

## ACTION PLAN PROFORMA FOR THE KVKs.

(1<sup>st</sup> January to 31 December, 2025)

### 1. GENERAL INFORMATION ABOUT THE KVK

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

Name and Address of KVK	Telephone		E mail	Website
Krishi Vigyan Kendra, Dhanbad Baliapur Farm, Dhanbad-828201	Office	FAX	Kvkadhanbadbau.2012@gmail.com	Website-- www.kvkadhanbad.org.in
	+91 9431578371			

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

Address	Telephone		E mail	Website
	Office	FAX		
Birsa Agricultural University, Kanke, Ranchi-834006(Jharkhand)	0651-2450500 0651-2450777		<a href="mailto:vc@bauranchi.org">vc@bauranchi.org</a> , <a href="mailto:registrarbaujharkhand@gmail.com">registrarbaujharkhand@gmail.com</a>	https://www.bauranchi.org

1.2.b. Status of KVK website : **Yes**      Date when the website last updated: **13/06/2025**

1.2.c. No. of Visitors (Hits) to your KVK website (as on today) : **97434**

1.2.d Status of ICT lab at your KVK :      Yes

a) No. of PC units      :      03 Unit

b) No. of Printers      :      03 Unit


c) Internet connection      :      Yes






#### 1.3. Name of the Senior Scientist & Head with phone & mobile no.

Name	Telephone / Contact		
	Office	Mobile	Email
Dr. Rajeev Kumar		+91 9431578371	kvkadhanbadbau.2012@gmail.com

1.4. Year of sanction: 2005

#### 1.5. Staff Position (as on 1<sup>st</sup> January, 2025)

Sl. No.	Sanctioned post	Name of the Incumbent	Designation	Discipline	Pay Scale (Rs.)	Grade Pay	Present basic (Rs.)	Date of joining	Permanent /Temporary	Category (SC/ST/OBC/ Others)	Mobile No.	Email id	Please attach recent photograph
1	Senior Scientist & Head	Dr. Rajeev Kumar	Scientist (Agril. Engg.) & Senior Scientist & Head (I/c)	Agril. Engg	79800-211500	7000	113800	21.07.2004	Permanent	Gen	9431578371	rajeevkvkadhanbad@gmail.com	

2	Subject Matter Specialist	Dr. Devkant Prasad	Scientist	Agronomy	79800-211500	7000	113800	19.07.2004	Permanent	Gen	9471535524	drprasadddevkant@gmail.com	
3	Subject Matter Specialist	Dr. Seema Singh	Scientist	Home Science	79800-211500	7000	107300	19.07.2004	Permanent	Gen	9431945425	seema21jan@gmail.com	
4	Subject Matter Specialist	Vacant											
5	Subject Matter Specialist	Vacant											
6	Subject Matter Specialist	Vacant											
7	Subject Matter Specialist	Vacant											
8	Programme Assistant	Sri Raman Kr. Srivastava	Programme Assistant	Agriculture	Level		68000	19.07.2004	Permanent	Gen	9431166252	ramansrivastava1967@gmail.com	
9	Computer Programmer	vacant											
10	Farm Manager	Sri Sanjay Kumar	Farm Manager	Agriculture	Level-6	4200	68000	20.07.2004	Permanent	Gen	9430706695	sanjaykvk3600@gmail.com	
11	Accountant / Superintendent  Assistant	Sri Dev Prakash Shukla	Assistant	-	Level-6	4200	35400	04.02.2025	Permanent	Gen	8471051876	Dev4sep94@gmail.com	
12	Stenographer	vacant											
13	Driver	vacant											

14	Driver	vacant											
15	Supporting staff	vacant											
16	Supporting staff	vacant											

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

S. No.	Item	Area (ha)
1	Under Buildings	1.0
2.	Under Demonstration Units	1.0
3.	Under Crops	4.5
4.	Horticulture	1.0
5.	Pond	2.5
6.	Others if any	
	total	10ha

**1.7. Infrastructural Development:**

**A) Buildings**

S. No.	Name of building	Source of funding		Stage					
		ICAR	RKVY	Complete			Incomplete		
				Completion Year	Plinth area (Sq.m)	Expenditure (Rs.)	Starting year	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR		Before 31.03.2007	500	8.14 lakh			functional
2.	Farmers Hostel	ICAR		Before 31.03.2007	300	7.54 lakh			functional
3.	Staff Quarters (6)	ICAR		Before 31.03.2007	400	3.90 lakh			Completely damaged
4.	Demonstration Units (2)	ICAR							
5	Fencing	ICAR							Incomplete and damaged
6	Rain Water harvesting system								Incomplete
7	Threshing floor			Before 31.03.2007					functional
8	Farm godown			Before 31.03.2007					Functional
	Other								
9	Mushroom Production Unit	ICAR		Before 31.03.2007					Functional
10	Soil test Lab	ICAR							
11	Shade house			2023					functional

**B) Vehicles**

Type of vehicle	Year of purchase	Source (ICAR/RKVY)	Cost (Rs.)	Total kms. run as on December, 2024	Present status
Tractor with trolley	2006	ICAR		1910.2 hours	Not Working but need repairing
Tractor with trolley	Provided by	BAU		01328.0 hours	Working

	BAU Ranchi				
Tata Sumo	2006	ICAR	500000	283868 km.	Condemned
Motar Cycle	2016	ICAR	59961	4080 km	Working
Motar Cycle	2016	ICAR	59961	10258 km	Working
Tractor with trolley	2006	ICAR		1902.2 hours	Not Working but need repairing
Mahindra Bolro B6	2025	ICAR	880000		Functional

### C) Equipment's & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Desktop Computer set	2006	--	Not Working
Xerox	2007	--	Not working
Digital Camera	2007	14512.50	Not Working

### 1.8. A). Details of SAC meetings to be conducted in the year

Sl. No.	Date
1. Scientific Advisory Committee	To be conducted

Suggestions of SAC meeting

## 2. DETAILS OF MICRO-FARMING SITUATIONS OF THE DISTRICT

### 2.1 Micro-farming situations

#### a) Characteristics

S. No.	Agro-Ecological situations (AES)	Existing Farming System (Crop+livestock+others)	Major soil types
1	AES 1 (Rainfed undulated plateau area having sandy-loam soil)	Soils are light textured having undulating topography & crops are grown under rainfed situation. No irrigation facility is available	Sandy loam, rainfed, undulating)
2	AES 2 (Rainfed upper plateau having gravelly soil area)	Soils are light textured having undulating topography with irrigation facility. The sources of irrigation are mainly wells and tanks	Sandy loam, undulating, irrigated
3	AES 3 ( Rainfed and heavy soil)	Soils are heavy textured, rich in organic matter and fertile. Crops are grown under rainfed situation. Only life saving irrigations is available.	Clay soil, rainfed
4.	AES 4 (Degraded forest and mining area)	Soils are heavy textured having undulating topography with no irrigation facility. Most of lands are under forest. Crops are grown under rainfed situation.	Heavily soil, undulating, rainfed / forest

## b) Land Characteristics

S.No	Agro-Ecological Situation (AES)	Topography	Drainage
1.	AES-1 (Name)	Forest Covered upland undulated Gravely soil type Rainfed	Good drainage
2.	AES-2 (Name)	Rainfed- Gravelly Soil type	Good drainage
3.	AES-3 (Name)	Cannel irrigated Calcarious soil-plains	Poor drainage

## c) AES-wise major problems

S.No	Agro-Ecological Situation (AES)	Major problems	Rank
1.	AES-1 (Name)	<p><b>Tundi</b></p> <ul style="list-style-type: none"> <li>➤ Farmers are not aware of improved variety</li> <li>➤ Use of traditional varieties</li> </ul> <p>Low productivity of serial and pulses</p>	8
2.	AES-2 (Name)	<p><b>Govindpur</b></p> <ul style="list-style-type: none"> <li>➤ Traditional package practices of serial and pulses</li> <li>➤ Poor Productivity of vegetables</li> <li>➤ Poor productivity of serial and pulses</li> <li>➤ Low milk yield of cow and buffaloes</li> <li>➤ Poor profitability of small animals like goat, pig and poultries.</li> </ul>	9
3.	AES-3 (Name)	<p><b>Baliapur</b></p> <ul style="list-style-type: none"> <li>➤ Poor Productivity of rice, wheat and oilseed.</li> <li>➤ No crops diversification</li> <li>➤ Indigenous breed of animals</li> <li>➤ More infestation of diseases and pest</li> </ul> <p>Use of local farm implements</p>	10

## 2.2. Area, Production and Productivity of major crops cultivated in the district (2024)

S. No	Crop	Area (ha)	Production (MT.)	Productivity (Qt./ha)	Yield gap (q/ha) with respect to demo of last year	Yield gap (q/ha) with respect to potential yield
1	Rice	35058	109696	31.29	10.6	
2	Finger millet	258	180	7.0	6.3	
3	Maize	1778	4267	24.0	-	
4	Pigeonpea	1637	1964	12.0	-	
5	Blackgram	807	565	7.0	-	
6	Moong	292	233	8.0	1.6	
7	Kulthi	199	139	7.0	-	
8	Groundnut	128	153	12.0	2.8	

9	Sesame	42	17	4.0	0.9	
10	Wheat	1223	2935	24	11.4	
11	Chickpea	901	1351	15.0	-	
12	Lentil	497	298	6.0	-	
13	Mustard	1335	1201	9.0	2.2	
14	Potato	1248		263	-	
15	Linseed	40	28	7.0	0.6	

Source: District agriculture department.

### 2.3. Weather data (2023-24)

Year	Month	Rainfall (mm)	Temperature °C		Relative Humidity (%)	
			Maximum	Minimum	Maximum	Minimum
2023	May	39.40				
	June	48.80				
	July	116.50				
	August	258.60				
	September	271.70				
	October	175.00				
	November	0				
	December	31.10				
2024	May	56.40				
	June	59.30				
	July	285.00				
	August	621.10				
	September	438.8				
	October	119.2				
	November	0				
	December	0				
<b>Total</b>						

### 2.4 Production and productivity of livestock, Poultry, Fisheries etc. in the district (2024)

Category	Population	Production	Productivity	Productivity gap
<b>Cattle</b>				
<b>Buffalo</b>	14,659			
<b>Sheep</b>	17,817			
<b>Goats</b>	2,25,652			
<b>Cattle</b>				
<i>Crossbred</i>	2,94,441			
<i>Indigenous</i>				
<b>Pigs</b>				
<b>Poultry</b>				
Hens	2,94,441			
<i>Desi</i>				
<b>Category</b>		<b>Production (q)</b>	<b>Productivity</b>	
Fish (Reservoir)				

\*Statcal report

## 2.5 Details of Operational area / Villages

Taluka	Name of the block	Name of the village	Major crops & enterprises	Existing yield (q/ha, number/year)	Major problem identified	Identified Thrust Areas
Dhanbad	Baliapur	Shitalpur	<p><b>Kharif-</b> Rice, Ragi, Sesame, Black gram, Red gram, vegetable</p> <p><b>Rabi-</b> Wheat, Mustard, Linseed, Gram, Lentil, Potato, Brinjal</p> <p><b>Summer-</b> Moong, Ladyfinger, Bottle guard, Ridge guard</p>		<ol style="list-style-type: none"> <li>1. Unavailability of quality seed.</li> <li>2. Unavailability of quality insecticides.</li> <li>3. Scarcity of irrigation water during Rabi &amp; Summer.</li> <li>4. Lack of knowledge about improved scientific cultivation.</li> <li>5. High cultivation cost of paddy.</li> </ol> <p>Damage of grains during storage.</p>	<ol style="list-style-type: none"> <li>1. Improvement of soil and water conservation practices.</li> <li>2. Improvement in yield of mono crop rice.</li> <li>3. Popularization of IPM measures for field and Horticultural crops.</li> </ol> <p>Introduction of post harvest &amp; value addition technology.</p>
	Baliapur	Salpatra	<p><b>Kharif-</b> Rice, Maize, Sesame, Black gram, Red gram, vegetables.</p> <p><b>Rabi-</b> Wheat, Mustard, Linseed, Gram, Lentil, Pea, Potato, Brinjal, Cauliflower, Cabbage.</p> <p><b>Summer-</b> Sesame, Moong, Ladyfinger, Cucurbits.</p>		<ol style="list-style-type: none"> <li>1. Unavailability of quality seed.</li> <li>2. Unavailability of quality insecticides.</li> <li>3. Scarcity of irrigation water during Rabi &amp; Summer.</li> <li>4. Lack of knowledge about improved scientific cultivation.</li> <li>5. High cultivation cost of paddy.</li> <li>6. Damage of grains during storage.</li> </ol>	<ol style="list-style-type: none"> <li>1. Improvement of soil and water conservation practices.</li> <li>2. Improvement in yield of mono crop rice.</li> <li>3. Popularization of IPM measures for field and Horticultural crops.</li> </ol> <p>Introduction of post harvest &amp; value addition technology.</p>

	Baliapur	Baghmara	<p><b>harif-</b> Rice, Maize, Sesame, Black gram, Red gram, Millets, Vegetables.</p> <p><b>abi-</b> Wheat, Mustard, Linseed, Gram, Lentil, Pea, Potato, Brinjal, Cauliflower, Cabbage.</p> <p><b>ummer-</b> Sesame, Moong, Ladyfinger, Cucurbits, Mushroom cultivation, Poultry and Fisheries.</p>		<ol style="list-style-type: none"> <li>1. Unavailability of quality insecticides.</li> <li>2. Scarcity of irrigation water during Rabi &amp; Summer.</li> <li>3. Lack of knowledge about improved scientific cultivation.</li> <li>4. High cultivation cost of paddy.</li> <li>5. Damage of grains during storage.</li> <li>6. Unavailability of quality seed.</li> <li>7. Lack of Knowledge of crop diversification.</li> </ol>	<ol style="list-style-type: none"> <li>1. Improvement of soil and water conservation practices.</li> <li>2. Improvement in yield of mono crop rice.</li> <li>3. Popularization of IPM measures for field and Horticultural crops.</li> </ol> <p>Introduction of post harvest &amp; value addition technology.</p>
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## 2.6 Top five major priority thrust areas:

- Improvement of soil and water conservation practices.
- Management of irrigation water.
- Management of problematic soils
- Improvement in crop productivity.
- Improvement in yield of mono crop rice.
- Diversification of traditional rice-based cropping system with appropriate commercialization.
- Breed Improvement of cattle, pig and goat.
- Popularization of IPM measures for field and Horticultural crops.
- Introduction of post harvest & value addition technology.
- Entrepreneurship development of SHG /FPO.

## 3. TECHNICAL PROGRAMME

### 3 A. Details of targeted mandatory activities by KVK

OFT		FLD		
(1)		(2)		
Number of OFTs	Number of Farmers	Area (ha)	No of enterprises	Number of Farmers
6	110	35	7	105

Training		Extension Activities	
(3)		(4)	
Number of Courses	Number of Participants	Number of activities	Number of participants
75	1925	113	3553

Seed Production (Qtl.)	Planting material (Nos.)	Fish seed prod. (Nos)	Soil Samples
(5)	(6)	(7)	(8)
90	78300	0	4830

### 3 B. Abstract of interventions to be undertaken

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions					
				Title of OFT if any	Title of FLD if any	Title of Training if any	Title of training for extension personnel if any	Extension activities	Supply of seeds, planting materials etc.
1	Crop Diversification	Rice	Low profitability of existing cropping system	Diversification of Rice crop based cropping systems					
2	Intercropping	Maize	Low profitability of existing sole crop	Enhancing the farming income through inter-cropping with maize system					
3	Use of small tools and implements	Weeding tools	Low Yield of groundnut	Assessment of manual low cost weeding tools in Groundnut					
4	Water Management	Drip irrigation system	Low Yield of brinjal	Assessment of Drip Irrigation system in Brinjal Cultivation					
5	Value Addition	Moringa	Prevalence of Anaemia among Farmwomen	Assessment of Moringa based Paustik Roti in Daily Diet of FarmWomen to reduce Anemia					
6	Post Harvest Management of Mushroom	Mushroom	Less yield with shorter shelf life of Mushroom	Mushroom production with high return and livelihood security					

### 3.1 Technologies to be assessed

#### A.1 Abstract on the number of technologies to be assessed in respect of crops

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Varietal Evaluation										
Seed / Plant production										
Weed Management										
Integrated Crop Management	2									2
Integrated Nutrient Management					1					1
Integrated Farming System										
Mushroom cultivation				1						1
Drudgery reduction										
Farm machineries	1									1
Value addition										
Integrated Pest Management										
Integrated Disease Management										
Resource conservation technology					1					1
Small Scale income generating enterprises										
<b>TOTAL</b>	<b>3</b>			<b>1</b>	<b>2</b>					<b>6</b>

#### A.2 Abstract on the number of technologies to be assessed in respect of livestock / enterprises

Thematic areas	Cattle	Poultry	Sheep	Goat	Piggery	Vermi culture	Fisheries	TOTAL
Evaluation of Breeds								
Nutrition Management								
Disease of Management								
Value Addition								
Production and Management								
Feed and Fodder								
Small Scale income generating enterprises								
<b>TOTAL</b>								

### B. Details of all On Farm Trial in the given format

#### OFT-1

Crop	Rice , Wheat, Maize, Potato, Vegetable Pea, Greengram
Season	Kharif, Rabi and Summer
Main problem	low profitability of existing cropping system
Main cause	Rice -Wheat cropping practice
Title of OFT	Diversification of Rice crop based cropping systems
Farming situation	Soil type – Sandy loam, land type – Medium, irrigation type – Rainfed and surface irrigation, Season – Kharif, Rabi and Summer and previous crop - Wheat
Thematic area	Crop Diversification
Farmer practice	.P – Rice ( Lalat) – Wheat (UP 262 )
Technology option selected for assessment	T1 – Rice (CR dhan 320) – Maize (BAUQMH - 07) + Potato (Lal Gulab) T2 – Rice (CR dhan 320) - Maize (BAUQMH - 07) + Vegetable Pea (GS-10)Advanta co. T3 – Rice (CR dhan 320) – Wheat (DBW-252) – Green gram (Samrat)
Source of technology	BAU, Ranchi

No of trial	10
Detail of critical input	Seed of Rice, Wheat, Maize,
Cost of individual critical input	Rice- Rs 1680/- , Wheat – Rs.5000/- , Maize – Rs. 4000/-
Total cost of critical input	Rs. 10680/-
Performance indicator to be recorded	(i) Technical indicator - (No of Effective tillers, grains per panicle, Yield (q/ha) , Rice equivalent yield (q/ha), soil data - before and after (pH, EC, OC, NPK,) ) (ii) Economic indicator - (Cost of cultivation, Gross return, Net return, B:C ratio) (iii) Farmer perception

### OFT-2

Crop	Maize, Blackgram, Groundnut, Sesame
Season	Kharif
Main problem	low profitability of existing sole crop
Main cause	Sole crop in practice
Title of OFT	Enhancing the farming income through inter-cropping with maize system
Farming situation	Soil type – Sandy loam, land type – Upland, irrigation type – Rainfed, Season – Kharif, and previous crop - Fallow
Thematic area	Intercropping
Farmer practice	FP - Maize Sole var. K-25 (40x20 cm)
Technology option selected for assessment	T1 - Maize , var. BAUQMH -07 (75x25 cm) + Blackgram var. Pant Urd-10 (1:2) (30x10 cm.) T2 - Maize , var. BAUQMH -07 (75x25 cm) + Groundnut var. K 1812 (1:2) (30x10cm) T3 - Maize var. . BAUQMH -07 (75x25 cm) + Sesamum var. GT- 4 (1:2) (30x10 cm.)
Source of technology	BAU, Ranchi
No of trial	10
Detail of critical input	Maize seed, Black gram seed, Groundnut seed, Sesame seed
Cost of individual critical input	Maize- Rs 4000/-
Total cost of critical input	Rs.4000 /ha
Performance indicator to be recorded	(i) Technical indicator ( no. of grains per cob, Yield (q/ha), stover yield (q/ha), biological yield (q/ha) , Maize equivalent yield (q/ha), LER, soil data before and after (pH, EC, OC, NPK,) ) (ii) Economic indicator (Cost of cultivation, Gross return, Net return, B:C ratio) (iii) Farmer perception

### OFT-3

Crop	Groundnut
Season	Kharif
Main problem	Low Yield of groundnut
Main cause	Heavy infestation of weed and unavailability of suitable Weeding tools
Title of OFT	Assessment of manual low cost weeding tools in Groundnut
Farming situation	Soil type – Sandy loam, land type – Upland, irrigation type – Rainfed, Season – Kharif, and previous crop - Fallow
Thematic area	Use of small tools and implements
Farmer practice	FP- Hand weeding with khurpi/kudal (20 DAS)

Technology option selected for assessment	T1- Three Tyne hoe (Grubber) (1st 20-25 DAS & 2nd 40-45 DAS) T2- Rotary tiller (Manual) (1st 20-25 DAS & 2nd 40-45 DAS)
Source of technology	CIAE, Bhopal
No of trial	10 (Total area for field crops 1.0 ha and for vegetable 0.4 ha)
Detail of critical input	Three tyne hoe and Rotary tiller
Cost of individual critical input	Rs. 16000/-
Total cost of critical input	Rs. 16000/ha
Performance indicator to be recorded	(i) Technical indicator Field Capacity, Field efficiency, Weeding efficiency, Yield (ii) Economic indicator Cost of cultivation, Gross return, Net return, B:C ratio (iii) Farmer perception

#### OFT-4

Crop	Brinjal
Season	Rabi
Main problem	Low Yield of brinjal
Main cause	Poor irrigation water availability
Title of OFT	Assessment of Drip Irrigation system in Brinjal Cultivation
Farming situation	Soil type – Sandy loam, land type – Upland , irrigation type – Drip, Season – Rabi, and previous crop - Blackgram
Thematic area	Water Management
Farmer practice	FP- Furrow Irrigation
Technology option selected for assessment	T1 - Single Row Crop with Single Lateral Line T2 - Double Row Crop with Single Lateral Line
Source of technology	IARI New Delhi
No of trial	10 (Total area for field crops 1.0 ha and for vegetable 0.4 ha)
Detail of critical input	Nil
Cost of individual critical input	Nil
Total cost of critical input	Nil
Performance indicator to be recorded	(i) Technical indicator Duty, Delta, Base Period, Water Use Efficiency, Yield (ii) Economic indicator Cost of cultivation, Gross return, Net return, B:C ratio (iii) Farmer perception

**OFT-5**

Crop	Fatigue in work efficiency in farmwomen
Season	Throughout Year
Main problem	Fatigue in work efficiency in farmwomen
Main cause	Prevalence of Anaemia among Farmwomen
Title of OFT	Assessment of Moringa based Paustik Roti in Daily Diet of FarmWomen to reduce Anamia
Farming situation	All women age 15-49 years who are anemic (63.8%accordig to NFHS 5)
Thematic area	Value Addition
Farmer practice	Irregular Daily Diet of practicing Farmwomen (Rice based diet with little seasonal green leafy vegetables
Technology option selected for assessment	TO1 : Moringa leaves in Paustik Roti (Ingredients: Wheat Flour 50 gm, Ragi Flour: 50 gm, Soyabean Flour – 10 gm, Onion 10 gm, Ajwain- 3gm, Oil -25gm, Moringa Leaves 20 gms TO2: Moringa powder in Paustik Roti (Ingredients: Wheat flour 50 gm, Ragi Flour: 50 gm, Soyabean Flour -10 gm, Onion 10 gm, Ajwain- 3gm, Oil -25gm, Moringa leaves powder -10 gm TO3 : 100 days IFA tablets from PHC
Source of technology	BAU, Ranchi, Jharkhand
No of trial	40
Detail of critical input	Ragi Flour, Moringa Leave powder, Soyabean Flour, wheat flour etc.
Cost of individual critical input	250.00
Total cost of critical input	10,000.00
Performance indicator to be recorded	(i) Technical indicator Health Camp at KVK before & after (3 & 6 Months) to record Hb: Height:, Weight: BMI: (ii) (iii) Economic indicator (iv) Farmer perception

**OFT-6**

Crop	Mushroom
Season	Round the year
Main problem	Less yield with shorter shelf life of Mushroom
Main cause	Lack of Post Harvest Management of Mushroom
Title of OFT	Mushroom prodction with high return and livelihood security
Farming situation	Climate Resilient
Thematic area	Post Harvest Management of Mushroom
Farmer practice	Fresh Forest Mushroom use
Technology option selected for assessment	T1 - Sun Drying + Packaging T2 - Sun Drying with blanching (2% Salt + 0.1% citic acid) + Packaging
Source of technology	Dr. RPCAU, Pusa

No of trial	10
Detail of critical input	Mushroom Spawn, Steeping Solution & Packaging Materials
Cost of individual critical input	400/-
Total cost of critical input	12,000/-
Performance indicator to be recorded	(i) Technical indicator Shelf life (0, 15,30 and 60 days), Cost of cultivation, Gross return, Net return, B:C ratio (ii) Economic indicator Farmer/Farmwomen perception (iii) Farmer perception

**Note: Each OFT detail should be given in the format**

### 3.2 Frontline Demonstrations

#### A. Details of FLDs to be organized -

Sl. No.	Crop	Thematic area	Technology for demonstration	Critical inputs	Season and year	Area (ha)	No. of farmers/ demon	Parameters identified (Yield related attributes, yield economics and farmers' perception)
1	Rice	Crop production	Use variety CR-Dhan 320, Time of nursery bed raising Mid June + seed rate @ 40 kg/ha + seed treatment carbendazime with 2 gm/kg of seed + spacing row to row 20 cm and plant to plant 10 cm + transplanting at 3-4 week old seedling + weed control 1st 20-25 DAT & 2nd 35-40 DAT+ 45 kg urea at top dressing after 1st weeding.	Rice Seed	Kharif & 2025	05 ha	20	I) Technical indicator- No. of tillers, 1000 grain wt. (gm) and Yield (q/ha) Economic indicator II) Cost of cultivation (Rs./ha), Gross return (Rs./ha), Net Return (Rs./ha) and B:C ratio III) Farmer Feedback- Low yield due to old varieties and poor agronomical practices
2	finger millets	Crop production	Use variety B.M-3, Time of nursery bed raising Mid June + seed rate @ 10 kg/ha + seed treatment carbendazime with 2 gm/kg of seed + spacing row to row 30 cm and plant to plant 10 cm + transplanting at 3-4 week old seedling + weed control 1st 20-25 DAT & 2nd 35-40 DAT+ 40 kg urea at top dressing after 1st weeding.	Finger millet seed	Kharif & 2025	05 ha	15	I) Technical indicator- No. of tillers, 1000 grain wt. (gm) and Yield (q/ha) II) Economic indicator - Cost of cultivation (Rs./ha), Gross return (Rs./ha), Net Return (Rs./ha) and B:C ratio III) Farmer Feedback-Low yield due to old varieties and poor agronomical practices
3	sorghum	Crop production	Use variety CSV-20, Timely sowing Mid	Sorghum Seed	Kharif & 2025	2 ha	15	Technical indicator- 1000 grain wt. (gm) and Yield (q/ha)

			June to mid July + seed rate @ 12 kg/ha + seed treatment carbendazime with 2 gm/kg of seed + spacing row to row 45 cm and plant to plant 15 cm + weed control 1st 20-25 DAS & 2nd 35-40 DAS + 88 kg urea at top dressing after 1st weeding.					Economic indicator – Cost of cultivation (Rs./ha), Gross return (Rs./ha), Net Return  (Rs./ha) and B:C ratio (III) Farmer Feedback- Low yield due to old varieties and poor agronomical practices
4	Wheat	Crop production	Use variety DBW-252, Timely sowing mid October to mid November + seed rate @ 125 kg/ha + seed treatment carbendazime with 2 gm/kg of seed + spacing row to row 22 cm and plant to plant 10 cm + weed control 1st 20-25 DAS & 2nd 35-40 DAS + 53 kg urea at top dressing after 1st weeding.and 2nd weeding	Wheat seed	Rabi & 2025	2 ha	20	Technical indicator- No. of tillers, 1000 grain wt. (gm) and Yield (q/ha) Economic indicator – Cost of cultivation (Rs./ha), Gross return (Rs./ha), Net Return  (Rs./ha) and B:C ratio (III) Farmer Feedback- Requirement of new wheat variety in low availability of water
5	Maize	Crop production	Use variety BAUQMH - 07, Timely sowing Mid October to mid November + seed rate @ 20 kg/ha + seed treatment carbendazime with 2 gm/kg of seed + spacing row to row 60 cm and plant to plant 20 cm + weed control 1st 20-25 DAS & 2nd 35-40 DAS + 65 kg urea at top dressing after 1st weeding.and 2nd weeding	Maize seed	Rabi & 2025	02 ha	15	Technical indicator- 1000 grain wt. (gm) and Yield (q/ha) Economic indicator – Cost of cultivation (Rs./ha), Gross return (Rs./ha), Net Return  (Rs./ha) and B:C ratio (III) Farmer Feedback- Low yield due to old varieties and poor agronomical practices
6	oyster musroom	Mushroom production	Oyster mushroom on paddy straw var. P. sajorkaju	Spawn	February to April , July to December and 2025	10 Units (10 spawn packet per unit)	10 Farmw omen	Technical indicator- Yield (kg/bag), Economic indicator : Cost Benefit Ratio Farmer Feedback- Ready to Adopt Mushroom Cultivation & Nutri Garden throughout Year
7	nutri garden	Food & nutrition security	Green leafy Vegetables: Palak(all green), Chaolai (pusa Lal chaulai), corriander (Vardaan) Methi (Pusa Kasuri) Sarson Saag (Pusa Sarson Saag 1) Chenopodium album (Bathua), Cabbage( Pusa Mukta), Broccoli (KTS-1) Fruits	Vegetable seed	All season and 2025	2 ha	10 Farmw omen	Technical indicator- Daily Consumption Economic indicator : Cost Benefit Ratio Farmer Feedback- Nutri Garden throughout Year

			Vegetables: Tomato( Swarn Samridhhi) Cauliflower (Pusa Shrad), Cucumber (Pusa Sanyog), Pea (Kashi Udai) Cow Pea(Kashi Kanchan) Reddish , Carrot, Garlic, Onion, Beetroot					
				<b>Total</b>		<b>18ha/ 10 Nos.</b>	<b>105</b>	

### Sponsored Demonstration

Crop	Area (ha)	No. of farmers

### B. Extension and Training activities under FLDs

S. No.	Activity	No. of activities	Month	Number of participants
1	Farmers Training	12	June, July, August, November, December	300
2	Field days	10	March, April, November, December,	250
3	Media coverage	7	All months	
4	Training for extension functionaries	1	December	30
5.	Kisan Gosthi	6	March, April, November, December,	250

### C. Details of FLD on Enterprises

#### (i) Farm Implements

Name of the implement	Crop	Season and year	No. of farmers	Area (ha)	Critical inputs	Performance parameters / indicators

#### (ii) Livestock Enterprises

Enterprise	Breed	No. of farmers	No. of animals, poultry birds/ha. etc.	Critical inputs	Performance parameters / indicators

Details of all FLD in the given format

**FLD-1**

Title of FLD	Demonstration on Rice var. CR Dhan - 320		
Season & Year	Kharif & 2025		
Main Problem	Low productivity of Rice		
Main cause of problem	Low yield of Rice due to use of old variety		
Full detail of farmer's Practice	Old Variety – Lalat, use more seed rate (80 kg/ha) and poor agronomical practices		
Name of the Technology	Variety and agronomical practices		
Full detail of technology to be demonstrated	Use variety CR- Dhan 320, Time of nursery bed raising Mid June + seed rate @ 40 kg/ha + seed treatment carbendazime with 2 gm/kg of seed + spacing row to row 20 cm and plant to plant 10 cm + transplanting at 3-4 week old seedling + weed control 1st 20-25 DAT & 2nd 35-40 DAT+ 45 kg urea at top dressing after 1st weeding.		
Thematic area	Crop production		
Source of Technology with year	BAU, Ranchi		
Name of villages	Shitalpur and Salpatra		
Farming situation	Medium land		
Area (ha)/Unit (No.)	05 ha	Unit	20
Performance indicator	(V) Technical indicator- No. of tillers, 1000 grain wt. (gm) and Yield (q/ha) (VI) Economic indicator Cost of cultivation (Rs./ha), Gross return (Rs./ha), Net Return (Rs./ha) and B:C ratio <b>VII) Farmer Feedback-</b> Low yield due to old varieties and poor agronomical practices		

**FLD-2**

Title of FLD	Demonstration on Finger millet var. BM-3		
Season & Year	Kharif & 2025		
Main Problem	Low productivity of finger millets		
Main cause of problem	Low yield of fingermillet due to old variety		
Full detail of farmer's Practice	Old Variety – Thopa kode , more seed rate (17 kg/ha) and poor agronomical practices		
Name of the Technology	Variety and agronomical practices		
Full detail of technology to be demonstrated	Use variety B.M-3,Time of nursery bed raising Mid June + seed rate @ 10 kg/ha + seed treatment carbendazime with 2 gm/kg of seed + spacing row to row 30 cm and plant to plant 10 cm + transplanting at 3-4 week old seedling + weed control 1st 20-25 DAT & 2nd 35-40 DAT+ 40 kg urea at top dressing after 1st weeding.		
Thematic area	Crop production		
Source of Technology with year	BAU, Ranchi		
Name of villages	Kolhar and Bishunpur		
Farming situation	Rainfed upland , sandy loam		
Area (ha)/Unit (No.)	2 ha	unit	15
Performance indicator	(III) Technical indicator- No. of tillers, 1000 grain wt. (gm) and Yield (q/ha) (IV) Economic indicator - Cost of cultivation (Rs./ha), Gross return (Rs./ha), Net Return (Rs./ha) and B:C ratio <b>(V) Farmer Feedback-</b> Low yield due to old varieties and poor agronomical practices		

**FLD-3**

Title of FLD	Demonstration on sorghum var. CSV-20		
Season & Year	Kharif & 2025		
Main Problem	Low productivity of sorghum		
Main cause of problem	Low yield of sorghum due to use of old variety		
Full detail of farmer's Practice	Old Variety – Kuba Jowar, more seed rate (20 kg/ha) and poor agronomical practices		
Name of the Technology	Variety and agronomical practices		
Full detail of technology to be demonstrated	Use variety CSV-20, Timely sowing Mid June to mid July + seed rate @ 12 kg/ha + seed treatment carbendazime with 2 gm/kg of seed + spacing row to row 45 cm and plant to plant 15 cm + weed control 1st 20-25 DAS & 2nd 35-40 DAS + 88 kg urea at top dressing after 1st weeding.		
Thematic area	<b>Crop production</b>		
Source of Technology with year	BAU, Ranchi		
Name of villages	Madhupur and Nemori		
Farming situation	Rainfed upland, sandy loam		
Area (ha)/Unit (No.)	2 ha	unit	15
Performance indicator	(I) Technical indicator- 1000 grain wt. (gm) and Yield (q/ha) (II) Economic indicator -Cost of cultivation (Rs./ha), Gross return (Rs./ha), Net Return (Rs./ha) and B:C ratio (III) Farmer Feedback-Low yield due to old varieties and poor agronomical practices		

**FLD-4**

Title of FLD	Demonstration on wheat var. DBW - 252		
Season & Year	Rabi & 2025		
Main Problem	Low productivity of wheat		
Main cause of problem	Low yield of Wheat due to use of old variety		
Full detail of farmer's Practice	Old Variety – UP 262, more seed rate (200 kg/ha) and poor agronomical practices		
Name of the Technology	Variety and agronomical practices		
Full detail of technology to be demonstrated	Use variety DBW-252, Timely sowing mid October to mid November + seed rate @ 125 kg/ha + seed treatment carbendazime with 2 gm/kg of seed + spacing row to row 22 cm and plant to plant 10 cm + weed control 1st 20-25 DAS & 2nd 35-40 DAS + 53 kg urea at top dressing after 1st weeding and 2nd weeding		
Thematic area	<b>Crop production</b>		
Source of Technology with year	BAU, Ranchi		
Name of villages	Palani and Dolabar		
Farming situation	Medium land		
Area (ha)/Unit (No.)	2 ha	unit	20
Performance indicator	(I) Technical indicator- No. of tillers, 1000 grain wt. (gm) and Yield (q/ha) (II) Economic indicator -Cost of cultivation (Rs./ha), Gross return (Rs./ha), Net Return (Rs./ha) and B:C ratio (III) Farmer Feedback-Requirement of new wheat variety in low availability of		

	water
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#### FLD-5

Title of FLD	Demonstration on maize var. BAUQMH - 07		
Season & Year	Rabi & 2025		
Main Problem	Low productivity of Maize		
Main cause of problem	Low yield of Maize due to use of old variety		
Full detail of farmer's Practice	Old Variety – K-25, more seed rate (30 kg/ha) and poor agronomical practices		
Name of the Technology	Variety and agronomical practices		
Full detail of technology to be demonstrated	Use variety BAUQMH -07, Timely sowing Mid October to mid November + seed rate @ 20 kg/ha + seed treatment carbendazime with 2 gm/kg of seed + spacing row to row 60 cm and plant to plant 20 cm + weed control 1st 20-25 DAS & 2nd 35-40 DAS + 65 kg urea at top dressing after 1st weeding.and 2nd weeding		
Thematic area	<b>Crop production</b>		
Source of Technology with year	BAU, Ranchi		
Name of villages	Aankhdwara and Fatehpur		
Farming situation	Medium land		
Area (ha)/Unit (No.)	02 ha	unit	15
Performance indicator	(I) Technical indicator- 1000 grain wt. (gm) and Yield (q/ha) (II) Economic indicator -Cost of cultivation (Rs./ha), Gross return (Rs./ha), Net Return (Rs./ha) and B:C ratio (III) Farmer Feedback- Low yield due to old varieties and poor agronomical practices		

#### FLD-6

Title of FLD	Demonstration on oyster musroom		
Season & Year	February to April , July to December and 2025		
Main Problem	Low production of oyster mushroom		
Main cause of problem	Unavailability of quality spawn		
Full detail of farmer's Practice	Mushroom production through unidentified spawn		
Name of the Technology	Mushroom Cultivation		
Full detail of technology to be demonstrated	Oyster mushroom on paddy straw var. P. sajorkaju		
Thematic area	<b>Mushroom production</b>		
Source of Technology with year	BAU, Ranchi, Jharkhand		
Name of villages	Baghmara & Jagdish 10 Farm Family each Village		
Farming situation	Climate resilient		
Area (ha)/Unit (No.)	10 Units (10 spawn packet per unit)	unit	10 Farmwomen

Performance indicator	(I) Technical indicator- Yield (kg/bag) (II) Economic indicator -Cost Benefit Ratio (III) Farmer Feedback-Ready to Adopt Mushroom Cultivation & Nutri Garden throughout Year
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### FLD-7

Title of FLD	Demonstration on nutri garden		
Season & Year	All season and 2025		
Main Problem	Malnutrition as per NFHS – 5 of Dhanbad District		
Main cause of problem	Unawareness of food & nutrition security technology		
Full detail of farmer's Practice	Irregular habit of production of fruits and vegetables;		
Name of the Technology	Nutri garden for food & nutrition security		
Full detail of technology to be demonstrated	Green leafy Vegetables: Palak(all green), Chaolai (pusa Lal chaulai), corriander (Vardaan) Methi (Pusa Kasuri) Sarson Saag (Pusa Sarson Saag 1) Chenopodium album (Bathua), Cabbage( Pusa Mukta), Broccoli (KTS-1) Fruits Vegetables: Tomato( Swarn Samridhhi) Cauliflower (Pusa Shrad), Cucumber (Pusa Sanyog), Pea (Kashi Udai) Cow Pea(Kashi Kanchan) Reddish , Carrot, Garlic, Onion, Beetroot		
Thematic area	Food & nutrition security		
Source of Technology with year	BAU, Ranchi, Jharkhand		
Name of villages	Baghmara & Shitalpur 10 Farm Family each Village		
Farming situation	Upland, Irrigated		
Area (ha)/Unit (No.)	2 ha	unit	10 Farmwomen
Performance indicator	(I) Technical indicator- Daily Consumption (II) Economic indicator - Cost Benefit Ratio (III) Farmer Feedback- Nutri Garden throughout Year		

**Note: Each FLD detail should be given in the format**

### 3.3 Training (Including the sponsored and FLD training programmes): **Note: 25 participants per training**

#### A) ON Campus

Thematic Area	Name of Courses	No. of Participants						
		Others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
<b>(A) Farmers &amp; Farm Women</b>								
<b>I Crop Production</b>								
Weed Management	1	5	5	10	5	10	15	25
Resource Conservation Technologies	3	10	10	20	15	40	55	75
Cropping Systems								
Crop Diversification								
Site specific nutrient management								
Integrated Farming								
Water management	2	10	15	25	10	15	25	50
Seed production	1	5	5	10	5	10	15	25
Nursery management								
Integrated Crop Management								
Fodder production								
Production of organic inputs								

Natural farming									
<b>II Horticulture</b>									
<b>a) Vegetable Crops</b>									
Production of low volume and high value crops									
Off-season vegetables									
Nursery raising									
Exotic vegetables like Broccoli									
Export potential vegetables									
Grading and standardization									
Protective cultivation (Green Houses, Shade Net etc.)									
Natural farming									
<b>b) Fruits</b>									
Training and Pruning									
Layout and Management of Orchards									
Cultivation of Fruit									
Management of young plants/orchards									
Rejuvenation of old orchards									
Export potential fruits									
Micro irrigation systems of orchards									
Plant propagation techniques									
<b>c) Ornamental Plants</b>									
Nursery Management									
Management of potted plants									
Export potential of ornamental plants									
Propagation techniques of Ornamental Plants									
<b>d) Plantation crops</b>									
Production and Management technology	1	5	5	10	5	10	15	25	
Processing and value addition									
<b>e) Tuber crops</b>									
Production and Management technology									
Processing and value addition									
<b>f) Spices</b>									
Production and Management technology									
Processing and value addition									
<b>g) Medicinal and Aromatic Plants</b>									
Nursery management									
Production and management technology									
Post harvest technology and value addition									
<b>III Soil Health and Fertility Management</b>									
Soil fertility management	1	5	5	10	5	10	15	25	
Soil and Water Conservation	1	5	5	10	5	10	15	25	
Integrated Nutrient Management									
Production and use of organic inputs									
Management of Problematic soils	1	5	5	10	5	10	15	25	
Micro nutrient deficiency in crops									

Nutrient Use Efficiency									
Soil and Water Testing									
<b>IV Livestock Production and Management</b>									
Dairy Management									
Poultry Management									
Piggery Management									
Rabbit Management/goat									
Disease Management									
Feed management									
Production of quality animal products									
<b>V Home Science/Women empowerment</b>									
Household food security by kitchen gardening and nutrition gardening	2	10	15	25	10	15	25	50	
Design and development of low/minimum cost diet	1	5	5	10	5	10	15	25	
Designing and development for high nutrient efficiency diet									
Minimization of nutrient loss in processing	1	5	5	10	5	10	15	25	
Gender mainstreaming through SHGs	1	5	5	10	5	10	15	25	
Storage loss minimization techniques									
Value addition	2	10	15	25	10	15	25	50	
Income generation activities for empowerment of rural Women	1	5	5	10	5	10	15	25	
Location specific drudgery reduction technologies	1	5	5	10	5	10	15	25	
Rural Crafts									
Women and child care	1	5	5	10	5	10	15	25	
<b>VI Agril. Engineering</b>									
Installation and maintenance of micro irrigation systems									
Use of Plastics in farming practices	1	5	5	10	5	10	15	25	
Production of small tools and implements									
Repair and maintenance of farm machinery and implements	2	10	15	25	10	15	25	50	
Small scale processing and value addition									
Post Harvest Technology									
<b>VII Plant Protection</b>									
Integrated Pest Management									
Integrated Disease Management	1	5	5	10	5	10	15	25	
Bio-control of pests and diseases									
Production of bio control agents and bio pesticides									
<b>VIII Fisheries</b>									
Integrated fish farming	1	5	5	10	5	10	15	25	
Carp breeding and hatchery management									
Carp fry and fingerling rearing									
Composite fish culture									
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								
<b>IX Production of Inputs at site</b>								
Seed Production	2	10	15	25	10	15	25	50
Planting material production								
Bio-agents production								
Bio-pesticides production								
Bio-fertilizer production								
Vermi-compost production	1	5	5	10	5	10	15	25
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								
<b>X Capacity Building and Group Dynamics</b>								
Leadership development								
Group dynamics								
Formation and Management of SHGs/FPOs etc	1	5	5	10	5	10	15	25
Mobilization of social capital	1	5	5	10	5	10	15	25
Entrepreneurial development of farmers/youths								
WTO and IPR issues								
<b>XI Agro-forestry</b>								
Production technologies								
Nursery management								
Integrated Farming Systems								
<b>XII Others (Pl. Specify)</b>								
<b>TOTAL</b>	<b>31</b>	<b>150</b>	<b>175</b>	<b>325</b>	<b>155</b>	<b>295</b>	<b>450</b>	<b>775</b>
<b>(B) RURAL YOUTH</b>								
Mushroom Production	5	25	25	50	50	25	75	125
Bee-keeping								
Integrated farming	1	5	5	10	5	10	15	25
Seed production								
Production of organic inputs								
Integrated Farming (Medicinal)								
Planting material production								
Vermi-culture	1	5	5	10	5	10	15	25
Sericulture								
Protected cultivation of vegetable crops								
Commercial fruit production								
Repair and maintenance of farm machinery and implements	1	5	5	10	5	10	15	25
Nursery Management of Horticulture crops	1	5	5	10	5	10	15	25
Training and pruning of orchards								
Value addition	2	10	15	25	10	15	25	50
Production of quality animal products								

Dairying								
Sheep and goat rearing	1	5	5	10	5	10	15	25
Quail farming								
Piggery								
Rabbit farming								
Poultry production								
Ornamental fisheries								
Para vets								
Para extension workers								
Composite fish culture								
Freshwater prawn culture								
Shrimp farming								
Pearl culture								
Cold water fisheries								
Fish harvest and processing technology								
Fry and fingerling rearing								
Small scale processing	1	5	5	10	5	10	15	25
Post Harvest Technology								
Tailoring and Stitching								
Rural Crafts								
<b>TOTAL</b>	<b>13</b>	<b>65</b>	<b>70</b>	<b>135</b>	<b>90</b>	<b>100</b>	<b>190</b>	<b>325</b>
<b>(C) Extension Personnel</b>								
Productivity enhancement in field crops	1	5	10	15	5	10	15	30
Integrated Pest Management	1	5	10	15	5	10	15	30
Integrated Nutrient management	1	5	10	15	5	10	15	30
Rejuvenation of old orchards								
Protected cultivation technology								
Formation and Management of SHGs	1	5	10	15	5	10	15	30
Group Dynamics and farmers organization								
Information networking among farmers								
Capacity building for ICT application								
Care and maintenance of farm machinery and implements								
WTO and IPR issues								
Management in farm animals								
Livestock feed and fodder production								
Household food security								
Women and Child care								
Low cost and nutrient efficient diet designing	1	5	10	15	5	10	15	30
Production and use of organic inputs								
Gender mainstreaming through SHGs	1	5	10	15	5	10	15	30
Any other (Pl. Specify)								
Water management through sprinkler and drip irrigation system	1	5	10	15	5	10	15	30
Different technique and importance of soil and water conservation	1	5	10	15	5	10	15	30
Organic farming	1	5	10	15	5	10	15	30
Increase water use efficiency in field crops	1	5	10	15	5	10	15	30

<b>TOTAL</b>	<b>10</b>	<b>50</b>	<b>100</b>	<b>150</b>	<b>50</b>	<b>100</b>	<b>150</b>	<b>300</b>
<b>G. Total</b>	<b>54</b>	<b>265</b>	<b>345</b>	<b>610</b>	<b>295</b>	<b>495</b>	<b>790</b>	<b>1400</b>

**B) OFF Campus Note: 25 participants per training**

Thematic Area	No. of Courses	No. of Participants						Grand Total
		Others			SC/ST			
		Male	Female	Total	Male	Female	Total	
<b>(A) Farmers &amp; Farm Women</b>								
<b>I Crop Production</b>								
Weed Management								
Resource Conservation Technologies	2	10	15	25	10	15	25	50
Cropping Systems								
Crop Diversification	1	5	5	10	5	10	15	25
Integrated Farming	1	5	5	10	5	10	15	25
Water management	1	5	5	10	5	10	15	25
Seed production	2	10	15	25	10	15	25	50
Nursery management								
Integrated Crop Management	1	5	5	10	5	10	15	25
Fodder production								
Production of organic inputs	1	5	5	10	5	10	15	25
<b>II Horticulture</b>								
<b>a) Vegetable Crops</b>								
Production of low volume and high value crops								
Off-season vegetables								
Nursery raising								
Exotic vegetables like Broccoli								
Export potential vegetables								
Grading and standardization								
Protective cultivation (Green Houses, Shade Net etc.)								
<b>b) Fruits</b>								
Training and Pruning								
Layout and Management of Orchards								
Cultivation of Fruit								
Management of young plants/orchards								
Rejuvenation of old orchards								
Export potential fruits								
Micro irrigation systems of orchards								
Plant propagation techniques								
<b>c) Ornamental Plants</b>								
Nursery Management								
Management of potted plants								
Export potential of ornamental plants								
Propagation techniques of Ornamental Plants								
<b>d) Plantation crops</b>								
Production and Management technology								
Processing and value addition								
<b>e) Tuber crops</b>								
Production and Management technology								
Processing and value addition								
<b>f) Spices</b>								
Production and Management technology								
Processing and value addition								
<b>g) Medicinal and Aromatic Plants</b>								
Nursery management								
Production and management technology								

Post harvest technology and value addition									
<b>III Soil Health and Fertility Management</b>									
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									
<b>IV Livestock Production and Management</b>									
Dairy Management									
Poultry Management									
Piggery Management									
Rabbit Management /goat									
Disease Management									
Feed management									
Production of quality animal products									
<b>V Home Science/Women empowerment</b>									
Household food security by kitchen gardening and nutrition gardening									
Design and development of low/minimum cost diet									
Designing and development for high nutrient efficiency diet	1	5	5	10	5	10	15	25	
Minimization of nutrient loss in processing									
Gender mainstreaming through SHGs	1	5	5	10	5	10	15	25	
Storage loss minimization techniques	1	5	5	10	5	10	15	25	
Value addition									
Income generation activities for empowerment of rural Women									
Location specific drudgery reduction technologies									
Rural Crafts	1	5	5	10	5	10	15	25	
Women and child care	1	5	5	10	5	10	15	25	
<b>VI Agril. Engineering</b>									
Installation and maintenance of micro irrigation systems									
Use of Plastics in farming practices									
Production of small tools and implements									
Repair and maintenance of farm machinery and implements									
Small scale processing and value addition									
Post Harvest Technology	1	5	5	10	5	10	15	25	
<b>VII Plant Protection</b>									
Integrated Pest Management	1	5	5	10	5	10	15	25	
Integrated Disease Management	1	5	5	10	5	10	15	25	
Bio-control of pests and diseases									
Production of bio control agents and bio pesticides									
<b>VIII Fisheries</b>									
Integrated fish farming									
Carp breeding and hatchery management									
Carp fry and fingerling rearing									
Composite fish culture									
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									
<b>IX Production of Inputs at site</b>									
Seed Production	2	10	15	25	10	15	25	50	
Planting material production (Horti.)									
Bio-agents production									
Bio-pesticides production									
Bio-fertilizer production									
Vermi-compost production (Horti.)	1	5	5	10	5	10	15	25	
Organic manures production (A.S.)									
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									
<b>X Capacity Building and Group Dynamics</b>									
Leadership development									
Group dynamics									
Formation and Management of SHGs(HS)									
Mobilization of social capital									
Entrepreneurial development of farmers/youths (Agro)									
WTO and IPR issues	1	5	5	10	5	10	15	25	
<b>XI Agro-forestry</b>									
Production technologies									
Nursery management									
Integrated Farming Systems (Agro)									
<b>XII Others (Pl. Specify)</b>									
<b>TOTAL</b>	<b>21</b>	<b>105</b>	<b>120</b>	<b>225</b>	<b>105</b>	<b>195</b>	<b>300</b>	<b>525</b>	

**C) Consolidated table (ON and OFF Campus)**

Thematic Area	No. of Courses	No. of Participants						Grand Total
		Others			SC/ST			
		Male	Female	Total	Male	Female	Total	
<b>(A) Farmers &amp; Farm Women</b>								
<b>I Crop Production</b>								
Weed Management	1	5	5	10	5	10	15	25
Resource Conservation Technologies	5	20	25	45	25	55	80	125
Cropping Systems								
Crop Diversification	1	5	5	10	5	10	15	25
Integrated Farming	1	5	5	10	5	10	15	25
Water management	1	5	5	10	5	10	15	25
Seed production	3	15	20	35	15	25	40	75
Nursery management								
Integrated Crop Management	1	5	5	10	5	10	15	25
Fodder production								
Production of organic inputs	1	5	5	10	5	10	15	25
<b>II Horticulture</b>								
<b>a) Vegetable Crops</b>								

Production of low volume and high value crops									
Off-season vegetables									
Nursery raising									
Exotic vegetables like Broccoli									
Export potential vegetables									
Grading and standardization									
Protective cultivation (Green Houses, Shade Net etc.)									
<b>b) Fruits</b>									
Training and Pruning									
Layout and Management of Orchards									
Cultivation of Fruit									
Management of young plants/orchards									
Rejuvenation of old orchards									
Export potential fruits									
Micro irrigation systems of orchards									
Plant propagation techniques									
<b>c) Ornamental Plants</b>									
Nursery Management									
Management of potted plants									
Export potential of ornamental plants									
Propagation techniques of Ornamental Plants									
<b>d) Plantation crops</b>									
Production and Management technology	1	5	5	10	5	10	15	25	
Processing and value addition									
<b>e) Tuber crops</b>									
Production and Management technology									
Processing and value addition									
<b>f) Spices</b>									
Production and Management technology									
Processing and value addition									
<b>g) Medicinal and Aromatic Plants</b>									
Nursery management									
Production and management technology									
Post harvest technology and value addition									
<b>(B) RURAL YOUTH</b>									
Mushroom Production	5	25	25	50	50	25	75	125	
Bee-keeping									
Integrated farming	1	5	5	10	5	10	15	25	
Seed production									
Production of organic inputs									
Planting material production	1	5	5	10	5	10	15	25	
Vermi-culture	1	5	5	10	5	10	15	25	
Sericulture									
Protected cultivation of vegetable crops									
Commercial fruit production									
Repair and maintenance of farm machinery and implements	1	5	5	10	5	10	15	25	
Nursery Management of Horticulture crops	1	5	5	10	5	10	15	25	
Training and pruning of orchards									
Value addition	2	10	15	25	10	15	25	50	
Production of quality animal products									
Dairying									
Sheep and goat rearing	1	5	5	10	5	10	15	25	
Quail farming									
Piggery									
Rabbit farming									
Poultry production									
Ornamental fisheries									
Para vets									
Para extension workers									
Composite fish culture									
Freshwater prawn culture									

Shrimp farming								
Pearl culture								
Cold water fisheries								
Fish harvest and processing technology								
Fry and fingerling rearing								
Small scale processing	1	5	5	10	5	10	15	25
Post Harvest Technology								
Tailoring and Stitching								
Rural Crafts								
<b>TOTAL</b>	<b>13</b>	<b>65</b>	<b>70</b>	<b>135</b>	<b>90</b>	<b>100</b>	<b>190</b>	<b>325</b>
<b>(C) Extension Personnel</b>								
Productivity enhancement in field crops	1	5	10	15	5	10	15	30
Integrated Pest Management	1	5	10	15	5	10	15	30
Integrated Nutrient management	1	5	10	15	5	10	15	30
Rejuvenation of old orchards								
Protected cultivation technology								
Formation and Management of SHGs	1	5	10	15	5	10	15	30
Group Dynamics and farmers organization								
Information networking among farmers								
Capacity building for ICT application								
Care and maintenance of farm machinery and implements								
WTO and IPR issues								
Management in farm animals								
Livestock feed and fodder production								
Household food security								
Women and Child care								
Low cost and nutrient efficient diet designing	1	5	10	15	5	10	15	30
Production and use of organic inputs								
Gender mainstreaming through SHGs	1	5	10	15	5	10	15	30
Any other (Pl. Specify)								
Water management through sprinkler and drip irrigation system	1	5	10	15	5	10	15	30
Different technique and importance of soil and water conservation	1	5	10	15	5	10	15	30
Organic farming	1	5	10	15	5	10	15	30
Increase water use efficiency in field crops	1	5	10	15	5	10	15	30
<b>TOTAL</b>	<b>10</b>	<b>50</b>	<b>100</b>	<b>150</b>	<b>50</b>	<b>100</b>	<b>150</b>	<b>300</b>
<b>III Soil Health and Fertility Management</b>								
Soil fertility management	1	5	5	10	5	10	15	25
Soil and Water Conservation	1	5	5	10	5	10	15	25
Integrated Nutrient Management								
Production and use of organic inputs								
Management of Problematic soils	1	5	5	10	5	10	15	25
Micro nutrient deficiency in crops								
Nutrient Use Efficiency								
Soil and Water Testing								
<b>IV Livestock Production and Management</b>								
Dairy Management								
Poultry Management								
Piggery Management								
Rabbit Management/goat								
Disease Management								
Feed management								
Production of quality animal products								
<b>V Home Science/Women empowerment</b>								
Household food security by kitchen gardening and nutrition gardening	2	10	15	25	10	15	25	50
Design and development of low/minimum cost diet	1	5	5	10	5	10	15	25
Designing and development for high nutrient efficiency diet	1	5	5	10	5	10	15	25
Minimization of nutrient loss in processing	1	5	5	10	5	10	15	25

Gender mainstreaming through SHGs	2	10	10	20	10	20	30	50
Storage loss minimization techniques	1	5	5	10	5	10	15	25
Value addition	2	10	15	25	10	15	25	50
Income generation activities for empowerment of rural Women	1	5	5	10	5	10	15	25
Location specific drudgery reduction technologies	1	5	5	10	5	10	15	25
Rural Crafts	1	5	5	10	5	10	15	25
Women and child care	2	10	10	20	10	20	30	50
<b>VI Agril. Engineering</b>								
Installation and maintenance of micro irrigation systems								
Use of Plastics in farming practices	1	5	5	10	5	10	15	25
Production of small tools and implements								
Repair and maintenance of farm machinery and implements	2	10	10	20	10	20	30	50
Small scale processing and value addition								
Post Harvest Technology	1	5	5	10	5	10	15	25
<b>VII Plant Protection</b>								
Integrated Pest Management	1	5	5	10	5	10	15	25
Integrated Disease Management	2	10	10	20	10	20	30	50
Bio-control of pests and diseases								
Production of bio control agents and bio pesticides								
<b>VIII Fisheries</b>								
Integrated fish farming	1	5	5	10	5	10	15	25
Carp breeding and hatchery management								
Carp fry and fingerling rearing								
Composite fish culture								
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								
<b>IX Production of Inputs at site</b>								
Seed Production	4	20	30	50	20	30	50	100
Planting material production								
Bio-agents production								
Bio-pesticides production								
Bio-fertilizer production								
Vermi-compost production	1	5	5	10	5	10	15	25
Organic manures production	1	5	5	10	5	10	15	25
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								
<b>X Capacity Building and Group Dynamics</b>								
Leadership development								
Group dynamics								
Formation and Management of SHGs	1	5	5	10	5	10	15	25
Mobilization of social capital	1	5	5	10	5	10	15	25
Entrepreneurial development of farmers/youths	1	5	5	10	5	10	15	25
WTO and IPR issues								
<b>XI Agro-forestry</b>								
Production technologies								
Nursery management								
Integrated Farming Systems								
Sponsored training								
<b>G. TOTAL</b>	<b>75</b>	<b>370</b>	<b>465</b>	<b>835</b>	<b>400</b>	<b>690</b>	<b>1090</b>	<b>1925</b>

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

Nature of Extension Activity	No. of activities	Farmers			Extension Officials			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	6	100	150	250	35	15	50	135	165	300
Kisan Mela	1	300	250	550	30	20	50	330	270	600
Kisan Ghosthi	6	100	150	250	35	15	50	135	165	300
Exhibition	2	200	275	475	10	15	25	210	290	500
Film Show										
Farmers Seminar										
Workshop										
Group meetings										
Lectures delivered as resource persons										
Newspaper coverage										
Radio talks										
TV talks										
Popular articles										
Extension Literature										
<b>Advisory Services</b>										
Scientific visit to farmers field	70	200	275	475	10	15	25	210	290	500
Farmers visit to KVK										
Diagnostic visits										
Exposure visits										
Ex-trainees Sammelan										
Soil health Camp	1	20	15	35	5	10	15	30	20	50
Animal Health Camp	1	20	15	35	5	10	15	30	20	50
Agri mobile clinic										
Soil test campaigns	1	20	15	35	5	10	15	30	20	50
Farm Science Club Conveners meet										
Self Help Group Conveners meetings	2	25	20	45	10	5	15	35	25	60
Mahila Mandals Conveners meetings										
Celebration of important days (specify)	10	200	275	475	10	15	25	210	290	500
Krishi Mohostva										
Krishi Rath										
Pre Kharif workshop										
Pre Rabi workshop										
PPVFRA workshop										
Any Other (Specify)										
<b>Total</b>	<b>97</b>	<b>1185</b>	<b>1440</b>	<b>2635</b>	<b>160</b>	<b>125</b>	<b>285</b>	<b>1355</b>	<b>1555</b>	<b>2910</b>

### 3.5 Target for Production and supply of Technological products

#### A) SEED MATERIALS

Sl. No.	Crop	Variety	Quantity (qtl.)
<b>CEREALS</b>	Rice	CR Dhan 320	50
	Finger Millet	Birsa Madhua -3	4
	Niger	Birsa Niger 1	2
	Wheat	DBW- 252	12
<b>OILSEEDS</b>	Mustard	BBM -1	10
<b>PULSES</b>	Pigeonpea	Birsa Arhar -2	5
<b>VEGETABLES</b>			
<b>OTHERS (Specify)</b>			

#### B) PLANTING MATERIALS

Sl. No.	Crop	Variety	Quantity (Nos.)
<b>FRUITS</b>	Mango	Aamrapali	700
		Mallika	500
		Dushehri	600
		Malda	800
	Guava	Allahabad safeda	200
		L-49	300
		Lalit	200
	Papaya	Red lady	5000
<b>SPICES</b>			
<b>VEGETABLES</b>	Chilli	HPH-5531	10000
	Tomato	Sahoo	10000
	Brinjal	Navkiran	10000
	Capsicum	Bokken	10000
	Cauliflower	Sakata white marble	10000
	Cabbage	Diamond Express	10000
	Broccoli	GS - 181	10000
<b>FOREST SPECIES</b>			
<b>ORNAMENTAL CROPS</b>			
		<b>Total</b>	

#### C) BIO-PRODUCT

Sl. No.	Product Name	Species	Quantity	
			No	(kg)
<b>BIO PESTICIDES</b>				
1				
2				

#### D) LIVESTOCK

Sl. No.	Type	Breed	Quantity	
			(Nos)	Unit
Cattle				

GOAT				
SHEEP				
POULTRY				
Pig farming				
FISHERIES				

### 3.6 Literature to be Developed/Published

#### (A) KVK News Letter

Date of start :

Number of copies to be published :

#### (B) Literature to be developed/published

S. No.	Topic	Number
1	Research paper each scientist	1
2	Technical reports	6
3	News letters	2
4	Training manual all discipline	1
5	Popular article	3
6	Extension literature	6
	<b>Total</b>	<b>19</b>

#### (C) Details of Electronic Media to be Produced

S. No.	Type of media (CD / VCD / DVD / Audio-Cassette, whatsapp group, mobile app, etc.	Title of the product	Number
1			

### 3.7. Success stories/Case studies identified for development as a case. -

- a. Brief introduction/Background
- b. Interventions/process
- c. Output
- d. Outcomes
- e. Impact
  - i) Social economic
  - ii) Bio-Physical
- f. Good Action Photographs

### 3.8 Indicate the specific training need analysis tools/methodology followed for Practicing Farmers

- a)
- b)
- c)

**Rural Youth**

- a)
- b)
- c)
- d)

**In-service personnel**

- a)
- b)
- c)

**3.9 Indicate the methodology for identifying OFTs/FLDs**

**For OFT:**

- i) PRA
- ii) Problem identified from Matrix based ranking & analysis
- iii) Field level observations
- iv) Farmer group discussions
- v) Others if any

**For FLD:**

- i) New variety/technology
- ii) Poor yield at farmers level
- iii) Existing cropping system
- iv) Others if any

**3.10 Field activities**

- i. Name of villages identified/adopted with block name (from which year) -
- ii. No. of farm families selected per village:
- iii. No. of PRA conducted:
- iv. No. of technologies taken to the adopted villages
- v. Name of the technologies found suitable by the farmers of the adopted villages:
- vi. Impact (production, income, employment, area/technological– horizontal/vertical)
- vii. Constraints if any in the continued application of these improved technologies

**3.11. Activities of Soil and Water Testing Laboratory**

Status of establishment of Lab:

1. **Year of establishment** :

**2. List of equipment's purchase with amount**

Sl. No.	Name of the equipment	Quantity	Cost (Rs)
1.	Digital Soil Testing Mini Lab Machine	2 Pcs.	
2.	Double Distillation Machine	2 Pcs.	
3.	Shaker	1 Pcs.	
4.	Beaker (50ml)	50 Pcs.	
5.	Beaker (100ml)	50 Pcs.	
6.	Beaker (250ml)	20 Pcs.	
7.	Test tube 50 ml	200 Pcs.	
8.	Buffer Solution Tablet 4.0	2Pkt.	
9.	Buffer Solution Tablet 7.0	2Pkt.	
10.	Buffer Solution Tablet 9.0	2 Pkt.	

11.	Measuring cylinder (100ml)	10 Pcs.	
12.	Reagent kit	20 Pcs.	
13.	Tissue Paper	20 Pkt.	
14.	Funnel Small	200 Pcs.	
15.	Plastic Bottle small mouth	200 Pcs.	
16.	Plastic Bottle Big mouth	200 Pcs.	
17.	Filter Paper	20 Pkt.	
18.	Wash Bottle	10 Pcs.	
19.	Sprit	15 lit.	
20.	Laboratory working table (10X5)	2 Pcs.	
21.	Iron Rack for Soil Sample Storage	6 Pcs.	
22.	Soil Sample Collection Bag	50 kg.	
23.	Godrej Steel Almirah (Big)	5 Pcs.	
24.	Gallon 20liter capacity for Distilled water storage	5 Pcs.	

### 3. Targets of samples for analysis:

Details	No. of Samples	No. of Farmers	No. of Villages	Amount to be realized
Soil Samples				
Water				
Plant				
<b>Total</b>				

### 4.0 LINKAGES

#### 4.1 Functional linkage with different organizations/department

Sl.No.	Name of organization	Nature of Linkage	Outcome of linkage
1.			
2.			
3.			
4.			
5.			

#### 4.2 Details of linkage with ATMA

a) Is ATMA implemented in your district Yes/No

S. No.	Programme	Nature of linkage	Outcome of linkage
1			
2			

### 5. Utilization of Hostel facilities

S. No.	Programme	No. of days
1		
2		
	<b>Total</b>	

### 6. Partnership with departments for technology out scaling (proposed):

## Training Programme

## i) Farmers &amp; Farm women (On Campus)

Date	Clientele	Title of the training programme	Duration in days	Number of participants			Number of SC/ST			G. Total	Month of training
				M	F	T	M	F	T		
<b>Crop Production</b>											
	PF/FW										
	PF/FW										
	PF/FW										
	PF/FW										
<b>Horticulture</b>											
	PF/FW										
	PF/FW										
	PF/FW										
	PF/FW										
<b>Livestock prod.</b>											
	PF/FW										
	PF/FW										
	PF/FW										
	PF/FW										
<b>Agril. Engg.</b>											
	PF/FW										
	PF/FW										
	PF/FW										
<b>Home Sc.</b>											
	PF/FW										
	PF/FW										
	PF/FW										
	PF/FW										

<b>Plan prot.</b>											
	PF/FW										
	PF/FW										
	PF/FW										
	PF/FW										
<b>Fisheries</b>											
	PF/FW										
	PF/FW										
	PF/FW										
	PF/FW										
	PF/FW										
<b>Soil Health</b>											
	PF/FW										
	PF/FW										
	PF/FW										
	PF/FW										
	PF/FW										

## i) Farmers &amp; Farm women (Off Campus)

Date	Clientele	Title of the training programme	Duration in days	No. of participants			Number of SC/ST			G. Total	Month of training
				M	F	T	M	F	T		
<b>Crop Production</b>											
	PF/FW										
	PF/FW										
	PF/FW										
	PF/FW										
	PF/FW										
	PF/FW										
<b>Horticulture</b>											
	PF/FW										
	PF/FW										



Date	Clientele	Title of the training programme	Duration in days	No. of participants			Number of SC/ST			G. Total
				M	F	T	M	F	T	
<b>On Campus</b>										

**iv) Sponsored programme**

Discipline	Sponsoring agency	Clientele	Title of the training programme	No. of course	No. of participants			Number of SC/ST			G. Total
					M	F	T	M	F	T	
<b>a) Sponsored training programme</b>											
			<b>Total</b>								
<b>b) Sponsored research programme</b>											
			<b>Total</b>								
<b>c) Any special programmes</b>											
			<b>Total</b>								

**Signature of Senior Scientist & Head**