CHO (g)	Energy (Kcal)	Calcium (mg)	Iron (mg)	Cost of produce/ kg	Market price of produce/ kg	Net profit/kg (Rs.)	B:C ratio
F.P. : Local people consume ripe jack fruit just as fruit	10	1.9	0.1	19.8	88.0	20.0	0.56	25	50	25	2:1
T.O.1: Preparation of jam ripe jack fruit. **Formulation - Ingredients** Jack fruit pulp 1 kg, Sugar – 700g, Citric acid 2.5g, pectin:10g		9.79	0.18	96.43	395.83	31.20	0.73	80	350	270	4.37:1
T.O. 2: Preparation of mixed jam from ripe jack fruit, papaya, guava and mango **Formulation - Ingredients** Well ripened jack fruit pulp juice – 600 g , Mango pulp – 100 g,papaya pulp 100 g and guava pulp 100g, Citric acid-2.5 g,pectin10g.		1.68	0.35	94.82	388.05	27.87	1.14	100	250	150	2.5:1

OFT-3: Horticulture

1.	Title of On farm Trial	Effect of micronutrient on yield and quality of Mango.
2.	Problem diagnosed	Deficiency of micronutrient like zinc,boron contributing towards poor yield and quality of Mango.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmers Practice –FYM 10 kg per tree + urea 0.5 kg per plant (06 year old) T.O.1– RDF (0.6:0.6:0.36 kg NPK/plant) + 100 g zinc sulphute + 50 g cupper sulphate + 50 g boric acid (soil application) in basin after harvest + foliar spray of 0.2% zinc sulphate + 0.1% boric acid (2 spray at just before flowering and marble stage) T.O.2– RDF (0.6:0.6:0.36 kg NPK/plant) + 100 g zinc sulphute + 50 g cupper sulphate + 50 g boric acid (soil application) in basin after harvest + foliar spray of 0.2% zinc sulphate + 0.1% cupper sulphate + 0.1% boric acid (2 spray at just before flowering and marble stage) **Mango- Variety : Amrapali**
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	ICAR, RCER, Ranchi
5.	Production system and thematic area	Fruit based production system, INM
6.	Performance of the Technology with performance indicators	Given in table
7.	Final recommendation for micro level situation	Technology Option-II – FYM @ 20kg /tree, RDF (0.6:0.6:0.36 kg NPK/plant) + 100 g ZnSO4 + 50 g CuSO4 + 50 g boric acid (soil application) in basin after harvest + foliar spray of 0.2% ZnSO4 + 0.1% CuSO4+ 0.1% boric acid (2 spray at just before flowering and marble stage) has better performance over Technology Option-I and farmers practice.
8.	Constraints identified and feedback for research	Unavailability of CuSO4 in local market.
9.	Process of farmers participation and their reaction	Personal contact and group discussion.

Thematic area: Integrated Nutrient Management

Problem definition: Deficiency of micronutrient like zinc,boron contributing towards poor yield and quality of Mango.

Technology assessed:

Table-1: Effect of micronutrient on yield and quality of Mango.

Technology option	No. of trials	Yield component					Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		No. of initial fruit/panicle	No. of final fruit set	Fruit wt. (g)	Yield (q/ha)	TSS				
Farmers Practice –FYM 10 kg per tree + urea 0.5 kg per plant (06 year old)	07	32.50	1.60	132.00	45.20	18.5	75500.00	135600.00	60100.00	1:79
T.O.I– RDF (0.6:0.6:0.36 kg NPK/plant) + 100 g zinc sulphute + 50 g cupper sulphate + 50 g boric acid (soil application) in basin after harvest + foliar spray of 0.2% zinc sulphate + 0.1% boric acid (2 spray at just before flowering and marble stage)		48.00	2.50	152.00	84.00	21.20	85500.00	252000.00	166500.00	2:94
T.O.II– RDF (0.6:0.6:0.36 kg NPK/plant) + 100 g zinc sulphute + 50 g cupper sulphate + 50 g boric acid (soil application) in basin after harvest + foliar spray of 0.2% zinc sulphate + 0.1% cupper sulphate + 0.1% boric acid (2 spray at just before flowering and marble stage)**Mango- Variety : Amrapali**		65.00	3.25	170.50	98.00	22.00	87500.00	294000.00	206500.00	3.36

Results: Technology Option-II – FYM @ 20kg /tree, RDF (0.6:0.6:0.36 kg NPK/plant) + 100 g ZnSO4 + 50 g CuSO4 + 50 g boric acid (soil application) in basin after harvest + foliar spray of 0.2% ZnSO4 + 0.1% CuSO4+ 0.1% boric acid (2 spray at just before flowering and marble stage) has better performance over Technology Option-I and farmers practice.**Note:** Mango price@3000/ quintal.

Activity during conducting OFT

Application of Nutrient

OFT-4

1.	Title of On Farm Trial	Sustainable Onion production through nutrient management
2.	Problem Diagnose	Unbalanced use of fertilizer results in poor crops yields.
3.	Details of Technologies selected for assessment/refinement	Farmers Practice : 60:20:20 (NPK) + 20 q FYM Technology option-I : RDF 150:50:80 (NPK), P through SSP Technology option-II : RDF 50% + 20 q poultry manure
4.	Source of Technology	Directorate of Onion & Garlic research, Pune
5.	Replication	11
6.	Production System & Thematic Area	Irrigated medium land and Nutrient Management
7.	Performance of the Technology with performance indicators	Given in table
8.	Final recommendation for micro level situation	RDF 50% + 20 q poultry manure performed better over other treatments.
9.	Constraints identified and feedback for research	Decomposition of poultry manure is difficult. CN ratio of poultry manure is very low and poultry manure contains residue, drugs and antibiotic. Before using it should be composted with paddy straw or saw dust.
10.	Process of farmers participation and their reaction	Personal contact and gosthi with farmers.

Thematic area: Nutrient Management

Problem definition: Unbalanced use of fertilizer results in poor crops yields.

Table: 1- Sustainable Onion production through nutrient management

Technology Option	No. of trials	Yield components				Yield (q)	Gross income (Rs.)	Cost of cultivation (Rs.)	Net return (Rs.)
		Plant height (cm)	Nos. of leaves	Diameter of bulb (cm)	Bulb wt. (g)				
F. P-60:20:20 (NPK) + 20 q FYM	11	35.20	9.0	4.0	56.20	243	194400	52500	141900
TO1- RDF 150:50:80 (NPK), P through SSP		42.92	8.0	3.4	54.50	198	158400	55000	103400
TO2- RDF 50% + 20 q poultry manure		52.60	13.0	4.8	61.20	285	228000	53100	174900

Onion sold @ Rs. 800/q

Result: Technology option-II performed good over technology option – I and farmers practice in respect of yield attributing character.



OFT-5 : Plant Protection

1.	Title of On farm Trial	Management of pod borer *Helicoverpaarmigera* (Hubner) in chickpea.
2.	Problem diagnosed	Low productivity of chickpea due to heavy infestation of pod borer.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined) **- Refined**	**Technology option** **Farmers Practice :** 1 spray of Carbryl 50 WP @ 4g/ lit. water as per appearance of larva. **Technology option-I :** 2 spray of Lambdacyhalothrin 2.5EC @ 2 ml/l water at 7 days interval starting from flowering stage. **Technology option-II** :Bt var. kurstaki 2g/l water. 1st spray at 50% flowering and 2nd spray at 15 days after 1st spraying. + 1spray of Chlorantraniliprole 18.5% SC 1ml/3l water after 2nd spray of BT.
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	BAU, Ranchi
5.	Replication	10
6.	Production system and thematic area	Rainfed Upland and Integrated Pest Management
7.	Performance of the Technology with performance indicators	Given in table
8.	Final recommendation for micro level situation	-Technology option-II : Bt var. kurstaki 2g/l water. 1st spray at 50% flowering and 2nd spray at 15 days after 1st spraying. + 1spray of Chlorantraniliprole 18.5% SC 1ml/3l water after 2nd spray of BT was found most effective in reducing pod damage
9.	Constraints identified and feedback for research	
10.	Process of farmers participation and their reaction	Personal contact and gosthi with farmer

Thematic area: Integrated Pest Management

Problem definition: Low productivity of chickpea due to heavy infestation of pod borer.

Technology assessed: Assessment

Table:Effect of insecticide against H,armigera under field condition.

Technology option	No.of larvae/MRL			Pod damage %	Yield q/ha	Cost of cultivation	Gross income	Net return	B:C
	2DAS	7DAS	14DAS						
Farmers Practice : 1 spray of Carbryl 50 WP @ 4g/ lit. water as per appearance of larva.	0.96 (1.22)	0.82 (1.15)	0.60 (1.05)	9.4 (17.86)	8.0	70680	10400	33320	0.47
Technology option-I : 2 spray of Lambdacyhalothrin 2.5EC @ 2 ml/l water at 7 days interval starting from flowering stage.	0.82 (1.15)	0.64 (1.07)	0.54 (1.02)	8.7 (17.15)	13.60	70720	176800	106080	1.5
Technology option-II :Seed treatment with Bt +var. Bt var. kurstaki 2g/l water. 1st spray at 50% flowering and 2nd spray at 15 days after 1st spraying.	0.50 (1.00)	0.50 (1.00)	0.44 (0.97)	7.9 (16.32)	16.22	71800	210860	139060	1.9

Results: **TO2** -Technology option-II : Bt var. kurstaki 2g/l water. 1st spray at 50% flowering and 2nd spray at 15 days after 1st spraying. + 1spray of Chlorantraniliprole 18.5% SC 1ml/3l water after 2nd spray of BT was found most effective in reducing pod damage.

OFT-6 Plant Protection

1.	Title of On farm Trial	Management of aphid *Aphis gossypii* in okra in kharif season.
2.	Problem diagnosed	Low productivity of Bhindi due to aphid attack.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined) - **Refined**	**Technology option:** **Farmers Practice:** Foliar spray of Acetamiprid 20% SP @ 1g/lit.water as per appearance of aphid. **Technology option-I** :3 Foliar spray of NSKE 5 % at 15 days interval from 30DAS **Technology option-II**: 3 spray of Imidachloprid 17.8% SL 1 ml/3lt water at 15 days interval from 30 DAS +3 Foliar spray of NSKE 5% at 15 days interval from 30DAS.
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	BAU, Ranchi
5.	Replication	10
6.	Production system and thematic area	Irrigated Mediumland and Pest Management
7.	Performance of the Technology with performance indicators	Given in table
8.	Final recommendation for micro level situation	Technology option-II- 3 spray of Imidachloprid 17.8% SL 1 ml/3lt water at 15 days interval from 30DAS+3 Foliar spray of NSKE 5% at 15 days interval from 30DAS was found best in reducing aphid population.
9.	Constraints identified and feedback for research	
10.	Process of farmers participation and their reaction	Personal contact and gosthi with farmer

Thematic area: Integrated Pest Management

Problem definition: Low productivity of Bhindi due to aphid attack.

Technology assessed: Refined

Table: 1 Management of aphid in okra.

Technology option	No. of trials	Yield Componenet									Yield q/ha	Cost of cultivation	Net return (Rs./ha)	B:C ratio
		Mean cummulative survival population of aphid /3leaves/plant												
		1st spray			2nd spray			3rd spray						
		3 DAS	7 DAs	14 DAS	3 DAS	7 DAS	14 DAS	3 DAS	7 DAs	14 DAS				
Farmers Practice : Foliar spray of Acetamiprid 20% SP @ 1g/lit.water as per appearance of aphid	10	8.53 (3.00)	8.77 (3.04)	11.43 (3.45)	6.60 (2.66)	6.37 (2.62)	6.23 (2.59)	3.18 (1.92)	2.83 (1.82)	3.08 (1.89)	58.61	71200.00	46020.00	0.67
Technology option-I :3 Foliar spray of NSKE 5 % at 15 days interval from 30DAS		6.10 (2.57)	6.33 (2.61)	8.67 (3.03)	5.28 (2.40)	5.11 (2.73)	7.68 (2.86)	2.58 (1.76)	2.22 (1.65)	2.94 (1.85)	83.28	74000.00	92560	1.2
Technology option-II :3 spray of Imidachloprid 17.8% SL 1.ml/3lt water at 15 days interval from 30 DAS +3 Foliar spray of NSKE 5% at 15 days interval from 30DAS.		7.64 (2.85)	8.52 (3.00)	10.86 (3.37)	5.82 (2.51)	5.48 (2.46)	5.72 (2.49)	3.30 (1.87)	2.85 (1.83)	3.15 (1.91)	86.64	75100.00	98180	1.3

Results: - Technology option-II :3 spray of Imidachloprid 17.8% SL 1 ml/3lt water at 15 days interval from30DAS + 3Foliar spray of NSKE 5% at 15 days interval from 30DAS was found best in reducing aphid population.

OFT-7 Agril. Engg

1.	Title of On farm Trial	Assessment of different sowing methods on wheat yield.
2.	Problem diagnosed	Low yield of wheat due to improper sowing method.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	**F.P. :-**Conventional method (wheat sowing behind the plough) **T.O.1 :-** Sowing with seed drill. **T.O.2 :-** Sowing with zero tillage machine.
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	BAU, Ranchi
5.	Production system and thematic area	Irrigated Mediumland and Farm Mechanization
6.	Performance of the Technology with performance indicators	Given in table
7.	Final recommendation for micro level situation	Technology option -2 Sowing with zero tillage machine was found most effective in different sowing method in wheat yield.
8.	Constraints identified and feedback for research	Zero tillage machine is not available in local area and its cost is high.
9.	Process of farmers participation and their reaction	Personal contact, training and gosthi

Thematic area: Farm Mechanization

Problem definition: Low yield of wheat due to improper sowing method.

Table: 1 – Effect of different sowing method in wheat yield.

Technology option	No. of trails	Yield components				Yield q/ha	Cost of cultivation Rs./ha	Gross income Rs./ha	Net income Rs./ha	B:C ratio
		Moisture content of soil before sowing	Plant Population after 21 days	Effective tiller/m^2	No. of grain/ ear head					
F.P.:- Conventional method (wheat sowing behind the plough)	07	12.50	185	276	40.1	27.0	30500	59400	28900	1.94
T.O.1 :- Sowing with conventional seed drill.		12.70	190	288	42.6	29.2	29000	64240	35240	2.21
T.O.2 :- Sowing with zero tillage machine.		17.20	172	294	45.2	30.1	26000	66220	40220	2.54

Selling price of wheat Rs. 2200/q

Results: Technology option -2 Sowing with zero tillage machine was found most effective in different sowing method in wheat yield.

OFT-8 Agril. Engg.

1.	Title of On farm Trial	Assessment of Irrigation methods in single and paired row potato cultivation.
2.	Problem diagnosed	Low irrigation water use efficiency in potato cultivation.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined): **Assessed**	**F.P. :-** Single row potato planting with furrow Irrigation **T.O.1 :-** Single row potato planting with Skip Irrigation (Alternate skip) **T.O.2 :-** Double row potato planting with furrow Irrigation
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	IARI, New Delhi
5.	Production system and thematic area	Irrigated Medium land and Water Management
6.	Performance of the Technology with performance indicators	Given in table
7.	Final recommendation for micro level situation	Technology option 1 single row potato planting with skip irrigation is found best treatment with respect to yield, net profit and inform of water saving. Therefore, single row potato planting with alternate furrow (skip) irrigation is recommended.
8.	Constraints identified and feedback for research	Some problems comes to put soil on double row potato planting with furrow irrigation.
9.	Process of farmers participation and their reaction	Personal contact. Farmers are satisfied with single row potato planting with alternate furrow irrigation.

Thematic area: Water Management
Problem definition: Low irrigation water use efficiency in potato cultivation.

Table: 1- Performance of technology with performance indicator.

Technology option		Yield components		Yield q/ha	Cost of cultivation Rs./ha	Gross return Rs./ha	Net return Rs./ha	B:C ratio
	No. of trials	Total water used m^3/ha	Water saving over FP(%)					
F.P. :- Single row with furrow Irrigation	07	1288	-	162	75000	259200	184200	3.45
T.O.1 :- Single row with Skip Irrigation		835	35.2	190	75000	304000	229000	4.05
T.O.2 :- Double row planting on raised bed with furrow Irrigation		1030	20.2	176	75000	281600	206600	3.75
CD5%								

Note: Selling price of potato is Rs. 1600/q
Results: Technology option 1 single row potato planting with skip irrigation is found best treatment with respect to yield, net profit and B: C ratio. Therefore, single row potato planting with alternate furrow (skip) irrigation is recommended.

OFT- 9: Crop Production

1.	Title of On Farm Trial	Yield and profitability of mustard as affected by nutrient management under irrigated condition.
2.	Problem Diagnose	Low yield of mustard due to imbalance use of fertilizer.
3.	Details of Technologies selected for assessment/refinement	F.P. - 20-25kgN, 8-10 kg P2O5, 8-10 q FYM/ha T.O. I – 75% RDF (60:45:30 kg NPK/ha)+ Azotobacter + PSB T. O. ii – 100% RDF + Sulphur (20kg/ha) RDF- 80:60:40 kgNPK/ha
4.	Source of Technology	BAU Ranchi
5.	Replication	10
6.	Production System & Thematic Area	Irrigated medium land and Nutrient Management
7.	Performance of the Technology with performance indicators	Given in table
8.	Final recommendation for micro level situation	
9.	Constraints identified and feedback for research	
10.	Process of farmers participation and their reaction	Personal contact and gosthi

Thematic area: Nutrient Management
Problem definition: Low yield of mustard due to imbalance use of fertilizer.

Table: 1 - Yield and profitability of mustard as affected by nutrient management under irrigated condition.

Treatment	No. of trials	Yield Component				Seed yield (q/ha)	Gross return (Rs/ha)	Net return (Rs./ha)	B:C ratio
		Plant height (cm)	No. of siliqua /plant	No. of seeds siliqua	1000 Seed (q/ha)				
F.P. - 20-25kgN, 8-10 kg P2O5, 8-10 q FYM/ha	10	118.6	212.6	11.2	2.79	7.42	37100.00	24250.00	2.8
T.O. I – 75% RDF (60:45:30 kg NPK/ha)+ Azotobacter + PSB		132.4	246.4	12.4	3.46	9.76	48800.00	34075.00	3.3
T. O. ii – 100% RDF + Sulphur (20kg/ha)		138.6	262.8	13.6	3.82	11.84	59200.00	41950.00	3.4

* RDF: 80:60:40 kg NPK/ha

OFT- 10: Crop Production

1.	Title of On Farm Trial	Effect of sowing methods on forage productivity and economics of barseem.
2.	Problem Diagnose	Low forage productivity of barseem due to poor crop establishment
3.	Details of Technologies selected for assessment/refinement	F.P. : Broadcasting method T.O.1 : Line sowing at 30 cm T.O. 2 : Puddling method
4.	Source of Technology	Birsa Agricultural University, Ranchi
5.	Replication	07
6.	Production System & Thematic Area	Integrated medium land and Fodder Production
7.	Performance of the Technology with performance indicators	Line sowing method of barseem is recorded maximum green fodder yield (492.33 q/ha) with net return of Rs. 123263.00 and B:C ratio 5.0. Line sowing method increased in green fodder yield of 89.87 % and 54.50% over broadcasting and puddling methods, respectively.
8.	Final recommendation for micro level situation	Line sowing method of barseem is recommended for higher green fodder yield.
9.	Constraints identified and feedback for research	
10.	Process of farmers participation and their reaction	Personal contact.

Thematic area: Fodder Production

Problem definition: Low forage productivity of barseem due to poor crop establishment

Table: 1 - Effect of sowing methods on yield of Barseam

Technology Option	Plant population/ m^2	Branches/ Plant	GF yield (q/ha)	Cost of cultivation (Rs./ha)	Gross Return (Rs./ha)	Net Return (Rs./ha)	B:C Ratio
F P: Broadcasting method	84	11	259.29	22790	77788	54998	2.41
TO1- Line sowing at 30 cm	166	20	492.33	24400	147663	123263	5.0
TO2- Puddling method	123	14	318.67	25500	95600	70100	2.75

Result:Line sowing method of barseem is recorded maximum green fodder yield (492.33 q/ha) with net return of Rs. 123263.00 and B:C ratio 5.0. Line sowing method increased in green fodder yield of 89.87 % and 54.50% over broadcasting and puddling methods, respectively.

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	Nutrient Management, Fodder Production	1	1	1
2.	Horticulture	Integrated Nutrient Management	4	2	2
3.	Agril. Engg.	Farm Mechanization, Water Management	4	2	2
4.	Plant Protection	Integrated Pest Management	5	2	2
5.	Women Empowerment	Value Addition	4	2	2
6.	Livestock				
7.	Enterprises				

Name of Project:"Enhancing farmers profitability through intervention, Assessment, Refinement and Dissemination of climate smart technologies for sustainable agriculture development of rabi crop in Jharkhand" for the year 2020-21

Technical Programme:

Crop	Variety	Plot Size/ variety	Seed Rate	RDF
Mustard	PM-28,DRM 150-35,TBM-1, NRCHB 101,Shivani, PM-30	30 cm	5 kg /ha	80:40:40:30 Kg N:P:K:S/ha
Wheat	K-1317,HD-3171, DBW 187, HI1563, Shivani,RR-21, Birsa gehun, DBW107, HD-2967	20 cm	120 kg/ha	120:60:40 Kg N:P:K/ha
Chickpea	JG-14,Birsa chana-3,KPF-59, KWR-108 GNG-2207	30 cm	75 kg/ha	25:50:25 Kg N:P:K /ha
Lentil	KLS-218,DBL -58	25 cm	30 kg/ha	25:50:25 Kg N:P:K /ha
Linseed	Divya,Priyam,Shekhar,T-397	30 cm	30 kg/ha	60:80:40 Kg N:P:K /ha

Plot Size: 7x4.5 meter
Date of Sowing: 20/12/2020

Crop: Mustard

Variety	Plant height (cm)	No. of Siliqua/plant	No. of Seeds/Siliqua	1000 Seed Wt. (g)	Seed yield (q/ha)
PM-28	112.7	171.6	12.2	3.82	9.45
DRMR150-35	134.6	230.4	11.4	4.2	11.20
TBM-1	110.8	174.0	11.8	3.87	8.2
NRCHB 101	118.7	196.7	11.8	4.80	10.62
Shivani	125.6	198.5	12.2	5.2	11.4
PM-30	131.4	209.7	12.6	5.4	11.85

Crop: Wheat

Variety	Plant height (cm)	No. of effective tillers/ row length	No. of grains/Panicle	1000 Seed wt (g)	Grain Yield (q/ha)	Straw yield (q/ha)
K-1317	86.4	84.6	68.4	49.4	25.4	38.6
HD-3171	72.3	66.8	45.6	36.2	19.5	27.4
DBW107	91.6	90.6	41.4	40.0	20.87	34.2
H-1563	86.8	92.4	58.5	53.2	27.80	39.7

Shivani	75.6	96.5	62.4	54.4	31.52	45.2
RR-21	80.2	78.9	44.8	45.6	23.84	36.4
Birsa Genhu	85.7	86.4	56.2	48.7	26.71	40.2
DBW -187	92.7	82.3	38.2	46.8	20.64	31.6
HD-2967	84.5	79.4	48.6	41.2	24.75	38.4

Crop: Chickpea

Variety	Plant height (cm)	No. of Pods/Plant	1000 Seed wt (g)	Yield (q/ha)
JG-14	45.5	46.4	37.8	12.6
Birsa chana-3	42.60	38.7	42.6	13.4
KPG-59	39.2	42.6	41.4	11.8
KWR-108	32.8	32.6	35.2	8.76
GNG-2207	44.3	41.5	36.4	12.4

Crop: Lentil

Variety	Plant height (cm)	No. of Pods/Plant	Seeds/Pods	1000 Seed wt (g)	Grain Yield (q/ha)	Straw yield (q/ha)
KLS-218	27.4	48.7	1.82	22.45	9.56	21.46
DBL -58	24.67	42.4	1.68	19.82	8.46	17.40

Crop: Linseed

Variety	Plant height (cm)	No. of Capsules/Plant	1000 Seed wt (g)	Seed yield (q/ha)	Straw yield (q/ha)
Divya	48.6	78.7	8.4	7.86	12.4
Priyam	46.4	88.6	9.6	9.38	16.64
Shekhar	42.6	76.4	10.70	8.6	15.36
T-397	49.2	56.2	8.2	7.2	13.60

On Station Trials

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			
						M	F	M	F	M	F	M	F	T	
1.	Paddy	Crop Production	Var- IR64drt, seed treatment, line sowing	20.0	20.0	-	-	8	-	20	-	28	-	28	
2.	Ragi	Crop Production	Var- A-404, seed treatment, line sowing	10.0	10.0	-	-	6	-	12	-	18	-	18	
3.	Paddy	Farm Mechanization	Var- Lalat, Use of drum seeder for paddy cultivation	4.0	4.0	-	-	-	-	8	-	8	-	8	
4.	Wheat	Farm Mechanization	Var- K-9107, use of zero tillage machine for wheat cultivation	5.0	5.0	-	-	-	-	10	-	10	-	10	
5.	Brinjal	ICM	Var- Rasi, line sowing, ICM	1.0	1.0	-	-	6	-	9	-	15	-	15	
6.	Tomato	ICM	Var- Nandini, line sowing, IPM & IDM	1.0	1.0	-	-	4	-	4	-	8	-	8	
7.	Cauliflower	ICM	Var- Namdhari-555 & Madhuri, line sowing, IDM	1.0	1.0	-	-	8	-	12	-	20	-	20	

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_2O_5	K_2O					

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: NA

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:NA

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

Other crops

Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	Other parameters		*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demonstration	Check		Demo	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Paddy	Crop Production	Var- IR64 drt, line sowing, seed treatment	128	20	32.6	28.4	14.79	-	-	29600.00	65200.00	35600.00	2.20	29600.00	56800.00	27200.00	1.91
Ragi	Crop Production	Var- A-404, line sowing, seed treatment	18	10	18.2	14.8	22.9	-	-	16500.00	54600.00	38100.00	3.30	16000.00	44400.00	28900.00	2.77
	Total																

Livestock :NA

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No.of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Dairy																	
Cow																	
Buffalo																	
Poultry																	
Rabbitry																	
Pigerry																	
Sheep and goat																	
Duckery																	
Others (Pl.specify)																	
Total																	

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Fisheries :NA

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No.of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Common carps																	
Mussels																	
Ornamental fishes																	
Others (pl.specify)																	
		Total															

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Other enterprises: NA

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

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Women empowerment

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

Farm implements and machinery

Name of the implement	Crop	Name of the technology demonstrated	No. of Farmer	Area (ha)	Filed observation (output/man hour)		% change in major parameter	Labor reduction (man days)				Cost reduction (Rs./ha or Rs./Unit)			
					Demonstration	Check						Demo	Check	Cost saving Rs./ha	Cost saving%
Drumseeder	Paddy : Lalat	Use of drum seeder for paddy cultivation	8	4	0.04	0.004	90.0	03	30	90		22800.00	29100.00	6300.00	21.65

* 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

Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	Other parameters		*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demonstration	Check		Demo	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Wheat-(K-9107)	Farm machinery & crop production	Use of Zero tillage machine for wheat cultivation	10	5	30.1	27.0	11.48	-	-	26000	66220	40220	2.54	30500	59400	28900	1.94
		Total	10	5													

Demonstration details on crop hybrids

Crop	Name of the Hybrid	No. of Farmers	Area (ha)	Yield (kg/ha) / major parameter			Economics (Rs./ha)			
				Demo	Local check	% change	Gross Cost	Gross Return	Net Return	BCR
Cereals										
Bajra										
Maize										
Paddy										
Sorghum										
Wheat										
Others (Pl. specify)										
Total Cereals										
Oilseeds										
Castor										
Mustard										
Safflower										
Sesame										
Sunflower										
Groundnut										
Soybean										
Others (Pl. specify)										
Total Oilseeds										
Pulses										
Greengram										
Blackgram										
Bengalgram										
Redgram										
Others (Pl. specify)										
Total Pulses										
Vegetable crops										
Bottle gourd										
Capsicum										
Cucumber										
Tomato	Nandini	15	1.0	78.0	36.65	99.58	62400.00	102300.00	39900.00	1.63
Brinjal	Rasi	8	1.0	107.20	65.0	64.92	75040.00	126080.00	51040.00	1.68
Cauliflower	Namdhari-555, Madhuri	20	1.0	250.0	150.0	150.0	175000.00	290000.00	115000.00	1.65
Okra										
Onion										
Potato										
Field bean										
Others (Pl. specify)										
Total Veg. Crops										
Commercial Crops										
Cotton										
Coconut										
Others (Pl. specify)										
Total Commercial Crops										
Fodder crops										
Napier (Fodder)										
Maize (Fodder)										
Sorghum (Fodder)										
Others (Pl. specify)										
Total Fodder Crops										

Technical Feedback on the demonstrated technologies

Sl. No	Crop	Feed Back
1.	Paddy: IR64-drt	Better yield performance under moisture deficit condition.8-10 days early maturity compare to other local variety.
2.	Ragi: A-404	Better yield performance, larger head size and bold seeded.

Extension and Training activities under FLD

Sl. No.	Activity	Date	No. of activities organized	Number of participants	Remarks
1.	Field days	18.11.2021	Kisan Gosthi on Paddy crop	26	
		18.11.2021	Kisan Gosthi on Ragi crop	23	
2.	Farmers Training				
3.	Media coverage				
4.	Training for extension functionaries				



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

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
1.	Groundnut	Moongfali	11.2	8.5	9.9	20.0	Var:TG-37+ Line sowing	102	20	17.4	12.8	15.4	85.8	59	(-) 21
2.	Sesame	Desi Til	3.2	3.0	3.70	8.5	Var:Shekhar+ Line sowing+ Sulphur, Pesticides	22	10	5.7	4.6	4.9	63.3	32.4	(-)42
3.	Niger	Local	3.5	3.0	3.2	7.0	Var:Puja-1+ Line sowing+ Sulphur, Pesticides	60	20	6.0	4.7	5.8	93.3	81	(-)17
4	Mustard	Sarsa	7.6	6.5	7.0	18.24	Var- P-30, Line sowing, sulphur@ 20 kg./ha +IPM+ Imidacloprid, Fungicide	20	58	12.2	8.8	10.4			
5	Linseed	Local	5.4	4.5	5.1	12.0	Improved Var- Priyam, Line sowing, sulphur@ 20 kg./ha +IPM+ Insecticide, Fungicide	20	46	9.7	6.5	8.3			

B. Economic parameters

Sl. No.	Variety demonstrated & Technology demonstrated	Farmer's Existing plot				Demonstration plot			
		Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C ratio	Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C ratio
1.	TG-37 + Line sowing	22500.00	56000.00	33500.00	2.48	27000.00	94800.00	67800.00	3.5
2.	Var-Shekhar+Line sowing+ Sulphur, Pesticides	11000.00	25600.00	14600.00	2.3	13500.00	39200.00	25700.00	2.9
3.	Var- Puja-1+ Line sowing+ Sulphur, Pesticides	9500.00	17500.00	8000.00	1.84	11800.00	29000.00	17200.00	2.45
4	Var- P-30, Line sowing, sulphur@ 20 kg./ha +IPM+ Imidacloprid, Fungicide					18000.00	57200.00	39200.00	3.18
5.	Improved Var- Priyam, Line sowing, sulphur@ 20 kg./ha +IPM+ Insecticide, Fungicide					14000.00	39010.00	25010.00	2.78

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)
1.	Groundnut: TG-37	30800	21560.00	60.00	6000	3000	Daily expenses, child education, health	12
2.	Sesame: Shekhar	4900	3900	80.00	500	500	Daily expenses, child education, health	10
3.	Niger: Puja-1	11600	7000	50.00	3400	1200	Daily expenses, child education, health	10

D. Oilseed 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
1.	**Groundnut:**Variety- TG-37, line sowing	Y	85%	90%	N	75%	
2.	**Sesame:**Var-Shekhar+Line sowing+ Sulphur, Pesticides	Y	80%	85%	N	70%	
3.	**Niger:**Var-Puja-1+Line sowing+ Sulphur, Pesticides	Y	80%	90%	N	80%	
4	**Mustard:** Var- P-30, Line sowing, sulphur@ 20 kg./ha +IPM+ Imidacloprid, Fungicide	Y	90%	90%	N	80%	
5	**Linseed:** Improved Var- Priyam, Line sowing, sulphur@ 20 kg./ha +IPM+ Insecticide, Fungicide	Y	85%	90%	N	75%	

E. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
Groundnut: Long pod, semi spreading, Maturity within 100 days, bold seeded	Better yield, disease resistant	42.85 % better performance over local variety.	Good yielding variety

Sesame: Better oil content, disease resistant	Better yield, disease resistant	53.3 % better performance over local variety.	Variety liked by farmers
Niger: Better oil content, shining of seed, bold seed	Better yield, disease resistant	65.7 % better performance over local variety.	Variety liked by farmers

F. Extension activities under FLD conducted:

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
1.	Training on groundnut:	13.07.2021, KVK,Bokaro	24
2.	Field day:Groundnut crop	15.09.2021, Durgapur, Kasmar 20.09.2021, Irgua, Kasmar	23 20
3.	Training on sesame	05.07.2021, KVK, Bokaro	25
4.	Field day: Sesme	19.10.2021, Chando, Petarwar 26.10.2021, Merudaru, Petarwar	22
5.	Training on Niger crop	12.07.2021, KVK Bokaro	28
6.	Field day : Niger crop	18.11.2021, Bhaski, Jaridih 18.11.2021, Tondra, Jaridih	26 22

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

H. Farmers' training photographs

I. Quality ActionPhotographs of field visits/field days and technology demonstrated.

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			

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

A. Technical Parameters: (PULSE)

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
1.	Pigeon pea	Local	10.2	7.5	7.5		Var- IPA-203+ line sowing+ seed treatment+ pest & disease management	21	10	15.4	10.5	13.8			
2.	Green gram	Local Moong	6.5	5.5	6.0	12	Var- HUM-16 + line sowing+ seed treatment+ pest & disease management	21	10	10.2	7.6	9.2	67.2	53	(-)23
3.	Black gram	Desi urad	7.4	5.5	6.19	14.0	Var- WBU-109 + line sowing+ seed treatment+ pest & disease management	29	10	12.5	7.8	10.8	96	75.5	(-)22.85
4.	Horse gram	Desi Kulthi	5.5	4.0	4.5	10.0	Var- Indira Kulthi-1 + line sowing+ + pest & disease management	45	10	8.8	6.7	7.9	97.5	75.5	(-) 21
5.	Chick pea	Desi	10.6	8.2	7.5		Var- JG-14 line sowing+ seed treatment+ pest &	28	10	17.5	11.4	14.2			

							disease management								
6.	Green gram summer	Local	7.0	5.5	6.0		Var- HUM-16 + line sowing+ seed treatment+ pest & disease management	30	10	11.2	7.8	10.2			

B. Economic parameters

Sl. No.	Variety demonstrated & Technology demonstrated	Farmer's Existing plot				Demonstration plot			
		Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C ratio	Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C ratio
1.	Var- IPA-203+ line sowing+ seed treatment+ pest & disease management	17500.00	51000.00	33500.00	2.91	20500.00	69000.00	48500.00	3.37
2.	Var- HUM-16 + line sowing+ seed treatment+ pest & disease management	17000.00	39000.00	22000.00	2.2	19800.00	55200.00	35400.00	2.78
3.	Var- WBU-109 + line sowing+ seed treatment+ pest & disease management	17200.00	48100.00	30900.00	2.79	19500.00	70200.00	50700.00	3.6
4.	Var- Indira Kulthi-1 + line sowing+ + pest & disease management	12000.00	27500.00	15500.00	2.29	15000.00	39500.00	24500.00	2.63
5.	Var- JG-14 line sowing+ seed treatment+ pest & disease management	19500.00	53000.00	33500.00	2.71	22800.00	71000.00	48200.00	3.2
6.	Summer Green gram: Var- HUM-16 + line sowing+ seed treatment+ pest & disease management	16600.00	49000.00	32400.00	2.95	20200.00	71400.00	51200.00	3.53

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)
1.	Pigeon pea: Var- IPA-203	Standing						
2.	**Green gram:** Var- HUM-16	9200	6450	60.00	2300	450	Daily expenses, child education, health	18
3.	**Black gram:** Var- WBU-109	10800	8100	65.00	2000	800	Daily expenses, child education, health	12
4.	Horse gram: Var- Indira Kulthi-1	7900	4750	50.00	2350	800	Daily expenses, child education, health	08

D. Oilseed 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
1.	Var- IPA-203+ line sowing+ seed treatment+ pest & disease management	Y	80%	85%	N	80%	
2.	Var- HUM-16 + line sowing+ seed treatment+ pest & disease management	**Y**	**80%**	**85%**	**N**	**80%**	
3.	Var- WBU-109 + line sowing+ seed treatment+ pest & disease management	Y	80%	85%	N	75%	

4.	Var- Indra Kulthi-1 + line sowing+ + pest & disease management	Y	85%	90%	N	80%	

E. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
Green gram: Short duration, Maturity within55-58 days, disease resistant, Good for summer season, Good crop canopy.	Better yield, disease resistant	41.00 % better performance over local variety.	Good yielding variety
Black gram: Uniform maturity, Maturity within70-75 days , disease resistant, useful for mixed cropping. Better yield under late sown condition	Better yield, disease resistant	45.9 % better performance over local variety.	Variety liked by farmers
Horse gram: Maturity within 105 day , bold seed	Better yield, disease resistant	43.6 % better performance over local variety.	Variety liked by farmers

F. Extension activities under FLD conducted:

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
1.	**Training on green gram**	28.06.2021, KVK, Bokaro	25
2.	Field day on green gram	08.09.2021, Chaninpur, Kasmar	20
3.	Training on black gram	20.06.2021, KVK, Bokaro	26
4.	Field day : on Black gram	10.09.2021, Manjura, Kasmar 28.08.2021, Chaninpur, Kasmar	18 21
5.	Training on Horse gram	26.07.2021 KVK, Bokaro	24
6.	Field day : on Horse gram	20.11.2021, Tondra, Jaridih 02.12.2021, Baraikhurd, Kasmar	17 20

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

H. Farmers' training photographs

I. Quality Action Photographs of field visits/field days and technology demonstrated.


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			

3.3 Achievements on Training (Including the sponsored and FLD training programmes):

ABSTRACT OF TRAINING PROGRAMME

Clientele	On Campus		Off Campus		Total	
	No. of course	Participants	No. of course	Participants	No. of course	Participants
Farmers and Farm Women	**41**	**1474**	**39**	**1208**	**80**	**2682**
Rural Youth	**9**	**278**	**-**	**-**	**9**	**278**
Extension Functionaries	**7**	**286**	**2**	**80**	**9**	**366**
Vocational Training for Rural Youth	**4**	**89**	**-**	**-**	**4**	**89**
Sponsored Training for Rural Youth	**18**	**646**	**-**	**-**	**18**	**646**
Total	**79**	**2773**	**41**	**1288**	**120**	**4061**

A) Farmers and farm women (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
I. Crop Production													
Weed Management													
Resource Conservation Technologies	1	46	3	49	8	1	9	24	8	32	78	12	90
Cropping Systems	1	15	5	20	-	-	-	5	-	5	20	5	25
Crop Diversification	2	20	9	29	9	2	11	24	12	36	53	23	76
Integrated Farming													
Water management													
Seed production													
Nursery management	1	15	9	24				5	11	16	20	20	40
Integrated Crop Management	3	27	81	108	8	1	9	10	7	17	65	89	154
Fodder production													
Production of organic inputs	1	16	8	24	-	-	-	10	6	16	26	14	40
Others, (cultivation of crops)	3	39	27	66	5	6	11	10	4	14	70	37	107
II. Horticulture													
a) Vegetable Crops													
Integrated nutrient management	1	10	15	25	-	-	-	3	-	3	13	15	28
Water management													
Enterprise development													
Skill development													
Yield increment													
Production of low volume and high value crops													
Off-season vegetables													
Nursery raising													
Export potential vegetables	1	25	22	47	-	-	-	-	-	-	25	22	47
Grading and standardization													
Protective cultivation (Green													

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
Houses, Shade Net etc.)													
Others, if any (Cultivation of Vegetable)	2	8	2	10	5	-	5		34	35	47	37	84
Training and Pruning													
b) Fruits													
Layout and Management of Orchards													
Cultivation of Fruit	1	9	1	10	2	3	5	12	6	18	24	10	34
Management of young plants/orchards													
Rejuvenation of old orchards													
Export potential fruits													
Micro irrigation systems of orchards													
Plant propagation techniques													
Others, if any(INM)	1	6	-	6	16	-	16	2	-	2	24	-	24
c) Ornamental Plants													
Nursery Management	1	-	-	-	-	-	-	10	18	28	10	18	28
Management of potted plants													
Export potential of ornamental plants													
Propagation techniques of Ornamental Plants													
Others, if any													
d) Plantation crops													
Production and Management technology													
Processing and value addition													
Others, if any													
e) Tuber crops													
Production and Management technology													
Processing and value addition													
Others, if any													
f) Spices													
Production and Management technology													
Processing and value addition													
Others, if any													
g) Medicinal and Aromatic Plants													
Nursery management													
Production and management technology													
Post-harvest technology and value addition													
Others, if any													
III. Soil Health and Fertility Management													
Soil fertility management	1	11	6	17	3	-	3	7	-	7	21	6	27
Soil and Water Conservation													
Integrated Nutrient Management	1	18	8	26	-	-	-	12	-	12	30	8	38
Production and use of organic inputs													
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency													

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
Soil and Water Testing	1	20	6	26	-	-	-	10	-	10	30	6	36
Others, if any													
IV. Livestock Production and Management													
Dairy Management													
Poultry Management													
Piggery Management													
Rabbit Management													
Disease Management													
Feed management													
Production of quality animal products													
Others, if any Goat farming													
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening	2	11	3	14	14	16	30	25	26	51	50	45	95
Design and development of low/minimum cost diet													
Designing and development for high nutrient efficiency diet	3	-	43	43	-	34	34	-	52	52	-	129	129
Minimization of nutrient loss in processing													
Gender mainstreaming through SHGs													
Storage loss minimization techniques													
Enterprise development													
Value addition													
Income generation activities for empowerment of rural Women													
Location specific drudgery reduction technologies													
Rural Crafts													
Capacity building	1	-	-	-	-	22	22	-	8	8	-	30	30
Women and child care	1	-	20	20	-	-	-	-	05	05	-	25	25
Others, if any													
VI.Agril. Engineering													
Installation and maintenance of micro irrigation systems	5	82	11	93	18	5	23	55	12	67	155	28	183
Use of Plastics in farming practices													
Production of small tools and implements													
Repair and maintenance of farm machinery and implements	4	20	-	20	36	44	80	20	12	32	76	56	132
Small scale processing and value addition													
Post-Harvest Technology													
Others, if any													
VII. Plant Protection													
Integrated Pest Management	5	62	30	92	-	-	-	5	29	34	67	59	126
Integrated Disease Management	4	43	20	63	-	3	3	20	3	23	74	26	100
Bio-control of pests and diseases													
Production of bio control agents and bio pesticides													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Others, if any Lac cultivation	1	-	-	-	-	-	-	28	5	33	28	5	33
VIII. Fisheries													
Integrated fish farming													
Carp breeding and hatchery management													
Carp fry and fingerling rearing													
Composite fish culture & fish disease													
Fish feed preparation & its application to fish pond, like nursery, rearing & stocking pond													
Hatchery management and culture of freshwater prawn													
Breeding and culture of ornamental fishes													
Portable plastic carp hatchery													
Pen culture of fish and prawn													
Shrimp farming													
Edible oyster farming													
Pearl culture													
Fish processing and value addition													
Others, if any													
IX. Production of Inputs at site													
Seed Production													
Planting material production													
Bio-agents production													
Bio-pesticides production													
Bio-fertilizer production													
Vermi-compost production													
Organic manures production													
Production of fry and fingerlings													
Production of Bee-colonies and wax sheets													
Small tools and implements													
Production of livestock feed and fodder													
Production of Fish feed													
Others, if any													
X. Capacity Building and Group Dynamics													
Leadership development													
Group dynamics													
Formation and Management of SHGs													
Mobilization of social capital													
Entrepreneurial development of farmers/youths													
WTO and IPR issues													
Others, if any													
XI Agro-forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													
XII. Others (Pl. Specify)													
TOTAL	**48**	**503**	**329**	**832**	**124**	**137**	**261**	**297**	**258**	**556**	**1006**	**725**	**1731**

B) Rural Youth (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
Mushroom Production	2	2	45	17	-	5	5	7	5	12	9	55	64
Bee-keeping	1	26	-	26	-	-	-	-	-	-	26	-	26
Integrated farming	1	16	10	26							16	10	26
Seed production	1	25	-	25	-	-	-	-	-	-	25	-	25
Production of organic inputs (nutrition garden)													
Integrated Farming													
Planting material production													
Vermi-culture	2	24	2	26	27	1	28	5	2	7	46	5	51
Sericulture													
Protected cultivation of vegetable crops	1	12	1					2			14	1	15
Commercial fruit production	1	25	-	25	-	-	-	10	-	10	35	-	35
Repair and maintenance of farm machinery and implements	2	48	-	48	8	-	8	10	-	10	66	-	66
Nursery Management of Horticulture crops													
Training and pruning of orchards	1	6	1	7	2	-	2	-	-	-	8	1	9
Value addition	1	-	18	18	-	-	-	-	15	15	-	33	33
Production of quality animal products													
Dairying													
Sheep and goat rearing													
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Enterprise development													
Para vets													
Para extension workers													
Composite fish culture													
Freshwater prawn culture													
Shrimp farming													
Pearl culture													
Cold water fisheries													
Fish harvest and processing technology													
Fry and fingerling rearing													
Small scale processing													
Post-Harvest Technology	2	-	30	30	-	6	6		24	24	-	60	60
Tailoring and Stitching	1	-	-	-	-	30	30	-	-	-	-	30	30
Rural Crafts													
TOTAL	**16**	**184**	**107**	**248**	**37**	**42**	**79**	**34**	**46**	**78**	**245**	**195**	**440**

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	1	18	9	27	6		6	11	2	13	41	5	46
Value addition													
Integrated Pest Management													
Integrated Nutrient management	1		18			10			10			38	38
Rejuvenation of old orchards													
Protected cultivation technology	1	10			20			5			35		35
Formation and Management of SHGs													
Group Dynamics and farmers organization (PACS)	1	20		20	6		6	15		15	41		41
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													
Gender mainstreaming through SHGs													
Others if any (Drip Irrigation Technology)	1	14		14				12		12	26		26
Nutrition Garden	2		62	62					38	38		100	100
TOTAL	**7**	**62**	**89**	**123**	**32**	**10**	**12**	**43**	**50**	**78**	**143**	**143**	**286**

D) Farmers and farm women (off campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
I. Crop Production													
Weed Management	1	16	4	20	5	3	8	12	4	16	33	11	44
Resource Conservation Technologies													
Cropping Systems	1	18	7	25	5	2	7	5	-	5	28	9	37
Crop Diversification	1	19	3	22	2	5	7		2	2	21	10	31
Integrated Farming													
Water management													
Seed production	1	10	1	11	9	7	16	4	3	7	23	11	34
Nursery management	2	23	9	32	7		7	15	5	20	45	14	59
Integrated Crop Management													
Fodder production													
Production of organic inputs													
Others, (cultivation of crops)													
II. Horticulture													
a) Vegetable Crops													
Integrated nutrient management													
Water management	1	29	2	31	2	-	-	5	2	7	36	4	40
Enterprise development													
Skill development													
Yield increment													
Production of low volume and high value crops	1	16	4	20	6	-	6	8	2	10	30	6	36
Off-season vegetables	2	8	28	36	13	5	18	1	4	5	22	37	59
Nursery raising	2	-	18	18	-	2	2	-	51	51	-	71	71
Export potential vegetables	1	16	-	16	-	-	-	27	-	27	43	-	43
Grading and standardization													
Protective cultivation (Green Houses, Shade Net etc.)													
Others, if any (Cultivation of Vegetable)	4	129	6	135	7	-	7	35	3	38	171	9	180
Training and Pruning													
b) Fruits													
Layout and Management of Orchards													
Cultivation of Fruit	1	18	6	24	2	-	2	4	1	5	24	7	31
Management of young plants/orchards													
Rejuvenation of old orchards													
Export potential fruits													
Micro irrigation systems of orchards													
Plant propagation techniques													
Others, if any(INM)													
c) Ornamental Plants													
Nursery Management													
Management of potted plants													
Export potential of ornamental plants													
Propagation techniques of Ornamental Plants													
Others, if any													
d) Plantation crops													
Production and Management													

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
technology													
Processing and value addition													
Others, if any													
e) Tuber crops													
Production and Management technology													
Processing and value addition													
Others, if any													
f) Spices													
Production and Management technology													
Processing and value addition													
Others, if any													
g) Medicinal and Aromatic Plants													
Nursery management													
Production and management technology													
Post-harvest technology and value addition													
Others, if any													
III. Soil Health and Fertility Management													
Soil fertility management													
Soil and Water Conservation													
Integrated Nutrient Management													
Production and use of organic inputs													
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency													
Soil and Water Testing													
Others, if any													
IV. Livestock Production and Management													
Dairy Management													
Poultry Management													
Piggery Management													
Rabbit Management													
Disease Management													
Feed management													
Production of quality animal products													
Others, if any Goat farming													
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening	3	-	45	45	-	-	-	-	-	-	-	45	45
Design and development of low/minimum cost diet													
Designing and development for high nutrient efficiency diet	3	-	52	52	-	36	36	-	8	8	-	96	96
Minimization of nutrient loss in processing													
Gender mainstreaming through SHGs													

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
Storage loss minimization techniques													
Enterprise development													
Value addition	2	-	49	49	-	-	-	-	-	-	-	49	49
Income generation activities for empowerment of rural Women													
Location specific drudgery reduction technologies													
Rural Crafts													
Capacity building													
Women and child care	1	-	24	24	-	-	-	-	8	8	-	32	32
Others, if any													
VI.Agril. Engineering													
Installation and maintenance of micro irrigation systems	1	25	-	25	-	-	-	15	-	15	40	-	40
Use of Plastics in farming practices	1	28	-	28	-	-	-	8	-	8	36	-	36
Production of small tools and implements													
Repair and maintenance of farm machinery and implements	3	12	15	27	36	7	43	8	14	22	56	36	92
Small scale processing and value addition													
Post-Harvest Technology	1	25	-	25	-	-	-	15	-	15	40	-	40
Others, if any													
VII. Plant Protection													
Integrated Pest Management	5	61	38	99	4	2	6	4	2	6	69	42	111
Integrated Disease Management	4	25	25	50	5	-	5	29	25	54	59	50	109
Bio-control of pests and diseases	1	-	-	-	-	-	-	14	20	34	14	20	34
Production of bio control agents and bio pesticides													
Others, if any													
VIII. Fisheries													
Integrated fish farming													
Carp breeding and hatchery management													
Carp fry and fingerling rearing													
Composite fish culture & fish disease													
Fish feed preparation & its application to fish pond, like nursery, rearing & stocking pond													
Hatchery management and culture of freshwater prawn													
Breeding and culture of ornamental fishes													
Portable plastic carp hatchery													
Pen culture of fish and prawn													
Shrimp farming													
Edible oyster farming													
Pearl culture													
Fish processing and value addition													
Others, if any													
IX. Production of Inputs at site													
Seed Production													
Planting material production													

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
Bio-agents production													
Bio-pesticides production													
Bio-fertilizer production													
Vermi-compost production													
Organic manures production													
Production of fry and fingerlings													
Production of Bee-colonies and wax sheets													
Small tools and implements													
Production of livestock feed and fodder													
Production of Fish feed													
Others, if any													
X. Capacity Building and Group Dynamics													
Leadership development													
Group dynamics													
Formation and Management of SHGs													
Mobilization of social capital													
Entrepreneurial development of farmers/youths													
WTO and IPR issues													
Others, if any													
XI Agro-forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													
XII. Others (Pl. Specify)													
TOTAL	**43**	**478**	**336**	**814**	**103**	**69**	**170**	**209**	**154**	**363**	**790**	**559**	**1349**

E)RURAL YOUTH (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													
Bee-keeping													
Integrated farming													
Seed production													
Production of organic inputs													
Integrated Farming													
Planting material production													
Vermi-culture													
Sericulture													
Protected cultivation of vegetable crops													
Commercial fruit production													
Repair and maintenance of farm machinery and implements													
Nursery Management of Horticulture crops													
Training and pruning of orchards													
Value addition													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Production of quality animal products													
Dairying													
Sheep and goat rearing													
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Para vets													
Para extension workers	1	9	4	13	20	8	28	20	10	30	49	22	71
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	2	9	16		20	14	34	20	24	44	49	54	103
Tailoring and Stitching													
Rural Crafts													
Others, if any													
TOTAL	3	18	20	13	40	22	62	40	34	74	98	76	174

F) Extension Personnel (Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops													
Integrated Pest Management													
Integrated Nutrient management													
Rejuvenation of old orchards													
Protected cultivation technology	1	39	1	40	-	-	-	-	-	-	39	1	40
Formation and Management of SHGs	1	-	17	11	2	-	2	9	2	11	11	19	30
Group Dynamics and farmers organization													
Information networking among farmers													
Capacity building for ICT application													
Care and maintenance of farm machinery and implements	1	37	3	40							37	3	40
WTO and IPR issues													
Management in farm animals													
Livestock feed and fodder production													
Household food security													
Women and Child care													

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
Low cost and nutrient efficient diet designing	1	-	20	20	-	-	-	-	16	16	-	36	36
Production and use of organic inputs	2	84	3	87	1	1	2	7	4	11	92	8	100
Gender mainstreaming through SHGs													
Crop intensification													
TOTAL	**6**	**160**	**44**	**198**	**3**	**1**	**4**	**16**	**22**	**38**	**179**	**67**	**246**

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
I. Crop Production													
Weed Management	1	16	4	20	5	3	8	12	4	16	33	11	44
Resource Conservation Technologies	1	46	3	49	8	1	9	24	8	32	78	12	90
Cropping Systems	2	33	12	45	5	2	7	10		10	48	14	62
Crop Diversification	3	39	12	51	11	7	18	24	14	38	74	33	107
Integrated Farming													
Water management													
Seed production	1	10	1	11	9	7	16	4	3	7	23	11	34
Nursery management	2	23	9	32	7		7	15	5	20	45	14	59
Integrated Crop Management	2	26	23	49	8	1	9	9	7	16	43	31	74
Fodder production													
Production of organic inputs	1	16	8	24	-	-	-	10	6	16	26	14	40
Others, (cultivation of crops)	2	26	16	42	5	6	11	10	4	14	41	26	67
II. Horticulture													
a) Vegetable Crops													
Integrated nutrient management	1	10	15	25	-	-	-	3	-	3	13	15	28
Water management													
Enterprise development													
Skill development													
Yield increment													
Production of low volume and high value crops	1	16	4	20	6	-	6	8	2	10	30	6	36
Off-season vegetables	2	8	28	36	13	5	18	1	4	5	22	37	59
Nursery raising	2	-	18	18	-	2	2	-	51	51	-	71	71
Export potential vegetables	2	41	22	63				27		27	68	22	90
Grading and standardization													
Protective cultivation (Green Houses, Shade Net etc.)													
Others, if any (Cultivation of Vegetable)	5	114	2	116	5		5	29	34	64	182	37	219

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
Training and Pruning													
b) Fruits													
Layout and Management of Orchards													
Cultivation of Fruit	2	27	7	34	4	3	7	16	7	23	48	17	65
Management of young plants/orchards													
Rejuvenation of old orchards													
Export potential fruits													
Micro irrigation systems of orchards													
Plant propagation techniques													
Others, if any(INM)	1	6	-	6	16	-	16	2	-	2	24	-	24
c) Ornamental Plants													
Nursery Management	1	-	-	-	-	-	-	10	18	28	10	18	28
Management of potted plants													
Export potential of ornamental plants													
Propagation techniques of Ornamental Plants													
Others, if any													
d) Plantation crops													
Production and Management technology													
Processing and value addition													
Others, if any													
e) Tuber crops													
Production and Management technology													
Processing and value addition													
Others, if any													
f) Spices													
Production and Management technology													
Processing and value addition													
Others, if any													
g) Medicinal and Aromatic Plants													
Nursery management													
Production and management technology													
Post-harvest technology and value addition													
Others, if any													
III. Soil Health and Fertility Management													
Soil fertility management													
Soil and Water Conservation													
Integrated Nutrient Management	1	18	8	26	-	-	-	12	-	12	30	8	38
Production and use of organic inputs													
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency													
Soil and Water Testing	1	20	6	26	-	-	-	10	-	10	30	6	36
Others, if any													
IV. Livestock Production and													

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													
Dairy Management													
Poultry Management													
Piggery Management													
Rabbit Management													
Disease Management													
Feed management													
Production of quality animal products													
Others, if any Goat farming													
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening	5	11	48	59	14	16	30	25	26	51	50	90	140
Design and development of low/minimum cost diet													
Designing and development for high nutrient efficiency diet	5		71	71		70	70		52	52		193	193
Minimization of nutrient loss in processing													
Gender mainstreaming through SHGs													
Storage loss minimization techniques													
Enterprise development													
Value addition	2	-	49	49	-	-	-	-	-	-	-	49	49
Income generation activities for empowerment of rural Women													
Location specific drudgery reduction technologies													
Rural Crafts													
Capacity building	1	-	-	-	-	22	22	-	8	8	-	30	30
Women and child care	2		44	44					13	13		57	57
Others, if any													
VI.Agril. Engineering													
Installation and maintenance of micro irrigation systems	6	107	11	118	18	5	23	70	12	82	195	28	223
Use of Plastics in farming practices	1	28	-	28	-	-	-	8	-	8	36	-	36
Production of small tools and implements													
Repair and maintenance of farm machinery and implements	7	32	15	47	72	51	123	28	26	54	132	92	224
Small scale processing and value addition													
Post-Harvest Technology	1	25	-	25	-	-	-	15	-	15	40	-	40
Others, if any													
VII. Plant Protection													
Integrated Pest Management	8	80	62	142	4	2	6	9	31	40	93	95	188
Integrated Disease Management	6	46	33	82	5	3	8	49	28	77	100	64	164
Bio-control of pests and diseases	1	-	-	-	-	-	-	14	20	34	14	20	34
Production of bio control agents and bio pesticides													
Others, if any Lac cultivation	1	-	-	-	-	-	-	28	5	33	28	5	33
VIII. Fisheries													
Integrated fish farming													

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
Carp breeding and hatchery management													
Carp fry and fingerling rearing													
Composite fish culture & fish disease													
Fish feed preparation & its application to fish pond, like nursery, rearing & stocking pond													
Hatchery management and culture of freshwater prawn													
Breeding and culture of ornamental fishes													
Portable plastic carp hatchery													
Pen culture of fish and prawn													
Shrimp farming													
Edible oyster farming													
Pearl culture													
Fish processing and value addition													
Others, if any													
IX. Production of Inputs at site													
Seed Production													
Planting material production													
Bio-agents production													
Bio-pesticides production													
Bio-fertilizer production													
Vermi-compost production													
Organic manures production													
Production of fry and fingerlings													
Production of Bee-colonies and wax sheets													
Small tools and implements													
Production of livestock feed and fodder													
Production of Fish feed													
Others, if any													
X. Capacity Building and Group Dynamics													
Leadership development													
Group dynamics													
Formation and Management of SHGs													
Mobilization of social capital													
Entrepreneurial development of farmers/youths													
WTO and IPR issues													
Others, if any													
XI Agro-forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													
XII. Others (Pl. Specify)													
TOTAL	**80**	**824**	**531**	**1358**	**215**	**206**	**421**	**482**	**388**	**871**	**1556**	**1126**	**2682**

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	2	2	45	17	-	5	5	7	5	12	9	55	6
Bee-keeping	1	26	-	26	-	-	-	-	-	-	26	-	26
Integrated farming	1	16	10	26							16	10	26
Seed production	1	25	-	25	-	-	-	-	-	-	25	-	25
Production of organic inputs (nutrition garden)													
Integrated Farming													
Planting material production													
Vermi-culture	2	24	2	26	27	1	28	5	2	7	46	5	51
Sericulture													
Protected cultivation of vegetable crops	1	12	1					2			14	1	15
Commercial fruit production	1	25	-	25	-	-	-	10	-	10	35	-	35
Repair and maintenance of farm machinery and implements	2	48	-	48	8	-	8	10	-	10	66	-	66
Nursery Management of Horticulture crops													
Training and pruning of orchards	1	6	1	7	2		2				8	1	9
Value addition	1	-	18	18	-	-	-	-	15	15	-	33	33
Production of quality animal products													
Dairying													
Sheep and goat rearing													
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Enterprise development													
Para vets													
Para extension workers	1	9	4	13	20	8	28	20	10	30	49	22	71
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	4	9	46	55	20	20	40	20	48	68	49	114	163
Tailoring and Stitching	1	-	-	-	-	30	30	-	-	-	-	30	30
Rural Crafts													
TOTAL	**19**	**202**	**127**	**286**	**27**	**64**	**141**	**74**	**80**	**152**	**343**	**271**	**556**

iii. Extension Personnel (On and Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops	1	18	9	27	6		6	11	2	13	41	5	46
Value addition													

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
Integrated Pest Management													
Integrated Nutrient management	1		18			10			10			38	38
Rejuvenation of old orchards													
Protected cultivation technology	2	49	1	50	20			5			74	1	75
Formation and Management of SHGs	1		17	17	2		2	9	2	11	11	19	30
Group Dynamics and farmers organization (PACS)	1	20	-	20	6	-	6	15	-	15	41	-	41
Information networking among farmers													
Capacity building for ICT application													
Care and maintenance of farm machinery and implements	1	37	3	40	-	-	-	-	-	-	37	3	40
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	1		20	20					16	16		36	36
Production and use of organic inputs	2	84	3	87	1	1	2	7	4	11	92	8	100
Gender mainstreaming through SHGs													
Others if any (Drip Irrigation Technology)	1	14	-	14	-	-	-	12	-	12	26	-	26
Nutrition Garden	2	-	62	62	-	-	-	-	38	38	-	100	100
TOTAL	**13**	**222**	**133**	**337**	**35**	**11**	**16**	**59**	**72**	**116**	**322**	**210**	**532**

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

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 else where
				Male	Female	Total	Type of units	Number of units	Number of persons employed	
Stitching	Stitching	Stitching of female garments	15	-	30	30	Small unit	06	08	02
Mali Training	Mali	Mali training	15	19	-	19	Small unit	04	03	02
Repair & maintenance of farm implements	Farm mechanization	Repair & maintenance of farm implements	10	20	-	20	Small unit	04	04	03
Vermi Composting	Vermi Compost	Making of vermi compost	05	20	-	20	Small unit	05	02	02
Total			**45**	**59**	**30**	**89**		**19**	**17**	**09**

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

I) Sponsored Training Programmes

Sl.	Title	Thematic area	Month	Duration (days)	Client PF/RY /EF	No. of courses	No. of Participants										Sponsoring Agency
							Male			Female			Total				
							Others	SC	ST	Others	SC	ST	Others	SC	ST	Total	
1.	Mali Training	Mali	Feb. 2021	15	RY	1	12	2	5	-	-	-	12	2	5	19	DHO, Bokaro
2.	Vegetable production	Vegetable production	Feb. 2021	05	RY	1	29	10	01	-	-	-	29	10	01	40	DHO, Bokaro
3.	Honey Bee	Bee keeping	Feb. 2021	05	RY	1	-	-	-	07	-	-	07	-	-	07	DHO, Bokaro
4.	Mushoom cultivation	Mushroom	March 2021	03	PF	13				400	120	-	400	120	-	520	DHO, Bokaro
5.	Stitching	Stitching	March 2021	15	RY	1	-	-	-	-	30	-	-	30	-	30	IINRG, Namkum, Ranchi
6.	Integrated Farming System	Farming system	May 2021	07	RY	1	-	30	-	-	-	-	30	-	-	30	IINRG, Namkum, Ranchi
	Total			**50**		**18**	**41**	**42**	**6**	**407**	**150**		**478**	**162**	**6**	**646**	

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	08										320
KisanMela	02										2620
KisanGhosthi	22										824
Exhibition	02										3312
Film Show	28										1580
Method Demonstrations											
Farmers Seminar											
Workshop											
Group meetings											
Lectures delivered as resource persons											
Advisory Services	852										852
Scientific visit to farmers field	72										418
Farmers visit to KVK	1578										1578
Diagnostic visits	23										23
Exposure visits	01										26
Ex-trainees Sammelan											
Soil health Camp	02										68
Animal Health Camp											
Agri mobile clinic											
Soil test campaigns	05										318
Farm Science Club Conveners meet											
Self Help Group Conveners meetings											
MahilaMandals Conveners meetings											
Celebration of important days (specify)											
Live Telecast on National Horticulture Fair 2021 (10.02.2021)	01										62
International Women's Day (08.03.2021)	01										46
World Water Day (22.03.2021)	01										58
Awareness Programme on Balance Use of Fertilizer (Online)(18.06.2021)	01										42
World Tribal Day (09.08.2021)	01										128

Food & Nutrition for Farmers (26.08.2021)	01										123
Tree Plantation Drive &Kisan Gosthi (17.09.2021	01										120
Live Telecast of PM and Farmers Scientist Meet (28.09.2021)	02										212
Mahila Kisan Diwas (15.10.2021)	01										46
World Food Day (16.10.2021)	01										38
National Unity Day (31.10.2021)	01										18
Agriculture & Environment: The Citizen Face (26.11.2021)	01										45
Samvidhan Diwas (26-11-2021)	01										45
World Soil Health Day (05.12.2021)	01										53
Swachhta Pakhwada (16-31 December 2021)	15										638
Live Telecast of of Hon'ble PM on Natural Farming (16.12.2021)	01										450
Jai Jawan Jai Kisan (23-25 Dec. 2021)	01										96
National Consumer Day (24.12.2021)	01										42
Any Other (Specify)											
Total	**2628**										**14201**

B. Other Extension activities

Nature of Extension Activity	No. of activities
Newspaper coverage	
Radio talks	2
TV talks	6
Popular articles	
Extension Literature	10
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 (26th Jan.)	1	26	12	38	20	08	2	10	34	14	48
International Women's Day (8th Mar.)	1	-	46	46	15	0	0	0	0	46	46
World Water Day (22.03.2021)	1	42	16	58	20	-	-	-	42	16	58
Ambedkar Jayanti (14th Apr.)	1	24	6	30	25	0	0	0	24	2	30
International Yoga Day (21st Jun.)	1	12	-	12							
World Indigenous Day (9 Aug.)	1	72	56	128	80	0	0	0	72	56	128
Independence Day (15th Aug.)	1	50	16	66	25	6	0	6	56	16	72
Parthenium Awareness Week (16th to 22nd Aug.)	1	136	52	188	20	0	0	0	136	52	188
Hindi Diwas (14th Sep.)	-	-	-	-	-	-	-	-	-	-	-
Gandhi Jayanti (2nd Oct.)	1	26	6	32	20	-	-	-	26	6	32
Mahila Kisan Diwas (15th Oct.)	1	-	46	46	20	-	-	-	-	46	46
World Food Day (16th Oct.)	1	28	10	38	25	-	-	-	28	10	38
Vigilance Awareness Week (27th Oct. to 2nd Nov.)	1	48	26	74	20	-	-	-	46	26	74
National Unity Day (31st Oct.)	1	18	-	18	15	-	-	-	18	-	18
World Science Day (10th Nov.)	1	16	6	22	15	-	-	-	16	6	22
National Education Day (11th Nov.)	-	-	-	-	-	-	-	-	-	-	-
National Constitution Day (26th Nov.)	1	23	20	43	15	1	1	2	24	21	45
World Soil Day (5th Dec.)	1	53	-	53	20	-	-	-	53	-	53
Kisan Diwas (23rd Dec.)	1	36	6	42	15	-	-	-	36	6	42

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

Sl.	Date of event	Name of Event/Programme	Interaction of Hon'ble PM/AM	Participants			
				Farmers	Staffs	VIP/Others	Total
1.	28.09.2021	Live Telecast of PM and Farmers Scientist Meet	Hon'ble PM	212	14	-	226
2.	16.12.2021	Natural Farming	Hon'ble PM	450	14	2	466

3.5 a. Production and supply of Technological products

Village seed

Crop	Variety	Quantity of seed (q)	Value (Rs)	No. of farmers involved in village seed production	Number of farmers to whom seed provided			
					SC	ST	Other	Total
Total								

KVK farm

Crop	Variety	Quantity of seed (q)	Value (Rs)	Number of farmers to whom seed provided			
				SC	ST	Other	Total
Paddy	Rajendra Maruri	30.0	120000.00				
	IR64-drt	20.0	75000.00				
	Lalat	20.0	75000.00				
Ragi	Birsa Maruwa	2.0	12000.00				
Mustard	P-30	1.5	15000.00				
Grand Total		**73.5**	**297000.00**				

Production of planting materials by the KVKs

Crop	Variety	No. of planting materials	Value (Rs)	Number of farmers to whom planting material provided			
				SC	ST	Other	Total
Vegetable seedlings							
Cauliflower	Namdhari(555)	20000			15	05	20
Cabbage		-					
Tomato	Nandini, Rohit	25000			15	05	20
Brinjal	Rasi	15000			15	05	20
Chilli							
Onion							
Others							
Fruits							
Mango	Amarpali, Malika	500			80	220	300
Guava	L-49	500			80	420	500
Lime							
Papaya							
Banana							
Sagwan		300				300	300
Ornamental plants							
Medicinal and Aromatic							
Plantation							
Spices							
Turmeric							
Tuber							
Elephant yams		-					

Fodder crop saplings							
Forest Species							
Others, pl.specify							
Total		**61300**			**205**	**955**	**1160**

Production of Bio-Products

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

Production of livestock materials

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

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

i) Name of Seed Hub Centre:

Name of Nodal Officer :	Uday Kumar Singh
Address :	Krishi Vigyan Kendra, Bokaro
e-mail :	kvk_bokaro@yahoo.co.in
Phone No. : Mobile :	8240233329

ii) Quality Seed Production Reports

Season	Crop	Variety	Production (q)			
			Target	Area sown (ha)	Production	Category of Seed(F/S, C/S)
Kharif 2021	Green gram	IPM- 2-3	100	8.0	80.0	B/S to F/S
		IPM- 2-3		10.0	100.0	F/S I to F/S II
	Black gram	IPU- 1102	200	1.5	15.0	B/S to F/S
		WBU-109 (Sulata)		12.0	96.0	C/S I to C/S II
	Pigeon pea	Rajeev Lochan	250	10.0	Standing	F/S to C/S
	Horse gram	VLG-19	100	-	-	-
Rabi 2021	Chick pea	GNG-1581	200	22.0	Standing	B/S to F/S
Summer/Spring 2021	Green gram	HUM-16	150	-	To be sown	
Total			**1000**	**63.5**		

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	50.00	40.00	37.52954	
2017-18	-	36.00	32.96939	
2019	-	24.00	18.71225	
2020	-			
2021	-			

iv) Infrastructure Development

Item	Progress
Seed processing unit	Completed
Seed storage structure	

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

Item	Title	Author's name	Number	Circulation
Research paper	"Augmenting Mustard Production Among Tribal Farmers of Jharkhand for Sustainable Livelihood Security"	Neena Bharti		
	"Effect of Newer Insecticide Against Fruit Borer *Helicoverpa armigera* (Hubner) in Capsicum."	Neena Bharti		
	"Effect of Mulching with Drip Irrigation on Water Use Efficiency and Yield of Bittergourd"	Vinay Kumar		
	"Effect of Micro Irrigation on Water Use Efficiency and Yield of Bitter Gourd in Summer Season."	Vinay Kumar		
Seminar/conference/ symposia papers	55th Annual Convention of Indian Society of Agricultural Engineers on "Challenges and Technological Solutions for Ensuring Food, Water and Energy Security" & International Symposium on Emerging Trends in Agricultural Engineering Education, Research and Extension."	Vinay Kumar		
Books				
Bulletins				
News letter				
Popular Articles				
Book Chapter				
Booklet	VªSDVj ,oa Mhty iEi lsV ejEer ,oa j[k j[kko	Jh fou; dqekj] Jh mn; dqekj Mk0 vfuy dqekj] Jherh Ukhuk Hkkjrh	205	205
	lCth dh mUur [ksrh	Mk0 vfuy dqekj] Jherh Ukhuk Hkkjrh] Jh mn; dqekj] Jh fou; dqekj	150	150
	cht mRiknu	Jh mn; dqekj] Ukhuk Hkkjrh] Mk0 vfuy	150	150

		dqekj fou; dqekj		
Extension Pamphlets/ literature	QwyxksHkh dh mUur [ksrh	Mk0 vfuy dqekj] Jherh Ukhuk Hkkjrh] Jh mn; dqekj] Jh fou; dqekj	600	600
	nyguh Qlyksa esa yxus okys dhV ,oa jksx izca/ku	Jherh Ukhuk Hkkjrh] Mk0 vfuy dqekj] Jh mn; dqekj] Jh fou; dqekj	600	600
	eDdk dh dh mUur [ksrh	Jh mn; dqekj] Ukhuk Hkkjrh] Mk0 vfuy dqekj fou; dqekj	600	600
	nyguh lfCt;ksa dh mUur [ksrh	Jh mn; dqekj] Ukhuk Hkkjrh] Mk0 vfuy dqekj fou; dqekj	600	600
	d`f"k esa iyokj dk egRo	Jh fou; dqekj] Mk0 vfuy dqekj] Jherh Ukhuk Hkkjrh] Jh mn; dqekj	600	600
	xsgw¡ dh mUur [ksrh	Jh mn; dqekj] Ukhuk Hkkjrh] Mk0 vfuy dqekj fou; dqekj	600	600
	o'kkZ ty laj{k.k	Jh fou; dqekj] Mk0 vfuy dqekj] Jherh Ukhuk Hkkjrh] Jh mn; dqekj	600	600
	nyguh lfCt;ksa esa yxus okys dhVksa dk jksdFkke	Jh mn; dqekj] Ukhuk Hkkjrh] Mk0 vfuy dqekj fou; dqekj	600	600
	izkFkfed izlaLdj.k	Mk0 uUnuk dqekjh] Jh mn; dqekj] Ukhuk Hkkjrh] Mk0 vfuy dqekj fou; dqekj	300	300
	iks'k.k okfVdk	Mk0 uUnuk dqekjh] Jh mn; dqekj] Ukhuk Hkkjrh] Mk0 vfuy dqekj fou; dqekj	300	300
	dqYFkh dh [ksrh	Ukhuk Hkkjrh] Jh mn; dqekj] Mk0 vfuy dqekj fou; dqekj	700	700
	ljxqtk dh [ksrh	Jh mn; dqekj]] Ukhuk Hkkjrh] Mk0 vfuy dqekj fou; dqekj	700	700
	ew¡xQyh dh [ksrh	Jh mn; dqekj]] Ukhuk Hkkjrh] Mk0 vfuy dqekj fou; dqekj	700	700
	frlh dh [ksrh	Jh mn; dqekj]] Ukhuk Hkkjrh] Mk0 vfuy dqekj] fou; dqekj	700	700
	ljlks dh mUur [ksrh	Jh mn; dqekj] Mk0 vfuy dqekj] Ukhuk Hkkjrh] Jh fou; dqekj]	700	700
	puk dh mUur [ksrh	Jh mn; dqekj] Ukhuk	1000	1000

		Hkkjrh] Mk0 vfuy dqekj fou; dqekj		
	xjek ew¡x [ksrh	Ukhuk Hkkjrh] Jh mn; dqekj] Mk0 vfuy dqekj fou; dqekj	700	700
	e'k#e mRiknu rduhd	Jherh uhuk Hkkjrh] Mk0 vfuy dqekj] Jh mn; dqekj] Jh fou; dqekj	300	300
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.	Winter School (Online)	Modern Practices of Plant and Animal Nutrition for sustainable Agriculture Production and Intensive Livestock Development	Sri Uday Kumar Singh Sr. Scientist & Head	2-22 February, 2021	IGFRI, Dharwar, Karnataka & National Agriculture Development Cooperative Ltd. Baramula (UT of J&K)
2.	Winter School (Online)	Modern Practices of Plant and Animal Nutrition for sustainable Agriculture Production and Intensive Livestock Development	Mrs. Neena Bharti (Scientist, Plant Protection)	2-22 February, 2021	IGFRI, Dharwar, Karnataka & National Agriculture Development Cooperative Ltd. Baramula (UT of J&K)
3.	Training (Online)	" ICT and Mass Media in Agricultural Extension"	Sri Vinay Kumar (Scientist, Agril. Engg.)	4-8 May, 2021	BAU, Ranchi and MANAGE, Hydrabad
4.	Training (Online)	Orientation cum training course on use of statistical tools in Agriculture and allied fields.	Sri Vinay Kumar (Scientist, Agril. Engg.)	16-19 July, 2021	Society of Krishi Vigyan , Ludhiyana
5.	International web conference (Online)	" Innovative and current Advances and Agriculture &Allied Sciences"	Sri Vinay Kumar (Scientist, Agril. Engg.)	19-21 July, 2021	Society for Scientific Development in Agriculture Technology (SSDAT), Meerut, India
6.	Summer School (Online)	A Three week online certificate course on policies, Institution and Marketing for CSA	Sri Vinay Kumar (Scientist, Agril. Engg.)	21 days (9-29 August 2021)	MPKV, Rahuri, CAAST-CSAWM

	Summer School (Online)	A Three week online certificate course on policies, Institution and Marketing for CSA	Mrs. Neena Bharti (Scientist, Plant Protection)	21 days (9-29 August 2021)	MPKV, Rahuri, CAAST-CSAWM
7.	Training	Weather Based Agro-Advisory Under DAMUs	Sri Vinay Kumar (Scientist, Agril. Engg.)	6-7 September, 2021	DEE and Deptt. of Agrometeorology & Environmental Sciences, BAU, Ranchi and ICAR-ATARI, Patna
8.	ISEE National Seminar	Transforming Indian Agriculture Through Pluralistic & Innovative Extension Approaches for Self Reliant India	Sri Uday Kumar Singh Sr. Scientist & Head	4-6 October, 2021	Banaras Hindu University, Varanasi, UP
9.	International Conference	"Global Initiative in Agricultural, Forestry and Applied Sciences for Food Security, Environmental Safety and Sustainable	Sri Uday Kumar Singh Sr. Scientist & Head	17-18 October, 2021	Sri Guru Ram Rai University, Dehradun, Uttarakhand
10.	International Conference	"Global Initiative in Agricultural, Forestry and Applied Sciences for Food Security, Environmental Safety and Sustainable	Sri Vinay Kumar (Scientist, Agril. Engg.)	17-18 October, 2021	Sri Guru Ram Rai University, Dehradun, Uttarakhand
11.	Annual Convention	55th Annual Convention of Indian Society, of Agricultural Engineers and International Symposium on " Emerging Trends in Agricultural Engineering Education, Research and Extension	Sri Vinay Kumar (Scientist, Agril. Engg.)	23-25 November, 2021	ISAE, New Delhi, DRPCAU, Pusa, Bihar and BAMETI, Patna
12.	Capacity Building	Horticulture Technologies for Doubling Farmer's Income in Jharkhand	Dr. Anil Kumar (Scientist, Horticulture)	(6-9 December, 2021)	BAU, Ranchi
13.	Capacity Building	Horticulture Technologies for Doubling Farmer's Income in Jharkhand	Mrs. Neena Bharti (Scientist, Plant Protection)	(6-9 December, 2021)	BAU, Ranchi
	Webinar	Mango Producing is not enough Wakeup Call on Postharvest Handling Processing Technology and Value Chain Management	Mrs. Neena Bharti (Scientist, Plant Protection)	7 December, 2021	Department of Agriculture and Environmental Science, NIFTEM

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	
Address	
Contact details (Phone, mobile, email Id)	
Landholding (in ha.)	
Name and description of the farm/ enterprise	
Economic impact	
Social impact	
Environmental impact	
Horizontal/ Vertical spread	

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)
1.	Potato (using vermi compost)	8	2 ton	20	No
2.	Onion(using vermi compost)	1	Standing	20	No

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 Soiland Water Testing Laboratory

Sl. No	Name of the Equipment	Qty.
1.	Flame photo meter	1
2.	Spectrophoto meter	1
3.	Incubator	1
4.	Hot plate	1
5.	P.H .meter	1
6.	E/C meter	1
7.	Distillation unit	1
8.	Mechanical shaker	1
9.	Electronic balance	1
10.	Mini Soil Testing Kit (Mridaparikshak)	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
Soil sample analyzed through	---	540

Mridaparikshak Kit.		

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	540	5	350	-
2.	Water				
3.	Plant				
4.	Fertilizers				
5.	Manures				
6.	Food				
7.	Others (if any)		5	350	

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
	Kisan Gosthi and Soil Health Card Distribution	55	0	0	55	55

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

No of training programme	No. of demonstrations	No. of plant material produced	Visit by the farmers (No.)	Visit by the officials (No.)
5	02	-	2	3

3.13. Technology week celebration

Type of activities	No. of activities	Number of participants	Related crop/livestock technology
15.02.2021	3	102	-

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

No of student trained	No of days stayed
18	**15(15.12.2021 to 29.12.2021)**

ARS trainees trained	No of days stayed
Nil	Nil

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

Date	Name of the person	Purpose of visit
17.09.2021	Smt. Seema Devi Prakhand Pramukh, Petarwar	Campaign on Nutri- Garden and Tree Plantation Prog.

19.08.2021	Dr. J. Oraon Director Extension Education, BAU, Ranchi	Monitoring of KVK activities
06.10.2021	Ms. Madhuri Pal Young Professional, NITI AAYOG	Interaction with KVK Scientist and monitoring & field visit
19.11.2021	Dr. Arvind Kumar Assistant Director, Directorate of Rice Development, Govt. of India, Patna	Monitoring and field visit of FLD 2021-22

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)
Mushroom Training	520	25%	Rs. 4000/ month	Rs. 5000/ month
Mali Training	19	20%	Rs. 6000/ month	Rs. 8000/ month
Stitching training	60	25%	Rs. 5000/ month	Rs. 8000/ month
Care & Maintenance of farm Implements	20	30%	Rs. 5000/ month	Rs. 7000/ month
Vermi composting	20	30%	Rs. 3000/ month	Rs. 4500/ month

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
Mushroom production	Approx. 250 unit are running in the district
Drip & Mulch	More than 3000 farmers adopted this technology in the district.
Water melon cultivation	Water melon cultivated at large scale in the district, more than 50 ha comes under this crop.
Capsicum cultivation	More than 50 ha area cultivated under capsicum vegetable in the district.

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	
Name & complete address of the entrepreneur	
Role of KVK with quantitative data support:	
Timeline of the entrepreneurship development	
Technical Components of the Enterprise	
Status of entrepreneur before and after the enterprise	
Present working condition of enterprise in terms of raw materials availability, labour availability, consumer preference, marketing the product etc. (Economic viability of the enterprise):	
Horizontal spread of enterprise	

4.6. Any other initiative taken by the KVK

- Promotion of Organic Farming under PKVY.
- Implementation of Dron Technology in agriculture and demonstration of technology was conducted in KVK, field as well as farmer's field for spraying of insecticide.

5. LINKAGES

5.1. Functional linkage with different organizations

Sl No.	Name of organization	Nature of linkage
1	ZRS, Dumka	Participation in meeting
2	DMR (ICAR) New Delhi	conducting training programmes and demonstration
3	DRMR (ICAR) Bharatpur, Rajasthan	Conducting training programmes and demonstration
4	IINRG, Namkum, Ranchi	Participation in meeting, conducting training programme& demonstration programme
5	HARP, Plandu Ranchi	Participation in meeting, conducting training programme& demonstration programme
6	KVKs of Other district	Participation in meeting
7	District Agriculture Office, Bokaro	Joint diagnostic survey, joint implementation, participation in meeting, conducting training programme& demonstration programme
8	District Horticulture Office, Bokaro	Joint diagnostic survey, joint implementation, participation in meeting, conducting training programme& demonstration programme
9	ATMA Bokaro	Joint diagnostic survey, joint implementation, participation in meeting, conducting training programme& demonstration programme
10	District Soil Survey & Soil Conservation Office, Bokaro	Joint implementation, participation in meeting, conducting training programme& demonstration programme
11	District Cooperative Office, Bokaro	Joint implementation, participation in meeting,

		conducting training programme& demonstration programme
12	Line Dept. State Govt.	Joint diagnostic survey, joint implementation, participation in meeting, conducting training programme& demonstration programme
13	NABARD/COMMERCIAL BANK	Participation in meeting, conducting training programme
14	LDM, Bokaro	Participation in meeting, conducting training programme
15	R.K. Mission Ranchi	Participation in meeting, conducting training programme& demonstration programme
16.	CURRS, Hazaribagh	Participation in meeting, conducting training programme& demonstration programme
17.	JSLPS, Sanjivini Project, Bokaro	Participation in meeting, conducting training programme& demonstration programme
18.	NGO (Pradan, Support, Raj Development SHADOW, Sanjeevnietc)	Joint diagnostic survey, participation in meeting, conducting training programme& demonstration programme
19.	Agriculture Skill Council of India, New Delhi	Skill Development Training
20.	IIPR, Kanpur	Implementation of Seed Hub Programme
21.	Regional Centre of Organic Farming, Patna	Training programme and Monitoring of KKA programme
22.	District Forest Office, Bokaro	Training

5.2. List of special programmes undertaken during 2021by 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.)

(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.)
Training	SCSP training programme on stitching	10.03.2021to 25.03.2021	IINRG, Namkum, Ranchi	252500.00
Training	Mali Training prog.	15.02.2021 to 08.03.2021	DHO, Bokaro	195000.00
Training	Vegetable Production	08.02.2021 to 12.02.2021	DHO, Bokaro	60000.00
Training	Bee Keeping	08.02.2021 to 12.02.2021	DHO, Bokaro	7000.00
Training	Mushroom Cultivation	March 2021	DHO, Bokaro	625000.00

6. PERFORMANCE OF INFRASTRUCTURE IN KVK

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

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.									
2.									
3.									
4.									
5.									
6.									
7.									
	Total								

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	
Rice	15-23, July2021	15-25 Dec. 2021	4.5	R. Masuri	F/S	30.0	60000.00	120000.00	
	10-15 July 2021	5-10 Dec. 2021		Lalat	C/S	20.0	30000.00	75000.00	
	16-20 July, 2021	16-22 Dec. 2021		IR-64drt	F/S	20.0	30000.00	75000.00	
Ragi	28-30 July, 2021	20-25 Nov. 2021	0.4	A-404	C/S	2.0	8000.00	12000.00	
Mustard	2-5 Nov. 2020	8-12 Feb. 2021	0.2	P-30	F/S	1.5	10000.00	15000.00	

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

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) -NA

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)
December 2021(RAWE Tr.)	15	15	Could not conducted residential training programme due to pandemic.
Feb. 2021 (Mali Tr.)	19	14	
Feb. 2021 (Vegetable Tr.)	40	05	
Feb. 2021 (Bee keeping Tr.)	04	05	
March, 2021 (Stitching Tr.)	30	14	
Total :	**108**	**53**	

(For whole of the year)

6.6. Utilization of staff quarters

Whether staff quarters has been completed:**Not 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

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 1st 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 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year (Kind + cash)
2019				
2020				
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

Nameof activity	Number of activity	Season	With line department	With ATMA	With both
Monitoring	3	Kharif		With ATMA	
Kharif Workshop	1	Khari			Both
Field visit	4	Kharif		With ATMA	
Training	2	Kharif		With ATMA	
Training	1	Kharif	With line department		
Training	3	Rabi		With ATMA	
Rabi Workshop	1	Rabi			Both

8. Other information

8.1. Prevalent diseases in Crops

Name of the disease	Crop	Date of outbreak	Area affected (in ha)	% Commodity loss	Preventive measures taken for area (in ha)
BPH	Rice	Oct. 2021	Approx 200	30-45%	80 - 100 ha

			ha		

8.2. Prevalent diseases in Livestock/Fishery ; NA

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: NA

Title of the training programme	Period		No. of the participant		Amount of Fund Received (Rs)
	From	To	Male	Female	
Rain Water Harvesting	20.03.2021	20.03.2021	42	-	-

9.2. PPV & FR Sensitization training Programme: NA

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	8	45200
Livestock		
Fishery		
Weather		
Marketing		
Awareness		
Training information	2	4200
Other	2	5600
Total	12	55000

9.4. *KVK* Portal and Mobile App

Sl. No.	Particulars	Description
1.	No. of visitors visited the portal	*250*
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.	Crop Production	8	8	17215
2.	Horticulture	6	6	12000
3.	Plant Protection	8	8	14325
4.				
5.				

9.6. a. Observation of Swachha Bharat Programme/Pakhwara

Date/ Duration of Observation	Activities undertaken	No. of Participants			
		Staffs	Farmers	Others	Total
16-31 Dec. 2021	Cleaning of office premises and adopted village,awareness programme, mask distribution, training, farmer's scientist interaction during swachhata pakhwada	16	452	4	472

b. Details of Swachhta activities with expenditure

Activities	Number	Expenditure (in Rs.)
1. Digitization of office records/ e-office	12	0.0
2. Basic maintenance	8	1000.00
3. Sanitation and SBM	12	1500.00
4. Cleaning and beautification of surrounding areas	4	5000.00
5. Vermicomposting/ Composting of biodegradable waste management & other activities on generate of wealth for waste	1	-
6. Used water for agriculture/ horticulture application		
7. Swachhta Awareness at local level	5	500.00
8. Swachhta Workshops	1	1000.00
9. Swachhta Pledge	1	
10. Display and Banner	6	500.00
11. Foster healthy competition	-	-
12. Involvement of print and electronic media	-	
13. Involving the farmers, farm women and	2	

village youth in the adopted villages (no of adopted village)		
14. No. of Staff members involved in the activities	16	
15. No of VIP/VVIPs involved in the activities	-	
16. Any other specific activity (in details)		
Total	**68**	**9500.00**

9.7. Observation of National Science day

Date of Observation	Activities undertaken
10 Nov. 2021	Training & Kisan Goshti

9.8. Programme with SeemaSurakshaBal/ BSF -NA

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**
Sarsawati Vidya Mandir, Petarwar	25.11.2021	Importance of agriculture	Theory , PPT
Sarsawati Vidya Mandir, Petarwar	26.11.2021	Nursery Management	Theory and practical, PPT
Marafari Middle School, Bokaro	08.12.2021	Water Management in Agriculture	Theory , Poster, PPT

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

9.11. Details of Swachhta Hi Sewaprogramme organized

Sl.	Activity	No. of	No. of	No. of VIPs	Name (s) of VIP(s)

No.		villages Involved	Particip ants		
1.	Cleaning of office premises and adopted village, awareness programme, mask distribution, training, farmer's scientist interaction during swachhata pakhwada	4	472		

9.12. Details of MahilaKisan Divas programme organized

Sl. No.	Activity	No. of villages Involved	No. of Particip ants	No. of VIPs	Name (s) of VIP(s)
1.	15.10.2021	6	46	-	-

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

Sl. No.	Name of Farmer	Address of the farmer with contact no.	Innovation/ Leading in enterprise
1.	Sri Shankar Soren	Village- Tanrbalidih, Post- Jaridih, Block Jaridih,Bokaro,Pin- 829301 Mobile: 08340607850, 9939189072	Organic Farming
2.	Smt. Jyoti Baske	Village: Aamtanr, Block: Petarwar Dist- Bokaro Mobile Number: 8809163422	Nursery raising
3.	Sri Ygendra Mahto	Village- Jaradih Post- Mungasarla, Block -Petarwar, Dist- Bokaro,Pin- 829301 Mobile Number:9162998074	Vegetable production through drip mulching
4.	Sri Vijay Kumar	Village- Jaridih basto, Post- Jaridih Bajar, Block- Bermo,District -Bokaro Mobile Number: 9771822167	Farm Mechanization & Custom hiring.
5.	Bharat Murmu	Address: Village- Koh, Post- Petarwar, Block: Petarwar, Dist- Bokaro, Pin- 829121 Mobile Number: 9199175270	Drip & Mulching
6.	Basudev Sharma	Nawadih, Bokaro	Mushroom cultivation

7.	Krishna Mahto	Address: Village- Jaradih, Koh0, Post- Petarwar, Block: Petarwar, Dist- Bokaro, Pin- 829121 Mobile Number: 99311263020	Dairy farming

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

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
2021	ICAR& IMD	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	Bokaro	Crop production	2	48	Rice cultivation in respect of day monsoon

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

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: NIL

a. Achievements of physical output under TSP during 2021

Sl.	Activities	Physical Achievement	
1)	Trainings	No. of Trainings/Demos	No. of beneficiaries
a.	Farmer		
b.	Women		
c.	Rural Youths		
d.	Extension Personnel		
2)	OFT	No. of OFTs	No. of beneficiaries
3)	FLD	No. of FLDs	No. of beneficiaries
4)	Mobile agro- advisory to farmers	No. of advisory	No. of beneficiaries
5)	Other activities		
a.	Participants in extension activities (No.)		
b.	Production of seed (q)		
c.	Production of Planting material (No. in lakh)		
d.	Production of Livestock strains (No. in lakh)		
e.	Production of fingerlings (No. in lakh)		
f.	Testing of Soil, water, plant, manures samples (Nos.)		
g.	Asset creation (Number; Sprayer, ridge maker, pump set, weeder etc.)		
h.	No. of other programmes (Swachha Bharat Abhiyaan, Agriculture knowledge in rural school, Planting material distribution, Vaccination camp etc.)		

b. Fund received under TSP in 2017-18 (Rs. In lakh):

c. Achievements of physical outcomeunder TSP during 2017-18

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

d. Location and Beneficiary Details during 2017-18

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

12.Details of SCSP

Sl.	Activities	Physical Achievement	
1)	Trainings	No. of Trainings/Demos	No. of beneficiaries
a.	Farmer	5	150
b.	Women	1	30
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.	Vermi bed distribution (30 nos.)	30	

13. Progress report of NICRA KVK (Technology Demonstration component) during the period (Applicable for KVKs identified under NICRA): **NA**

Natural Resource Management

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

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
1.	3rd prize awarded for stall presentation in the Agrotek Kisan Mela-2021 at BAU, Ranchi	BAU, Ranchi	-	Best stall presentation.

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
	Progressive Farmer's Award	Shankar Soren	Village-Tanrbalidih, Post- Jaridih, Block Jaridih,Bokaro, Pin- 829301	08340607850 9939189072	-	-	Best Organic Farmer	BAU, Ranchi

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
1.	Wadi Fal Sabjee Utpadak Sahyog Samiti	1/Bermo/2016	2017 Jaridih, Bokaro	Vegetable cultivation, Agri imputs	Agri. Product	326	239000.00	
2.	Jansakti Organic Farmer Producer Company Ltd.	U01400JH2020PTC014804	2019 Chas, Bokaro	Vegetable cultivation	Agri. Product	498	141350.00	
3.	Dehatik Chasi, Jansakti Producer Company Ltd.	U01400JH2020PTC14950	2019 Chas, Bokaro	Animal Husbandry	Animal Product.	230	112000.00	
4.	Petarwar Agro Star Farmers Producer Organization Ltd.	CINU01100JH2021PTC016860	2021 Petarwar, Bokaro	Agriculture & Allied Activities	Agri. Product	301	280000.00	
5.	Gomia Farmers Producers Organizations	CINU01100JH2021PTC016843	2021 Gomia, Bokaro	Agriculture & Allied Activities	Agri. Product	300	301000.00	
6.	Luguburu Farmers Producer Company Limited	U01100JH2019PT013680	2021 Chas, Chandankiyari, Jaridih, Petarwar, Bokaro	Sale of seeds, fertilizers, pesticides, farm equipment's, output marketing of farm produced, NTFP products etc. Sales of chicks, chick feed, fish feed etc.	Agri. Product	6860	6021700.00	

17. Integrated Farming System (IFS) : NA

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	Area (ha)	No. of Activities	No. of farmers benefited

		established		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	Drip & Mulch				
2	Floriculture				
3.	Poultry farming				
4.	Mushroom				
5.	Commercial Vegetable production				

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

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 : NA

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	Mango grower	Dr. Anil Kumar	15.01.2019	10.02.2019	20	Y	165000.00
	Mushroom grower	Mrs.Neena Bharti	15.01.2019	10.02.2019	20	Y	165000.00
2020	Agriculture Machinery Repair and Maintenance and Service Provider	Sri Vinay Kumar	22.002.2020	25.03.2020	20	Y	212000.00
	Quality		22.002.2020	25.03.2020	20	Y	180000.00

	Seed Grower						
2021							

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

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. Nandana Kumari, Scientist, Home Science	Nil	Nil	5	3	10	-

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.	Raghunathpur, Kasmar	Backyard/Kitchen garden	1	360	333
2.	Bundu Jara, Petarwar	Community level	1	1000	38
3.	Baradih	Terrace Garden	1	280	367
4.	Koh	Vertical Garden	2	1600	351
TOTAL			**5**	**3240**	**1089**

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: Nil

Name of Nutri Smart Village	Name of Crop/ veg./ fruits/ other	Name of Value added product	Activity (OFT/FLD)	No. of farmers/ beneficiaries
Bundu Jara	Radish	Pickle	FLD	24

d. Training programmes in Nutri-Smart village: Nil

Name of Nutri Smart Village	Area of Training	No of courses	No. of beneficiaries
Baradih	Lalance Diet	1	62

e. Extension activities under NARI Project

Name of Nutri-Smart Village	Title of Activity	No. of activities	No. of beneficiaries

Bundu Jara	Awareness Programme, Immunity improving, Medicinal herbs	1	52

23. Activities under KSHAMTA: NA

Number of Adopted Villages	No. of Activities		No. of farmers benefited	
	Demo	Training	Demo	Training

24. Information on Krishi Kalyan Abhiyan Phase- I/ Phase-II/ Phase-III, if applicable

Krishi Kalyan Abhiyan- I/II

A. Training

Name of programme	***No. of programmes***	***No. of farmers benefitted***									***No. of officials attended the programme***
		SC		***ST***		***Others***		***Total***			
		M	***F***	***M***	***F***	***M***	***F***	***M***	***F***	***T***	
KKA-I											
KKA-II											

B. Distribution of seed/ planting materials/ input/ others

Name of programme	No. of Programme	Total quantity distributed				No. of farmers benefited									No. of other officials (except KVK) attended the programme
		Seed (q)	Planting material (lakh)	Input (kg)	Other (kg/ No.)	SC		ST		Others		Total			
						M	F	M	F	M	F	M	F	T	
KKA-I															
KKA-II															

C. Livestock and Fishery related activities

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

D. Other activities

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

	NADEP Pit established										
	Farm implements distributed										
	Others, if any										

Krishi Kalyan Abhiyan- III

No. of villages covered	No. of animal inseminated	No. of farmers 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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