ACTION PLAN 2023-24

1. Name of the KVK:BOKARO

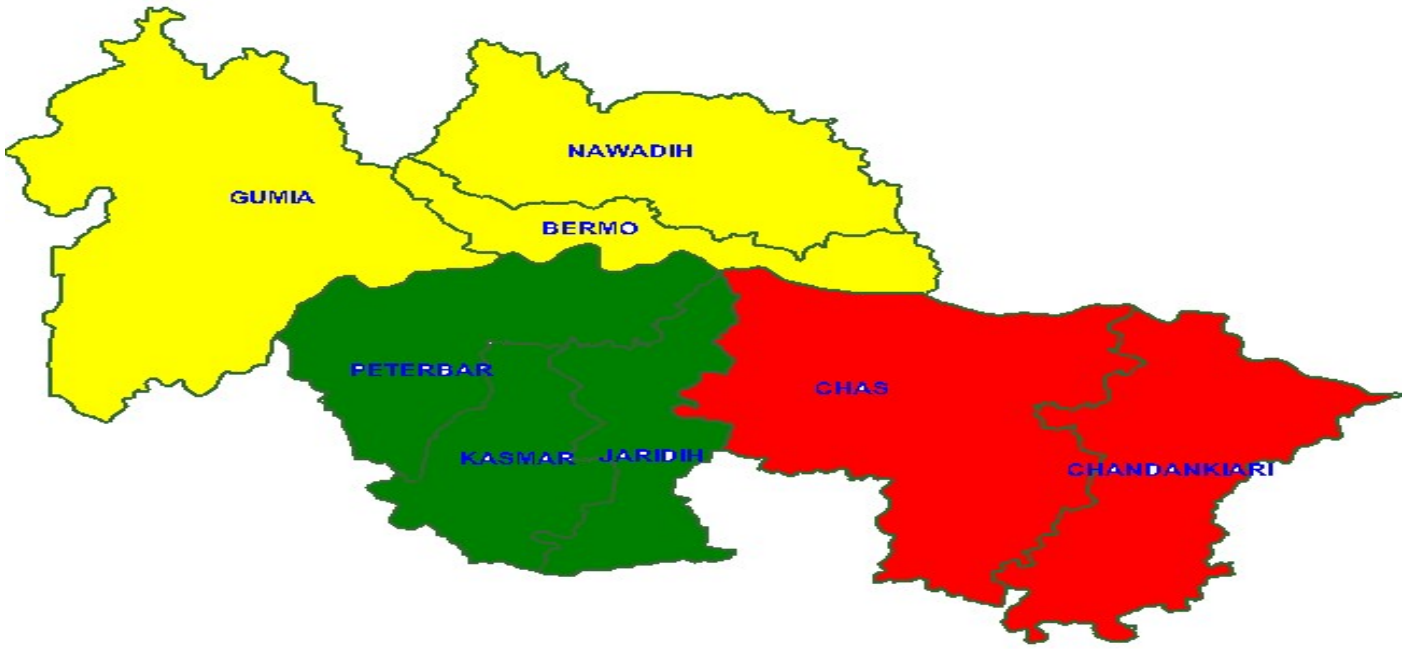
Address	Telephone		E mail
KrishiVigyan Kendra, Bokaro P.O.-Petarwar Pin- 829121	06549-265048 (O) 09431176741 (M)		kvk_bokaro@yahoo.co.in

2. Name of host organization:

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

I. Introduction

KrishiVigyan Kendra Bokaro established in 2004 is located on National Highway No.23 about 35 KM of district headquarter of Bokaro (Jharkhand). There are 2 subdivision (Bermo& Chas) 9 blocks, 200 panchayats and 733 villages in Bokaro district, Total population of the district is 17,75,961. Total geographical area of the district is 2,88,970 ha out of which only 25840 ha is under crop having cropping intensity of 116 %.



II. District Profile

Land holding pattern.

1. Number of Holding (000)	:	116.41
2. Average Size of Holding (Hectare/holding)	:	1.18
3. Marginal farmer's holding (No. in ,000)	:	81.49
4.Small & Medium farmer (No. in 000)	:	30.64
5. Large farmer, holding (No. in 000)	:	4.28

District profile

1.	**Location**		
	Latitude	:	$23^0$24'34" N to $23^0$59'05"N
	Longitude	:	$85^0$35'00" E to $86^0$38'47"E
2.	**Average Annual Rainfall**	:	**1252.62 mm**
3.	**Administrative Units**		
	3.1 No. of Subdivision	:	2 (Bermo, Chas)
	3.2 No. of Blocks	:	9
	3.3 No. of Panchyets	:	200
	3.4 No. of Villages	:	733
4.	**Land use (000ha)**		
	4.1 Total geographical	:	288.97
	4.2 Total Forest area	:	72.23
	4.3 land Barren and uncultivated	:	25.01
	4.4 Cultivated waste land	:	119.29
	4.5 Net Sown area	:	15.81
	4.6 Total cropped area	:	25.84
	4.7 Irrigated area	:	0.90
	4.8 Cropping Intensity	:	116%
5.	**Population 2001**		
	5.1 Total population (in lakh)	:	17.75
	5.2 Total Rural population (in lakh)	:	9.71
	5.3 Population Density (Number/ Sq Km)	:	621
	5.4 Literacy (%)	:	62.90
	5.5 Male Literacy (%)	:	76.99
	5.6 Female(%)	:	47.17
	5.7 Total ST Population (lakh)	:	2.19
	5.8 Total Sc Population (lakh)	:	2.36
6.	**Working population**		
	6.1 Total working population (in lakh)	:	5.10
	6.2 Total cultivators (lakh)	:	1.19
	6.3 Total agricultural laborer (lakh)	:	1.09
	6.4 Total labours engaged in cottage industry(lakh)	:	0.20
	6.5 Other workers(lakh)	:	2.62

7.	**Operational holding**			
	7.1 Number of Holding (000)		:	116.41
	7.2 Average Size of Holding (Hectare/holding)		:	1.18
	7.3 Marginal farmer's holding (No. in ,000)		:	81.49
	7.4 Small & Medium farmer (No. in 000)		:	30.64
	7.5 Large farmer, holding (No. in 000)		:	4.28
8.	**Livestock (in, 000)**			
	8.1 Total Population		:	673.47
	8.2 Total Cattle		:	327.23
	8.3 Total Buffalow		:	61.30
	8.4 Total sheep		:	34.49
	8.5 Total Goat		:	207.16
	8.6 Total pig		:	43.21
	8.7 Total Poultry		:	600.14
9.	**Fishery**			
	9.1 Government Ponds Number Total Area Average Size			 1710 1621 ha 0.95 ha
	9.2 Private Ponds Number Total Area Average Size			 745 402 ha 0.54 ha
	9.3 Total Number Total Area			 2455 2023 ha
	9.4 Annual Fish Production			2000 Tons
	9.5 Average Productivity		:	0.81 Tons/ha
10	**Information on credit**			
	10.1 No. of Commercial Banks		:	77
	10.2 No. of RRB		:	08
	10.3 No. of Co-operative Banks		:	05
	10.4 No. of Land development Banks		:	92
11.	**Total No. of Hat /Bazar**		:	97
12.	**Crop Production**			
	Name of crop	**Area (ha)**	**Production (ton)**	**Productivity (kg/ha)**
	Total Cereals	19121	22084	1155
	Total Pulses	1129	823	729
	Total Oilseeds	115	77	670
	Total Vegetable	5551	83972	1513
	Total Fruits	952	11240	1181

13.	Productivity of major 2-3 crops under cereals, pulses, oilseeds, vegetables, fruits and others	**Crop**	**Area (ha)**	**Production (MT)**	**Productivity (q /ha)**
		Maize (Hybrid)	3075	12300	40.00
		Maize	26113	40088	15.50
		Wheat	1300	1272	10.00
		Maize	4746	7595	16.00
		Arhar	2130	1374	6.50
		Gram	1309	1149	8.25
		Mustard	1615	388	6.00
		Pea	325	387	12.00
		Mustard	1540	847	5.5
		Brinjal	497	12860	2558.75
		Tomato	1011	28380	280.71
		Cauliflower	1303	35660	273.7
		Bottle gourd	480	8000	166.6

III. Priority Thrust Areas of Bokaro District

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. Training programme to be organized (April 20232023 to March2024)

ACTION PLAN

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	40	1200	40	1440	80	2640
Rural Youth	20	300	-	-	20	300
Extension Functionaries	6	180	4	200	10	380
Total	66	1680	44	1640	110	3320

Farmers and Farm Women:

Thematic Area*	Title	No.	Duration	Venue On/ Off	Tentative Date	No. of Participants								
						OTH		SC		ST		Total		
						M	F	M	F	M	F	M	F	T
Crop production														-
Production and Management Technology	Production Techniques of Babycorn/ Maize	1	2	On	May	10	20	-	-	-	-	10	20	30
	Cultivation practice of kharif oilseed- and pulses	2	2	On	June	20	10	-	-	10	20	30	30	60
Soil and water conservation technique	Control of Soil erosion & moisture Conservation Technique	2	2	On	Aug.	20	10	-	-	20	10	40	20	60
Total		**5**	**6**			**50**	**40**			**30**	**30**	**80**	**70**	**150**
Soil health & fertility management														

Integrated nutrient management	Integrated nutrient management module of vegetable crops	1	2	On	Oct	30	-	-	-	-	-	30	-	30
Soil fertility management	Balance use of nutrients in rice & Maize	1	2	On	June-July	-	30	-	-	-	-	-	30	30
Total		**2**	**4**			**30**	**30**					**30**	**30**	**60**
Horticulture														
Floriculture	Nursery raising for flower crops	1	2	On	Oct.	-	15	-	-	-	15	-	30	30
Fruit crop	Cultivation of high value fruit crops Capsicum & Watermelon	1	2	On	Nov	-	-	-	-	-	30	-	30	30
Exotic vegetables	Cultivation practice of Exotic vegetable (broccoli, red cabbage, salad crops etc)	1	2	On	Sept.	20	10	-	-	-	-	20	10	30
Tuber crops	Production technology of tuber and bulb crops	1	2	On	May	-	-	-	-	20	10	20	10	30
Kitchen gardening	Kitchen gardening	1	2	On	Oct.	15	15	-	-	15	15	30	30	60
Total		**05**	**10**			**35**	**40**			**35**	**70**	**70**	**110**	**180**
Plant Protection														
Integrated Pest Management	Technique for healthy and disease free seedling of vegetables	2	2	On	June & Nov..	-	30	-	-	-	30	-	60	60
	Integrated pest & disease management in kharif&rabi cereals crops	2	2	On	May & Nov	15	15	-	-	15	15	30	30	60
Mushroom	Mushroom cultivation	1	2	On	Sept.	10	-	-	-	10	10	20	10	30
Lac cultivation	Production technology of kusmi lac	1	2	On	June	-	30	-	-	-	-	-	30	30
Integrated disease management	Control of bacterial and fungal disease in Tomato	2	2	On	June & Dec.	25	20	-	-	25	20	50	40	90

	&Brinjal													
Total		**08**	**10**			**50**	**95**			**50**	**75**	**100**	**170**	**270**
Agril. Engg.														
Farm Mechanization	Use of farm machinery implements in agriculture.	2	2	On	. July & Aug.	15	15	-	-	15	15	30	30	60
Installation & maintenance of micro irrigation system	Micro irrigation and mulching in vegetable cultivation	2	2	On	Sept. & Oct	30	30	-	-	-	-	30	30	60
Soil &* Moisture Conservation	Use of Mulching in vegetable Production	2	2	On	May & June	30	-	-	-	30	-	60	-	60
	Soil moisture conservation technique	2	2	On	March & April	30	-	-	-	30	-	60	-	60
PHT	Post-harvest processing of seeds and grains	1	2	On	Jan	**30**	**-**	**-**	**-**	**-**	**-**	**30**	**-**	**30**
	Storage technique and storage structure for seeds and grains	1	2	On	Feb.	**15**	**-**	**-**	**-**	**15**	**-**	**30**	**-**	**30**
Total		**10**	**12**			**150**	**45**			**90**	**15**	**240**	**60**	**300**
Home Science/ women empowerment														
Capacity Building	Mahua Based Products development for rural women	1	1	on	April-May	-	25	-	-	-	-	-	25	25
	Different kind of badi and papad making from cereals, pulses and vegetables	1	2	On	Nov. & Dec.	-	25	-	-	-	-	-	25	25
	Benefits of developing	1	1	on	Feb-March	-	25	-	-	-	-	-	25	25

	nutria-garden for Rural family													
	Income generating areas for farm women post covid period	2	1	on	April-May	-	20		15	-	-	-	35	35
Value addition	Technique of Amda pickle making for rural	1	1	on	Feb-March	-	25	-	-	-	-	-	25	25
PHT	Preservation of seasonal fruits for income generation	1	2	on	May-June	-	25	-	-	-	-	-	25	25
Total		**5**	**7**				**145**	**-**	**15**	**-**	**-**	**-**	**160**	**125**
Live stock														
Disease and feed management	Disease and feed management in poultry &Goatry	1	2	On	June	-	-	30	-	-	-	30	-	30
Total		**1**	**2**					**30**	**-**	**-**	**-**	**30**	**-**	**30**
Fisheries														
Fish farming	Composite fish farming	2	2	On	July	30	-	-	-	-	-	30	-	30
Total		**2**	**2**			**30**	**-**	**-**	**-**	**-**	**-**	**30**	**-**	**30**
Grand total		**40**	**56**			**345**	**340**	**30**		**205**	**280**	**580**	**620**	**1200**

B. Farmers and farmwomen – Off Campus

Thematic Area*	Title	No. of course	Duration	Venue On/ Off	Tentative Date	No. of Participants								
						OTH		SC		ST		Total		
						M	F	M	F	M	F	M	F	T
Crop production														
Weed management	Weed management in kharif crops	1	1	Off	July	30	-	-	-	-	-	30	-	30
Integrated crop management	Green manuring in rice cultivation	2	1	Off	Nov.	30	-	-	-	30	-	60	-	60
	ICM of Mustard & Linseed	2	1	Off	Oct.	-	30	-	30	-	-	-	60	60

Production and Management Technology	Cultivation practice of kharif oilseed- Production Technology of forage crops berseem& Maize	2	1	Off	July& Oct	30	-	-	-	-	30	30	30	60
	Production Technique of millets	1	1		June	15	5	5	5	-	-	20	10	
Total		**8**	**5**			**105**	**35**	**5**	**35**	**30**	**30**	**140**	**100**	**210**
Soil health & fertility management														
Soil & water testing	Method of soil sampling	1	1	Off	Sept.	15	-	-	-	15	-	30	-	30
Integrated nutrient management	Sulphur and phosphate management in oilseed crops	1	1	Off	July	-	30	-	-	-	-	-	30	30
Total		**2**	**2**			**15**	**30**	**-**	**-**	**15**	**-**	**30**	**30**	**60**
Horticulture														
Integrated crop management	Cultivation practice of bulbs and cole crops	2	1	Off	April & May	15	15	-	-	15	15	30	30	60
	Cultivation of Cucurbitaceo us vegetables	1	1	Off	Nov.	-	15	-	-	-	15	-	30	30
Nursery management	Nursery management & seedling production of vegetable & fruit	2	1	Off	July	15	15	-	-	15	15	30	30	60
Hi- tech horticulture	Organic vegetable production	2	1	Off	July & Oct.	15	15	-	-	15	15	30	30	60
Fruit	Papaya cultivation	2	1	Off	July	30	-	-	-	30	-	60	-	60
Total		**9**	**5**			**75**	**60**			**75**	**60**	**150**	**120**	**270**
Plant Protection														
Integrated pest management	Integrated pest management of pulses and	2	1	Off	April & Nov.	-	30	-	-	-	30	-	60	60

	oilseeds.													
	Integrated pest management in Tomato &Brinjal	3	1	Off	June , July & Aug.	30	60	-	-	-	-	30	60	90
Seed treatment	Seed treatment of field crops	2	1	Off	Nov. & Dec.	30	15	-	-	20	15	50	30	80
Bio-control	Use of bio-pesticide in rabi vegetable	2	1	Off	Nov. Dec.	-	30	-	-	-	30	-	60	60
Disease Management	Control method of blights disease in potato	1	1	Off	Dec	-	30	-	-	-	-	-	30	30
Total		**10**	**5**			**60**	**165**			**20**	**75**	**80**	**240**	**320**
Agril. Engg.														
Farm mechanization	Zero Till wheat cultivation technique	2	1	Off	Oct	15	15	-	-	20	15	35	30	65
Soil and Water Conservation	Low cost water harvesting technique	2	1	Off	May & June	25	15	-	-	20	15	45	30	75
Installation and maintenance of micro irrigation systems	Mulching and drip irrigation in vegetable production	2	1	Off	Nov. & Dec.	25	15	-	-	20	15	45	30	75
PHT	Post-harvest management of vegetable for value addition	2	1	Off	Sept. & Oct.	20	15	-	-	15	15	35	30	65
	Storage technique and storage structure for seeds and grains	1	1	Off	March & April	15	-	-	-	15	-	30	-	30
Total		**9**	**6**			**100**	**60**			**90**	**60**	**180**	**120**	**300**
Home Science/ women empowerment														

Food security														
Design & development of low cost diet	Importance of balance diet for immunity development	1	1	Off	June & Dec.	-	20	-	-	-	15	-	35	35
Minimization of nutrient loss in processing	Nutrient saving cooking Practice	1	1	Off	July & Aug.	-	20	-	-	-	20	-	40	40
Women & child care	Nutri-Garden lay out & designing for farm women	1	2	off	Feb-March	-	20	-	15	-	-	-	35	35
	Common medicinal & herbal plant to boost immunity	1	1	Off	July-Oct.	-	20	-	-	-	15	-	35	35
Drudgery reduction	Technique for Drudgery reduction	1	2	0ff	Sept.	-	-	-	25	-	25	-	50	50
Total		**5**	**7**	**-**	**-**	**-**	**80**	**-**	**40**	**-**	**75**	**-**	**195**	**195**
Grand total		**44**	**27**			**330**	**470**		**35**	**225**	**345**	**560**	**850**	**1440**

(C) Rural youths/Skill development

Thematic area	**Title of Training**	**No.**	**Duration**	**Venue On/Off**	**Tentative Date**	**No. of Participants**								
						OTH		**SC**		**ST**		**Total**		
						M	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**T**
Seed production	Quality Seed production technology	1	5	On	June	15	-	-	-	15	-	30	-	30
Doubling farming income	Doubling farming income through Integrated farming system	1	5	On	June	25	-	-	-	25	-	50	-	50
Commercial fruit production	Establishment of nursery and mali training	2	5	On	July	30	-	-	-	30	-	60	-	60
Mushroom Production	Production technology of Mushroom	2	5	On	Nov. & Dec.	-	20	-	-	-	20	-	40	40
Drafting and stitching of female garment	Drafting and stitching of female garment	1	5	On	June, July & Jan.21	-	15	-	-	-	15	-	30	30
Value addition of localyavaila	Small scale processing and preservation of locally	1	5	On	June – sept.	-	15	-	-	--	15	-	30	30

ble seasonal fruit& vegetables	availableseasonal fruits and vegetable													
Bee keeping	Cultivation of bee keeping	1	5	On	May	15	-	-	-	15	-	30	-	30
Repair and maintenanc e of farm machinery and implements	Repair and maintenance of farm implement	1	15	On	June	20	-	5	-	5	-	30	-	30
Total		**10**	**50**			**105**	**50**	**5**		**90**	**50**	**200**	**100**	**300**

(D) Extension functionaries

Thrust area/ Thematic area	**Title of Training**	**No.**	**Duration**	**Venue On/Off**	**Tentative Date**	**No. of Participants**								
						OTH		**SC**		**ST**		**Total**		
						M	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**T**
Installation and maintenance of micro irrigation systems	Micro irrigation system for vegetable production	1	1	On	May	15	-	-	-	15	-	30	-	30
Farm Mechanization	Role of farm mechanization in increasing productivity and profitability	1	1	On	Aug. Oct.	20	-	-	-	20	-	40	-	40
Soil and Water Conservation	Water harvesting and soil moisture conservation technique	1	1	On	July	20	-	-	-	20	-	40	-	40
Women & child care	Awareness programme on common medicinal herbs like gilloy ,tulsi and neem in daily routine for immunity development.	1	1	On	April & Aug.	-	15	-	-	-	15	-	35	35
	Awareness programme on need of nutrition / community garden in anganbari in school related to MDM Programme.	1	1	On	July	-	15	-	-	-	15	-	35	35
Production of organic inputs	Promotion of organic farming in vegetable production	2	1	On	Aug,	20	-	-	-	20	-	40	-	40
Production of bio control agents and bio pesticides	Use of Bio-pesticides in vegetable production	1	1	On	Sept.	20	-	-	-	10	-	30	-	30
Seed production	Doubling farmer income through Seed production of pulses	2	1	On	July & Oct.	40	-	-	-	20	-	60	-	60
Total		**10**	**8**			**135**	**30**			**105**	**30**	**240**	**60**	**300**

4. Seed production at KVK farm (2023-24)

Crop	Variety	Type of Seed	Area (ha.)
Rice	IR-64 drt-1	F/S	2.0
	R. Masuri	F/S	2.5
	Total		**4.5**
Pulse			
Black gram	IPU 11-02	F/S	0.4
	Total	F/S	**0.4**
Oil seed			
Niger	Puja-1	F/S	0.2
	Total	F/S	0.1
Other	Elephant Yam		0.1
Rabi 2023-24	Mustard	F/S	2.0
	Linseed	F/S	1.0
	Total		**3.4**
	Grand Total		**8.3**

5. Frontline demonstration to be conducted (2023-24)

Season	Crop/Enterprise	Variety	No. of area (ha)	No. of Demo.
Kharif	Rice	IR-64 drt1	20	40
	Ragi	A- 404	10	25
	Watermelon	Icebox	02	10
	Cucurbits	Malo, Pali	02	10
Rabi	Capsicum	Indira, Super wonder	02	10
	Mushroom	Oyster	10 units	05
	Milk Processing		10 Unit	10
	Total		**36.0 ha 20 Units**	**105**

6. Extension and Training activities under FLD:

Activity	Title of Activity	No.	Clientele	Duration	Venue On/Off	No. of Participant
Training	Production technology of high value crop	01	PF	01	On	30
Training	Orchard management	03	PF	01	On	90

7. Action Plan: Cluster Frontline Demonstration on Oilseed and Pulses 2023-24

Season	Crop	Variety	No. of area (ha)	No. of Demo.
Kharif	**Pulse**			
	Black gram	WBU-109	20	50
	Green Gram	HUM-16	20	50
	Pigeon pea	Rajiv Lochan	20	50
	Horse gram	Indra Kulthi-1	20	50
Rabi	Chick pea	GNG 1581	20	50
		Total	**100**	**250**
Kharif	**Oilseed**			
	Sesame	Shekhar/Improved	20	50
	Niger	Puja-1	20	50
Rabi	**Oilseed**			
	Rapeseed & Mustard	P-30	30	75
	Linseed	Priyam	20	50
		Total	**90**	**225**
		Grand Total	**190**	**475**

8. Extension Activities

Sl. No.	Activities	No. of activities proposed	Farmers				Extension Officials			Total		
			M	F	T	SC/ ST (% of total)	Male	Female	Total	Male	Female	Total
1.	Field Day	10										600
2.	KisanMela	4										4000
3.	KisanGhosthi	6										500
4.	Exhibition	5										500
5.	Film Show	30										1500
6.	Method Demonstrations	5										100
7.	Farmers Seminar	0										0
8.	Workshop	0										0
9.	Group meetings	2										200
10.	Lectures delivered as resource persons	50										
11.	Newspaper coverage	10										
12.	Radio talks	5										
13.	TV talks	12										
14.	Popular articles	5										
15.	Extension Literature	15										
16.	Advisory Services	100										60
17.	Scientific visit to farmers field	150										1000
18.	Farmers visit to KVK	1500										1500
19.	Diagnostic visits	30										250
20.	Exposure visits	4										100
21.	Ex-trainees Sammelan	1										100
22.	Soil health Camp	2										200
23.	Animal Health Camp											
24.	Agri mobile clinic	0										0
25.	Soil test campaigns (Analysis)	1										100
26.	Farm Science											

	Club Conveners meet											
27.	Self Help Group Conveners meetings	2										100
28.	MahilaMandals Conveners meetings	0										0
29.	Celebration of important days (specify)	2										200
30.	Help line service	2000										2000
31.	Any Other (Technology Week)	2										500
	Total	**3953**										**13510**

On-Farm Trials - 1

i. Season: Kharif
ii. Title of OFT: - Assessment of Preparation methods of ripe Jack Fruit papad (Bar).
iii. Thematic Area:- Value Addition
iv. Problem diagnosed: Jack fruit is heavily produced in local area of Bokaro district but not properly utilized due to lack of processing knowledge.
v. Important Cause: Heavy wastage of ripe jack fruit.
vi. Production System: Rainfed Upland
vii. Micro farming system: -
viii. Technology for Testing: Preparation methods of different ripe jack fruit based papad.
ix. Existing Practice: Local people consume ripe jack fruit as such as fruit.
x. Hypothesis: Papad developed from ripe jack fruit may increase both income and its utilization.
xi. Objective: **To increase utilization** by developing papad from ripe jack fruit and income.
xii. Treatments:

F.P. : Local people consume ripe jack fruit just as such as ripe.

T.O.1: Preparation of Bar from ripe Jack Fruit.
Formulation –-Jack fruit pulp 1 kg, Sugar – 100g, Citric acid -5.0g, Sodium Benzoate-1.0g

T.O. 2: Preparation of Bar from ripe jack fruit blended with mango
Formulation – Ingredients Well ripened jack fruit pulp juice – 500 g ,Mango pulp–500gm, Sugar – 100g, Citric acid -5.0g, Sodium Benzoate-1.0g

Xiii. Critical Inputs: Sugar, citric acid, ripe jack fruit ripe mango.
xiv. Unit Size: **Papad per kg**
xv. No. of Replications: 10
xvi. Unit Cost: **Rs. 100**
xvii. Total Cost: **Rs. 5000**

xviii. Monitoring Indicator:

1. Nutritive value
2. Self life (storage duration) in days
3. Sensory evaluation
4. Economics
5. B:C ratio

xix. Source of Technology:-ICAR-CCARI, Goa
xxx. Coordinating Scientist :Dr. Nandana Kumari

On-Farm Trials - 2

Season: **Kharif/Rabi 2023**

i. **Title of the OFT:** preparation and Preservation of ripe wood apple fruit as squash

ii. **Thematic Area:** Preservation

iii. **Problem diagnosed: Heavy wastage of ripe wood apple fruit and sold in local market very very low price.**

iv. **Important Cause:** Lack of knowledge regarding processing and preservation of wood apple fruit among rural people.

v. **Production system:** **R**oad side , Uncultivated and Marginal land plants.

vi. **Micro farming system:** Rain-fed medium.

vii. **Technology for Testing:** Preservation of ripe wood apple fruit as squash.

viii. **Existing Practice:** Local people consume ripe wood apple as homemade drink known as sharbat

ix. **Hypothesis:** Use of ripe wood apple based squash may increase its consumption/Utilization and income.

x. **Objective(s):** To increase utilization and income.

xi. **Treatments:**

Farmers Practice: Local people consume ripe wood apple as homemade drink known as sharbat

TO1: Preparation and preservation of squash develop from ripe wood apple having formulation given below.
Formulation: Fruit pulp: 1 kg, sugar-820gm, citric acid-15gm, water-165ml, KMS-1.2gm

TO2: Preparation and preservation of squash develop from ripe wood apple blended with ripe mango.
Formulation: Fruit pulp: 500gm, ripe mango pulp-500gm, sugar-820gm, citric acid-15gm, water-165ml, KMS-1.2gm

xii. **Monitoring Indicator:**

3. Nutritive value
4. Self life (storage duration) in days
3. Sensory evaluation
4. Economics
5. B:C ratio

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xiii. **Source of Technology:** Hand Book of Horticulture ICAR, New Delhi.

xiv. **Coordinating Scientist :Dr. Nandana Kumari**

On farm Trial-3

i. Season: Kharif

ii. **Title of OFT:- :** **Assessment of different levels of nutrients on yield and quality of mango.**

iii. Thematic Area:- Management of orchard

iv. Problem diagnosed:-Imbalance dose of fertilizer **co**ntributing towards poor yield and poor quality of Mango.

v. Important Cause: Low fertility, and poor vegetative growth.

vi. Production System: **Fruit based production system, INM**

vii. Micro farming system: Rice-Fallow

viii. Technology for Testing: Balanced fertilizers management for proper vegetative growth and high yield.

ix. Existing Practice: Sole mango

x. Hypothesis: Application of zinc helps in improving biosynthesis of auxin which help in improving fruit set, size and quality Application of boron improves in fertilization fruit set and sugar metabolism in MangoApplication of NPK improves the overall development of plant.

xi. Objective: To assess the effect of nutrient application on the yield and quality of Mango

xii. Treatments:

Farmers Practice .) 10 KG FYM

T.O.1– RDF (NPK-1Kg,1Kg,600gm for 10 year old plant **)** soil application in basin after harvest

T.O.2– RDF RDF + 200 g Zinc sulphate + 100 g Borax (Soil application) in basin after harvest

Mango- Variety : **Amrapali**

xiii. Critical Inputs: **Nutrients + FYM**

xiv. Unit Size: **7 per unit**

xv. No. of Replications: **08**

xvi. Unit Cost: **Rs. 1500**

xvii. Total Cost: **Rs.10500**

xviii. Monitoring Indicator:

1. No. of fruits set per panicle,
2. Average fruit weight (g)
3. Fruit yield (t/ha)
4. TSS (^{o} brix)
5. B:C ratio

xix. Source of Technology:- ICAR, RCER, Ranchi.

xxx. Coordinating Scientist :Dr. Anil Kumar

On Farm Trials-4

i. Season: Kharif

ii. **Title of OFT:- :** Assessment of different growth regulators on fruits setting and yield of chilli.

iii. Thematic Area:- NutrientManagement

iv. Problem diagnosed:- Low yield of chilli due to flower drop.

v. Important Cause: Flower drop due to formation of abscission layer.

vi. Production System : Vegetable based production system**,**

vii. Micro farming system: Vegetable -vegetable

viii. Technology for Testing: Application of hormones to reduce the fruit drop in chilly.

ix. Existing Practice: No uses of hormones.

x. Hypothesis: NAA prevent abscission layer formation.

xi. Objective: To assess the effect of hormone application on the yield and quality of chilly.

xii. Treatments:

Farmers Practice.) Biozyme (2.0 ml)/1.0 ltr water)

T.O.1- Alpha NAA 4.5 SL @ 1ml / 4.5 liter water (Twice at 25 days and 40 days after transplanting)

T.O.2– Tricontanol @ 0.05%@ 0.5ml/ litre(Twice at 25 days and 40 days after transplanting)

RDF: 100:60:50 kg NPK/ha

Chilly- Variety : Gagan(Rasi)

xiii. Critical Inputs: Seed +Hormone

xiv. Unit Size: **10 dismil per unit**

xv. No. of Replications: **08**

xvi. Unit Cost: **Rs. ; 10000.00**

xvii. Total Cost: **Rs.10000.00**

xviii. Monitoring Indicator:

1. No. of fruits per Plant,
2. Average fruit weight (g)
3. Fruit yield (t/ha)
4. Percentage of flower drop.
5. B:C ratio

xix. Source of Technology:-ICAR-IARI New Delhi.

xxx. Coordinating Scientist: Dr. Anil Kumar

On Farm Trials-5

i. **Season:** **Kharif**

ii. **Title of the OFT:** Effectiveness of Visual Based Social Media 'WhatsApp for control of stem borer in maize.

iii. **Thematic Area:** Information Communication Technology

iv. **Problem diagnosed:** Lack of technical and quick knowledge sharing social media among farmers

v. **Important Cause:** Lack of knowledge about control of stem borer in maize

vi. **Production system:** Rice-fellow- fellow

vii. **Micro farming system:** Rain-fed medium.

viii. **Technology for Testing:** Effectiveness of visual based social media WhatsApp

Existing Practice: Farmers not using any social media.

ix. **Hypothesis:** **:** Use of Visual based social media may control stem borer inmaize

x. **Objective(s):** **:** To increase level of knowledge about insect control

xi. **Treatments:**

Technology option-$_{I}$**:** Dissemination of agricultural technologies without visual based social media

Technology option-$_{II}$: Visual Based Social Media 'WhatsApp

xiiCritical Inputs: **:** Training,

xii. **Unit Size:** **:** 2 group (20 each)

xiii. **No of Replications:** 10

xiv. **Unit Cost:** Rs. 1,000/-

xv. **Total Cost:** Rs. 10,000/-

xvi. **Monitoring Indicator** i. Level of Knowledge before & after

ii. Level of adoption

ii Yield & B/C ratio

xvii. **Source of Technology :** IGKV, Raipur

xviii. **Coordinating Scientist :Dr. Adarsh Kumar Srivastava**

On Farm Trials-6

i. **Season:** **Kharif/Rabi 2023**

ii. **Title of the OFT:**Assessment of Effectiveness Extension Methodsfor dissemination Ofcommercial Vegetable Production Technologies.

iii. **Thematic Area:** Vegetable Production

iv. **Problem diagnosed:** Lack of technical knowledge vegetable production

v. **Important Cause:** **:**Lack of knowledge scientific cultivation of vegetables

vi. **Production system:** Rice-fellow- fellow

vii. **Micro farming system:** Rain-fed medium.

viii. **Technology for Testing:** Effectiveness of visual based social media WhatsApp

Existing Practice: Farmers not using any social media.

ix. **Hypothesis:** **:** Use of Visual based social media may control stem borer inmaize

x. **Objective(s):** **:** To increase level of knowledge about insect control

xi. **Treatments:**

Farmers Practice: without Extension Education Methods
TO1: individual contact method (farm and home visit)
TO2: Group contact Method (Demonstration, Lecture, Participatory Discussion/Training)
TO3: Mass Contact (Leaflet, Mobile Advisory, A/V film)

XiiCritical Inputs: **:**Training,

xii. **Unit Size:** **: 120(60 farmers + 60 extension personnel)**

xiii. **No of Replications:** **:**10

xiv. **Unit Cost:** Rs. 1,000/-

xv. **Total Cost:** Rs. 10,000/-

xvi. Monitoring Indicator

1. Pattern of use of Extension Methods among farmers.
2. Effectiveness Intensity Index of methods perceived by Farmers
3. Effectiveness Intensity Index of methods perceived by Extension Personnel.

xvi. **Source of Technology :** BAU, Ranchi

xvii. **Coordinating Scientist :Dr. Adarsh Kumar Srivastava**

10. List of Projects to be implemented by funding from other sources (other than KVK fund)

Sl. No.	Name of the project	Fund expected (Rs.)
1.		

11. No. of success stories proposed to be developed with their tentative titles

05 Nos. of success stories to be developed

12. Scientific Advisory Committee

Date of SAC meeting held during 2022-23	Proposed date during 2023-24
	17.07.2023

13. Soil and water testing

Details	**No. of Samples**	**No. of Farmers**									**No. of Villages**	**No. of SHC distributed**
		SC		**ST**		**Other**		**Total**				
		M	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**T**		
Soil Samples	1000	50	50	300	100	300	200	650	350	1000	10	5000
Water Samples												
Total	**1000**	**50**	**50**	**300**	**100**	**300**	**200**	**650**	**350**	**1000**	**10**	**5000**