

## **PROFORMA FOR ANNUAL REPORT 2022 (January-December 2022)**

### **1. GENERAL INFORMATION ABOUT THE KVK**

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

Address	Telephone		E mail
	Office	FAX	
Krishi Vigyan Kendra, Bhadrak Ranital, Odisha-756111	06784- 265825		<a href="mailto:kvkbhadrak.ouat@gmail.com">kvkbhadrak.ouat@gmail.com</a> <a href="mailto:kvkbhadrak.od@gov.in">kvkbhadrak.od@gov.in</a> <a href="mailto:kvk.Bhadrak@icar.gov.in">kvk.Bhadrak@icar.gov.in</a>

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

Address	Telephone		E mail
	Office	FAX	
Registrar, O.U.A.T, Bhubaneswar, Odisha-751003	0674-2397970/ 2397818 / 2397719/ 2397669 / 2397719 / 2397919 / 2397868	0674-2397780	<a href="mailto:registrarouat@gmail.com">registrarouat@gmail.com</a> <a href="mailto:vc@ouat.nic.in">vc@ouat.nic.in/</a> <a href="mailto:vcouat@gmail.com">vcouat@gmail.com</a>

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Aurovinda Das	-	8895417939	<a href="mailto:auroagro@gmail.com">auroagro@gmail.com</a>

#### **1.4. Year of sanction of KVK: 2004**

### 1.5. Staff Position (as on 1<sup>st</sup> January, 2022)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale with present basic	Date of joining	Permanent/Temporary	Category (SC/ST/OBC/Others)
1	Senior Scientist& Head	Dr. Aurovinda Das	Sr. Scientist & Head	Agronomy	APL-12, ₹ 1,10,400	06.09.12	Permanent	Others
2	Subject Matter Specialist	Dr. Biswa Ranjan Samantaray	Scientist	Fishery Sc	APL-10, ₹ 92,500	04.06.21	Permanent	Others
3	Subject Matter Specialist	Dr. Debiprasad Dash	Scientist	Soil Sc.	APL-10, ₹ 82,200	11.02.14	Permanent	Others
4	Subject Matter Specialist	Dr. Jyotshnarani Maharana	Scientist	Horticulture	APL-10, ₹ 92,500	04.06.21	Permanent	Others
5	Subject Matter Specialist	Dr. Bijayalaxmi Rout	Scientist	Home Science	APL-10, ₹ 82,200	04.06.21	Permanent	Others
6	Subject Matter Specialist	Dr. Rojalin Mohanta	SMS	Agril. Extension	L-12, ₹ 63,100	30.07.18	Permanent	Others
7	Subject Matter Specialist	Vacant						
8	Programme Assistant	Sri Gayadhar Shial	Programme Assistant(Forestry)	Agroforestry	L-9, ₹ 56,900	01.10.12	Permanent	SC
9	Computer Programmer	Sri Gopal Krushna Ojha	Programme Assistant(Computer)	-	L-9, ₹ 62,200	12.08.16	Permanent	OBC
10	Farm Manager	Sri Mantu Choudhury	Farm Manager	Entomology	L-9, ₹ 39,900	04.02.19	Permanent	Others
11	Accountant / Superintendent	Vacant						
12	Stenographer	Sri Susanta Ku. Singh	Jr. Steno cum Computer Operator	-	L-7, ₹ 41,000	04.06.21	Permanent	OBC
13.	Driver	Sri Sanjay Kumar Panda	Driver cum Mechanic	-	L-5, ₹ 29,300	26.07.22	Permanent	Others
14.	Driver	Sri Sradhansu Sekhar Pattnaik	Driver cum Mechanic	-	L-5, ₹ 27,600	18.06.12	Permanent	Others
15.	Supporting staff	Sri Prasanta Kumar Dalai	Supporting staff	-	L-1, ₹ 23,600	28.07.08	Permanent	OBC
16.	Supporting staff	Sri Harihara Nayak	Supporting staff	-	L-1, ₹ 25,000	17.07.13	Permanent	Others

1.6. Total land with KVK (in ha) :

S. No.	Item	Area (ha)
1	Under Buildings	1.0
2.	Under Demonstration Units, IFS unit, farm ponds	3.5
3.	Under Crops	12.0
4.	Others with details (farm roads, lowlying undulated lands)	4.9
	<b>Total</b>	<b>21.4</b>

*Total area should be matched with breakup*

1.7. Infrastructure Development:

#### A) Buildings and others

S. No.	Name of infrastructure	Not yet started	Completed up to plinth level	Completed up to lintel level	Completed up to roof level	Totally completed	Plinth area (sq.m)	Under use or not*	Source of funding
1.	Administrative Building	✓							
2.	Farmers Hostel					✓	280	Used	RKVY
3.	Staff Quarters	✓							
4.	Piggery unit	✓							
5	Fencing	✓							
6	Rain Water harvesting structure	✓							
7	Threshing floor					✓		Under use	RKVY

8	Farm godown					✓		Used	Seed Hub project
9.	Dairy unit	✓							
10.	Poultry unit	✓							
11.	Goatery unit	✓							
12.	Mushroom Lab					✓		Under use	RKVY
13.	Mushroom production unit	✓							
14.	Shade house							Used	RKVY
15.	Soil test Lab					✓		Used	ICAR
16	Seed processing plant					✓		Used	Seed Hub

\* If not  
in use then since when and reason for non-use

## B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total km. Run	Present status
Mahindra Bolero	2023	9,00,000.00	0	
Motor cycle	2009	54000		Requiring frequent repair

## C) Equipment & AV aids

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
<b>a. Lab equipment</b>				
Soil & water testing equipment			Very old equipment not functioning properly. Need for renovating Lab.	ICAR
Mushroom lab equipment			Laminar air flow and autoclave is	RKVY



			requiring frequent repairing	
<b>b. Farm machinery</b>				
Rotavator	2017	86000	Working	Seed Hub
Scraper / leveler	2017	35000	Working	Seed Hub
Pulse thresher	2017	78000	Working	Seed Hub
MB plough	2017	23000	Working	Seed Hub
Tractor with its accessories	2019	700000	Working	ICAR
<b>c. AV Aids</b>				
Laptop	2017-18	41950	Working	ICAR
Desktop	2017-18	39500	Working	ICAR
Laptop	2016-17	38000	Working	ICAR
Generator	2003-04		Not working	ICAR
LCD projector	2015-16	53000	Not working	ICAR
Handy Cam Sony	2011	20000	Working	ICAR
Camera, SLR	2016-17	36000	Working	ICAR
Desktop	2021-22	39500	Working	ICAR-Award money
Desktop	2021-22	39500	Working	ICAR-Award money
Camera Stand	2022-23	3500	Working	ICAR
Microphone(Omnidirectional)	2022-23	23998	Working	ICAR
LED TV	2022-23	28869	Working	ICAR
Webcam	2022-23	8100	Working	ICAR
Laptop	2022-23	35088	Working	ICAR-CSISA
Head phone	2022-23	1412	Working	ICAR-CSISA

#### D) Farm implements

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
Rotavator	2018	86000	Working	Seed Hub
Scraper / leveler	2018	35000	Working	Seed Hub
Pulse thresher	2018	78000	Working	Seed Hub
MB plough	2018	23000	Working	Seed Hub

Paddy Reaper (Self Propelled)	2022-23	150000	Working	ICAR-NICRA
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### 1.8. Details of SAC meeting\* conducted in the year

Sl. No.	Date	Number of Participants	Salient Recommendations	Action taken	If not conducted, state reason
1.	25.112022	40	Trial on rice varieties in Saline soils		
			Promote Natural farming in low pest load crops like beans, knolkhol		
			Suggest another source of technology in growth performance of Pengba		
			Promote awareness on quality gur making		
			Promote leafy variety for Moringa powder preparation		
			Promote Micronutrient test for pulse crop and soil sample testing		
			Promotion of awareness and activities for Hi-tech horticulture like fertigation		
			Trials on maize promotion		
			Creation of Youtube channel for videos of promising technologies		
			Promotion of Nano DAP		
			Awareness and promotion of Crop resilient varieties for high temperature and pests		
			Minifeed and Biofloc unit at KVK		
			Production of literature on economics of IFS		
			Promotion of IFS activities		
			Support in poultry demonstration about the care and maintenance in poultry rearing to OLM beneficiaries		
			Activities for promotion of millets		
			Promote hygienic method of fish drying at Basudevpur FPOs, Value addition by hygienic dry fish		
			Market linkages for FPO on vegetable and pulse growers		
			Conservation based rice cropping system		
			Trial on off-season vegetable cultivation		
			Promotion of marigold round the year		

\* Salient recommendation of SAC in bullet form

Attach a copy of SAC proceedings along with list of participants

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

Sl. no.	Item	Information			
1	Major Farming system/enterprise	Rice-blackgram/greengram/mustard/sunflower/vegetable/sugarcane Pisciculture, Dairy, Poultry, Mushroom			
2	Agro-climatic Zone	North Eastern Coastal Plain Zone			
3	Agro ecological situation	3 AES in the district <ul style="list-style-type: none"><li>Alluvial Canal Irrigated</li><li>Low lying Flood prone</li><li>Saline soil group</li></ul>			
4	Soil type	Alluvial soil: 83209 ha, Saline soil: 20200ha, Sandy soil: 19146 ha			
5	Productivity of major 2-3 crops under cereals, pulses, oilseeds, vegetables, fruits and others(q/ha)	Crop	Productivity, q/ha	Crop	Productivity, q/ha
		Rice	42-45	Groundnut	20.8
		Greengram	5.9	Vegetables	135
		Blackgram	6.0	Sugarcane	860
		Mustard	6.1	Chilli	6.0
		Sunflower	12.0		
6	Mean yearly temperature, rainfall, humidity of the district	1427 mm, Mean Max temp-32.4 and min temp-21.5			
7	Production of major livestock products like milk, egg, meat etc.	Milk:48.2 MT/year Egg: 21.65 million/year Meat:4.38 MT/year			

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

Sl No.	Name of Taluk	Name of the block	Name of villages	Major crop & enterprises	Major problems identified (crop wise)	Identified thrust Areas
1	Rajendrapur	Bhandaripokhari	Thaila	Rice fallow Dairy Poultry	Low yield from DSR due to broadcast sowing, pest incidence, injudicious nutrient management Yield loss due to BPH in rice	Rice fallow intensification ICM in DSR BPH management

Sl No.	Name of Taluk	Name of the block	Name of villages	Major crop & enterprises	Major problems identified (crop wise)	Identified thrust Areas
				Fish	Fish production from smaller ponds leading to low profit Low milk yield and high cost of feed in dairy Slow growth rate of desi poultry bird Opportunity for intensification small ponds with fruits and vegetables	Nursery raising of carp spawns in small ponds Feed management in cows Backyard poultry for income generation
2	Adia	Bonth	Kuanrda	Rice fallow Dairy Poultry Fish+fruits/vegetable	Yield loss due to BPH in rice Rice fallow High incidence of pests in rice Smaller pond size leading to non-lucrative fish farming High cost of production of Milk Poor growth potential of Desi poultry bird	BPH management Intensification of rice fallows Varietal evaluation in vegetable crops Remunerative pisciculture in small ponds Cost effective feed management in cows Strengthening livelihood support through poultry and duckery
3	Radhaballavpur	Dhamnagar	Solagaon	Rice fallow Rice-blackgrampaira Dairy Poultry	Yield loss due to BPH in rice No fertilizer management of blackgrampaira crop resulting low yield High cost of milk production High incidence of diseases like FMD and Mastitis Low growth rate of desi poultry bird	BPH management Nutrient management in paira cropping Feed management of cows Disease management in livestock Strengthening backyard poultry Mushroom and duckery for income generation
4	Bodak	Tihidi	Orali	Rice fallow Rice-blackgrampaira Dairy Poultry	No fertilizer management of blackgrampaira crop resulting low yield High cost of milk production High incidence of diseases like FMD and Mastitis Slow growth rate of desi poultry bird Opportunity for mushroom production	Nutrient management in paira cropping Feed management of cows Disease management in livestock Strengthening backyard poultry Duckery for income generation
5	Mousudha	Chandbali	Junuda	Ricefallow Dairy Poultry	Low yield from local rice varieties High incidence of insect and diseases in rice High cost of milk production High incidence of diseases like FMD and Mastitis Poor growth potential of desi poultry bird	Varietal evaluation for salt affected ecology Paira cropping in fallows Fodder production for feed management of cows Backyard poultry variety Mushroom cultivation for income generation

## 2. c. Details of village adoption programme:

Name of the villages adopted by PC and SMS (2021-22) for its development and action plan

Name of village	Block	Action taken for development
Thaila	Bhandaripokhari	ICM of mechanized direct seeded rice with STBFR High valued horticultural crops on dykes of backyard small ponds Blackgram as paira for intensification of rice fallows Nursery raising of carp spawns to fries in small backyard tanks Vermicompost production using locally available resources Fodder and azolla production for feed management of cow Multidisciplinary trainings Animal Health Camp and Awareness camp on Soil sample collection and testing Seed treatment campaign
Kuanrda	Bonth	ICM of mechanized direct seeded rice with STBFR Mechanical transplanted rice demonstration Nutrient management in rice blackgram paira cropping Fodder and azolla production for feeding management of cattle Rainbow rooster in backyard system Multidisciplinary trainings
Solagaon	Dhamnagar	ICM of mechanized direct seeded rice with STBFR High valued horticultural crops on dykes of backyard small ponds Nutrient management in rice-blackgram paira Nursery raising of carp spawns to fries in small backyard tanks Vermicompost production using locally available resources Fodder and azolla production for feed management of cow Multidisciplinary trainings Animal Health Camp
Orali	Tihidi	ICM of mechanized direct seeded rice with STBFR Nutrient management in rice blackgram paira cropping Fodder and azolla production for feeding management of cattle Rainbow rooster in backyard system Multidisciplinary trainings
Junuda	Chandbali	Salt tolerant rice variety Luna Sampad for saline area Blackgram as paira for intensification of rice fallows Fodder and azolla for feeding management of cattle Multidisciplinary trainings

## 2.1 Priority thrust areas

Sl. No	Thrust area
1.	Biotic and abiotic stress management in rice with special reference to BPH, blast, BLB, salinity, weeds and flood
2.	Nutrient management of pulses and area expansion under rainfed rice-fallow
3.	ICM of sunflower
4.	Promotion of vermicompost and organic farming
5.	Soil health management and management of problematic soil
6.	Pest management of vegetable crops
7.	Species diversification, feed and disease management in pisciculture
8.	Promotion of pond based integrated farming system
9.	Low cost feeding practices in livestock through promotion of fodder and azolla
10.	Promotion of backyard poultry rearing system for small and marginal farmers
11.	Cost minimization and processing in mushroom

### 3. TECHNICAL ACHIEVEMENTS

### 3.A. Details of target and achievement of mandatory activities by KVK during the year

OFT												FLD											
No. of technologies tested:												No. of technologies demonstrated:											
Number of OFTs		Number of farmers										Number of FLDs				Number of farmers							
Target	Achievement	Target	Achievement									Target	Achievement	Target	Achievement								
			SC		ST		Others		Total						SC		ST		Others		Total		
			M	F	M	F	M	F	M	F	T				M	F	M	F	M	F	M	F	T
13	12	230	15	2	0	0	17	26	18	28	214	24	23	290	44	15	0	0	12	92	16	10	71

Training				Extension activities			
Number of Courses		Number of Participants		Number of activities		Number of participants	
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement

			SC		ST		Others		Total						SC		ST		Others		Total		
			M	F	M	F	M	F	M	F	T				M	F	M	F	M	F	M	F	T
84	73	2260	203	73	5	0	894	826	1102	8	901	203	264	7734	656	147	181	15	7139	1768	7976	130	906

Impact of capacity building											Impact of Extension activities										
Number of Participants trained		Number of Trainees got employment (self/ wage/ entrepreneur/ engaged as skilled manpower)									Number of Participants attended		Number of participants got employment (self/ wage/ entrepreneur/ engaged as skilled manpower)								
Target	Achievement	SC		ST		Others		Total			Target	Achievement	SC		ST		Others		Total		
		M	F	M	F	M	F	M	F	T			M	F	M	F	M	F	M	F	T
195	236	1	2			13	25	14	27	41	500	725					120	85	120	85	205

Seed production (q)					Planting material (in Lakh)				
Target		Achievement			Target		Achievement		
570		630			0.67		0.595		

Livestock strains and fish fingerlings produced (in lakh)*					Soil, water, plant, manures samples tested (in lakh)				
Target		Achievement			Target		Achievement		
Fish fingerlings- 9.58		10.0			Soil-1000		521		
Poultry chicks- 0.02		0.012			Water-100		311		

\* Give no. only in case of fish fingerlings

Publication by KVKs							
Item	Number	No. circulated	No. of Research papers in NAAS rated Journals	Highest NAAS rating of any publication	Average NAAS rating of the publications	Details of awarded publication, if any	Details of Award given to the publication

Research paper							
Seminar/conference/ symposia papers							
Books							
Bulletins							
News letter	1	500					
Popular Articles							
Book Chapter							
Extension Pamphlets/ literature	5	3550					
Technical reports							
Electronic Publication (CD/DVD etc)	3	mass					
TOTAL	9						

# 1 Achievements on technologies assessed and refined

## OFT-1

1 .	Title of On farm Trial	Assessment of nano nitrogen in rice
2 .	Problem diagnosed	High cost of N fertiliser and opportunity for cost minimization
3 .	Details of technologies selected for assessment/refinement	FP: Application of N @80kg/ha TO1: Foliar application of IFFCO nano-N @ 1250ml/ha at tillering & PI Stage + No Soil application of N+100% P & K TO2: Foliar application of IFFCO nano-N @ 1250ml/ha at tillering & PI Stage +Soil application of 50%N through urea +100% P&K
4 .	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	IFFCO, 2020



5	Production system and thematic area	Rice-Vegetable & Nutrient management
6	Performance of the Technology with performance indicators	No. of effective tillers/hill, No. of grains per panicle, Net return (Rs./ha) found to be better under nano N with 50% soil nitrogen
7	Final recommendation for micro level situation	Trial will be repeated in second year for confirmed results
8	Constraints identified and feedback for research	
9	Process of farmers participation and their reaction	Trials conducted in participatory approach. Farmers are encouraged to use nano liquid urea fertilizer over granular urea

*Thematic area:* Nutrient management

Problem definition: High cost of N fertiliser and opportunity for cost minimization

Technology assessed:

FP: Application of N @80kg/ha

TO1: Foliar application of IFFCO nano-N @ 1250ml/ha at tillering & PI Stage + No Soil application of N+100% P & K

TO2: Foliar application of IFFCO nano-N @ 1250ml/ha at tillering & PI Stage +Soil application of 50%N through urea +100% P&K

Table:

Technology option	No. of effective tillers/hill	Yield (q/ha)	Cost of cultivation (Rs./ha)	Net return (Rs./ha)	BC ratio
FP	13	52.3	45500	49000	2.07
TO <sub>1</sub>	11	48.0	41847	51753	2.23
TO <sub>2</sub>	13	53.5	42372	53928	2.27
CD 5%	0.9	4.1			

Results:

## OFT-2

1 .	Title of On farm Trial	Assessment of organic formulations for organic production of pointed gourd
2 .	Problem diagnosed	Opportunity for promoting organic farming in high valued vegetable
3 .	Details of technologies selected for assessment/refinement	FP: NPK @130-80-60 TO1: Amrit Pani (Cow dung- 10kg + 500gm jaggery + 250 ml mustard oil + Water- 200L) Soil +Foliar application TO2: Jeevamrut (Cow dung- 10kg +Cow urine- 10L +Jaggery- 2kg + Flour of pulse – 2kg + Live soil (Healthy soil)- 1 kg + Water- 200L), soil and foliar application
4 .	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	TO1- NEERI, 2018 TO2-TNAU, 2018
5 .	Production system and thematic area	Rice-Vegetable & Organic farming
6 .	Performance of the Technology with performance indicators	No. of fruits/vine, vine length, Yield, SOC, available NPK, Economics
7 .	Final recommendation for micro level situation	Trial is to be repeated again.
8 .	Constraints identified and feedback for research	
9 .	Process of farmers participation and their reaction	Trial is conducted through participatory approach of farmers who love to practice organic farming. Application of Jeevamrut is better than their own practice.

*Thematic area:* Organic farming

Problem definition: Opportunity for promoting organic farming in high valued vegetable

Technology assessed:

FP: NPK @130-80-60

TO1: Amrit Pani (Cow dung- 10kg + 500gm jaggery + 250 ml mustard oil + Water- 200L) Soil +Foliar application

TO2: Jeevamrut (Cow dung- 10kg +Cow urine- 10L +Jaggery- 2kg + Flour of pulse – 2kg + Live soil (Healthy soil)- 1 kg + Water- 200L), soil and foliar application

Table:

Technology option	No. of trials	No. of fruits/vine	Vine length(cm)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
FP	7	5.67	169.8	129.46	140125	388380	248255	2.77
TO1	7	5.2	166.77	112.05	119950	336150	216200	2.80
TO2	7	5.34	168.7	115.18	120900	345540	224640	2.86

Results: Application of Jeevamrut resulted the yield of 125.98 q/ha and the percent increase in yield over farmer's practice was 14.2%.

### OFT-3

1	Title of On farm Trial	Assessment of natural farming practices in few vegetable crops (Brinjal, pointed gourd, tomato)
2	Problem diagnosed	Opportunity for improvement in soil health, cost reduction
3	Details of technologies selected for assessment/refinement	FP: Application of NPK @80-50-60kg/ha TO <sub>1</sub> : Beejamrut+Jivamrut, straw mulching, Neemastra TO <sub>2</sub> : Amrut ghol ( Cow urine-5 L +Cow dung-1 Kg + decaying fruits juice-1 L - kept for 5 days for fermentation) as Soil +Foliar application
4	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Subhash Palekar Krishi, 2017, Akhil Bharatiya Sajiv Kheti Samaj, Mapusa, Goa
5	Production system and thematic area	Rice-Vegetable, Natural farming
6	Performance of the Technology with performance indicators	

7.	Final recommendation for micro level situation	
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	

### *Thematic area:*

Problem definition:

Technology assessed:

**Table: Pointed gourd**

Technology option	No. of trials	No. of fruits/vine	Vine length(cm)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
FP	8	5.9	172.7	133.1	144250	399375	255125	2.77
TO1	8	5.6	170.9	118.9	115190	356719	241529	3.09
TO2	8	5.4	167.2	112.4	112060	337266	225206	3.01

**Table: Brinjal**

Technology option	No. of trials	Fruit weight (gm)	Fruits/plant	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
FP	8	49.4	7.4	301.7	175250	452578	277328	2.58
TO1	8	48.6	7.1	247.8	1,48,812	381094	232282	2.56
TO2	8	46.4	6.9	243.5	1,44,312	365273	220961	2.53

Results: Though FP gave higher yield than TO1 & TO2, BC ratio is highest in TO1 in pointed gourd. But in case of brinjal crop, FP gave higher yield & BC ratio than TO1 & TO2. Pest & diseases in brinjal crop is difficult to control with the use of neemastra alone.

## OFT-4

1	Title of On farm Trial	Assessment of integrated pest management modules in sunflower
2	Problem diagnosed	Yield reduction due to collar rot/stem rot, leaf damage & head damage in sunflower
3	Details of technologies selected for assessment/refinement	FP: Drenching of catbendazim + mancozeb , Spraying of Lambda cyhalothrin, Cypermethrin TO1: Spot application of FYM incubated with T. viridae + P. flourescence @ 5 kg/ ha + Spot drenching of Tebuconazole @ 500 ml/ ha+ Pheromone Trap for monitoring of spodoptera & helicoverpa+ Alternate need based application of neem oil (1500 ppm) @ 1.5 L/ ha and Flubendiamide 480 SC @ 150 ml/ ha + Poison bait placement (10 kg Rice bran+ 1 kg jaggery+ 200 g cartap hydrochloride) TO2: Spot application of metalaxyl + mancozeb@2g/l +mechanical destruction of larvae+2 sprays of spinosad 45sc@175ml/ha
4	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	TO1- OUAT, 2020-21 TO2-UAS, Raichur, 2020
5	Production system and thematic area	Rice-sunflower & IPM
6	Performance of the Technology with performance indicators	Per cent disease incidence, percent leaf damage by Spodoptera & Helicoverpa found comparatively less and higher net return in TO2
7	Final recommendation for micro level situation	Trial will be repeated in second year for confirmed results
8	Constraints identified and feedback for research	Cost of technology is higher and availability of bioagents should be made easily available in local market
9	Process of farmers participation and their reaction	Trials conducted in participatory approach. Farmers are encouraged to go for IPM practices in Sunflower

*Thematic area: IPM*

Problem definition: Yield reduction due to collar rot/stem rot, leaf damage & head damage in sunflower

Technology assessed:

FP: Drenching of catbendazim + mancozeb , Spraying of Lambda cyhalothrin, Cypermethrin

TO1: Spot application of FYM incubated with T. viridae + P. flourosence @ 5 kg/ ha + Spot drenching of Tebuconazole @ 500 ml/ ha+ Pheromone Trap for monitoring of spodoptera & helicoverpa+ Alternate need based application of neem oil (1500 ppm) @ 1.5 L/ ha and Flubendiamide 480 SC @ 150 ml/ ha + Poison bait placement (10 kg Rice bran+ 1 kg jaggery+ 200 g cartap hydrochloride)

TO2: Spot application of metalaxyl + mancozeb@2g/l +mechanical destruction of larvae+2 sprays of spinosad 45sc@175ml/ha

Table:

Technology option	No. of trials	Disease incidence (%)	Leaf damage by spodoptera (%)	Head damage by helicoverpa (%)	Seed Yield(q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
FP	7	13.75	20.5	11.5	11.2	43,100	67,200	24,100	1.55
TO1	7	5.5	8.5	5.5	16.2	47,800	98,400	50,600	2.05
TO2	7	8.25	12	8	13.5	45,600	81,000	35,400	1.77

Results:

TO1 found to be better than TO2 and FP. The lowest PDI 5.5%, leaf damage by Spodoptera 8.5% and head damage by Helicoverpa 5.5% was observed in TO1 with higher yield of 16.2q/ha and BC ratio 2.05

## OFT-5

1	Title of On farm Trial	Assessment of growing media for raising seedlings in portrays
2	Problem diagnosed	High mortality and poor quality of seedling grown in soil
3	Details of technologies selected for assessment/refinement	FP: Raising seedling in portrays using soil TO <sub>1</sub> : Raising seedlings in portray with Cocopeat TO <sub>2</sub> : Raising seedling with 75% cocopeat +25% FYM enriched with neem cake and biopesticides (T. viride, P. flourosence@2kg each in 200kg neem cake mixed with 600kg FYM) in portrays

4	Source of Technology (ICAR/AICRP/SAU/other, please specify)	TO <sub>1</sub> : CIWA, 2015 TO <sub>2</sub> : TNAU, 2019
5	Production system and thematic area	Nursery, Nursery management
6	Performance of the Technology with performance indicators	
7	Final recommendation for micro level situation	
8	Constraints identified and feedback for research	
9	Process of farmers participation and their reaction	

**Thematic area:** Varietal evaluation

Problem definition: Low yield from available papaya variety

Technology assessed:

FP: Raising seedling in soil based nursery beds

TO<sub>1</sub>: Cocopeat

TO<sub>2</sub>: Cocopeat and FYM

Table:

Technology option	No. of trials	Yield component			Mortality %	Seedling/ 10 tray	Cost/ 10 tray (Rs)	Gross /10 tray trausreturn (Rs/ha)	Net /10 tray /return/10 trays (Rs./ha)	BC ratio
		Days to germination (cm)	Germination %	Leaf area cm <sup>2</sup>						
FP	7	6.714	84	4.286	45.143	538	660	1076	1141	1.63
TO <sub>1</sub>	7	6	86.571	6.429	11.857	865	1021	2162	860.6	2.12
TO <sub>2</sub>	7	5.571	88.429	7.143	9.857	884	976	2210	1234	2.26
CD		0.555	0.967	0.525	1.191					

Results: use of cocopeat along with FYM is better than single use of cocopeat

## OFT-6

1	Title of On farm Trial	Assessment of different trellies in bitter gourd for higher production
2	Problem diagnosed	High incidence of fruit rot due to ground trelling
3	Details of technologies selected for assessment/refinement	FP: Ground Trelling TO1: Single trellie, one row constructed with bamboo poles and GI wires, jute rope TO2: Lean to type trellies-stake are joined between two adjoining bed forming an A shaped structure .horizontal stakes are installed at the top joining of all other beds.T he stakes support the climbing vines. Strings are used to secure adjoining stakes, trellies height 2m
4	Source of Technology (ICAR/AICRP/SAU/other, please specify)	TO1- CHES 2014 TO2- CHES 2014
5	Production system and thematic area	Rice-Vegetable & ICM
6	Performance of the Technology with performance indicators	The lean to type trellie gave a yield of 114.3 q while single trellie gave an yield of 110.6q with B:C ratio of 2.33.the single trellie is preffered because of prevalance of lowland and easy agricultural opeation
7	Final recommendation for micro level situation	The yield was high with less rotting in single type trellie which wasat par with lean to type
8	Constraints identified and feedback for research	Cost of stacking and netting for temporary period is high. The structure with less costly inputs and labour requirement may be done foe benefit of farming community
9	Process of farmers participation and their reaction	The farmers are interested to go for trellie near pond dykes which are permanent trellies for atleast 2 years

*Thematic area:* ICM

Problem definition: High incidence of fruit rot due to ground trelling

Technology assessed:



FP: Ground Trelling

TO1: Single trellie, one row constructed with bamboo poles and GI wires, jute rope

TO2: Lean to type trellies-stake are joined between two adjoining bed forming an A shaped structure .horizontal stakes are installed at the top joining of all other beds.T he stakes support the climbing vines. Strings are used to secure adjoining stakes, trellies height 2m

Table:

Technology option	No. of trials	Yield component			Incidence of fruit fly %	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		No of fruits/plant	Wt of fruits(kg)	Fruit rot %						
FP	7	11.03	0.062	48.26	24.13	76.57	87228.57	153142.9	65914.29	1.76
TO1	7	12.81	0.069	38.36	19.18	100.43	99228.57	200857.1	101628.6	2.02
TO2	7	14.83	0.074	27.14	13.57	124.57	113478.57	249142.9	135664.3	2.20
CD										

**Results:** The lean to type trellie gave a yield of 124 q while single trellie gave an yield of 100q with B:C ratio of 2.20

## OFT-7

1	Title of On farm Trial	Assessment of growth promoters for maximizing carp fry yield in nursery tanks
2	Problem diagnosed	Less growth rate and poor yield of fry
3	Details of technologies selected for assessment/refinement	FP: Only powdered feed (Rice bran: GNOC ::1:1) TO: Use of Manganous sulphate and Cobaltous chloride each at a dose of 0.01mg per spawn per day (Incorporated with powdered feed) TO2: Use of commercially available yeast powder ( <i>Saccharomyces cerevisiae</i> ) at a dose of 0.5% of total powdered feed to be served daily TO3: Incorporation of commercially available RAAFRES-AQ @250ppm in powder feed

4	Source of Technology (ICAR/AICRP/SAU/other, please specify)	TO-1-ICAR-CIFA – 20013, TO-2 – TNAU-2019 and ICAR-CIFE – 2015
5	Production system and thematic area	Pond based farming system & Production and Management
6	Performance of the Technology with performance indicators	Survivability (%), B:C
7	Final recommendation for micro level situation	Incorporation of commercially available RAAFRES-AQ @250ppm in powder feed gives better growth rate and economic yield of fish fry.
8	Constraints identified and feedback for research	Availability quality spawn
9	Process of farmers participation and their reaction	Farmers involved in the current assessment were convinced with the results by visualizing the faster growth and its significant role in increasing fish yield.

**Thematic area:** Production and Management

Problem definition: Less growth rate and poor yield of fry

Technology assessed:

FP: Only powdered feed (Rice bran: GNOC ::1:1)

TO: Use of Manganous sulphate and Cobaltous chloride each at a dose of 0.01mg per spawn per day (Incorporated with powdered feed)

TO2: Use of commercially available yeast powder (*Saccharomyces cerevisiae*) at a dose of 0.5% of total powdered feed to be served daily

TO3: Incorporation of commercially available RAAFRES-AQ @250ppm in powder feed

Table:

Technology option	No. of trials	Survival rate (%)	Yield (nos/ha)	Net return (Rs./ha)	BC ratio
FP	6	24	7,20000	41,800	1.2
TO1	6	28	8,40000	54,600	1.4
TO2	6	32	9,60000	62,400	1.8
TO3	6	43	12,90000	1,20500	2.5

Results: Incorporation of commercially available RAAFRES-AQ @250ppm in powder feed gives better growth rate and economic yield of fish fry.

## OFT-8

1 .	Title of On farm Trial	Assessment of genetically improved Catla spawn for maximising fish productivity
2 .	Problem diagnosed	High mortality and poor initial growth rate of Catla spawns in nursery pond
3 .	Details of technologies selected for assessment/refinement	FP: Nursery management with stocking of normal Catla spawns @30 lakhs/ha with single basal manuring TO-1: Nursery management with stocking of improved Catla spawns @30 lakhs/ha with single basal manuring TO-2: Nursery management with stocking of improved Catla spawns @30 lakhs/ha with phased manuring
4 .	Source of Technology (ICAR/AICRP/SAU/other, please specify)	TO-1: ICAR-CIFA – 2015 TO-2: ICAR-CIFA – 2018
5 .	Production system and thematic area	Pond based farming system, Production and Management
6 .	Performance of the Technology with performance indicators	By stocking improved Catla spawns with phased manuring the farmers are getting better survivability and Specific growth rate.
7 .	Final recommendation for micro level situation	-
8 .	Constraints identified and feedback for research	Timely availability of Improved Catla spawn
9 .	Process of farmers participation and their reaction	The farmers are happy with better Specific growth rate and survivability.

*Thematic area:* Production and Management

Problem definition: Less initial growth rate of Catla spawns in nursery tanks encourages predation by insects, thus leads to poor survival and final low yield of fry

Technology assessed:

FP: Nursery management with stocking of normal Catla spawns @30 lakhs/ha with single basal manuring

TO-1: Nursery management with stocking of improved Catla spawns @30 lakhs/ha with single basal manuring

TO-2: Nursery management with stocking of improved Catla spawns @30 lakhs/ha with phased manuring

Table:

Technology option	No. of trials	Survival rate (%)	Yield (q/ha)	SGR (%)	BC ratio
FP	6	23	16.5	1.5	1.2
TO1	6	35	20.4	1.8	1.8
TO2	6	44	24.6	2.1	2.3

Results:

## OFT-9

1	Title of On farm Trial	Assessment of effectiveness of different extension methods to access information on rice production
2	Problem diagnosed	Poor accessibility to accurate and timely information on technical knowledge/advisory in rice production
3	Details of technologies selected for assessment/refinement	FP: Farmers getting information from peer group, input dealers, extension functionaries, mass media and, KMA TO-1: FP + Short Video Lecture+ Clarification session TO-2: FP + Using of "riceXpert" App.
4	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	TO2: NRRI, Cuttack.2017
5	Production system and thematic area	Rice- Pulses, ICT
6	Performance of the Technology with performance indicators	

7 .	Final recommendation for micro level situation	
8 .	Constraints identified and feedback for research	
9 .	Process of farmers participation and their reaction	

*Thematic area:*

Problem definition:

Technology assessed:

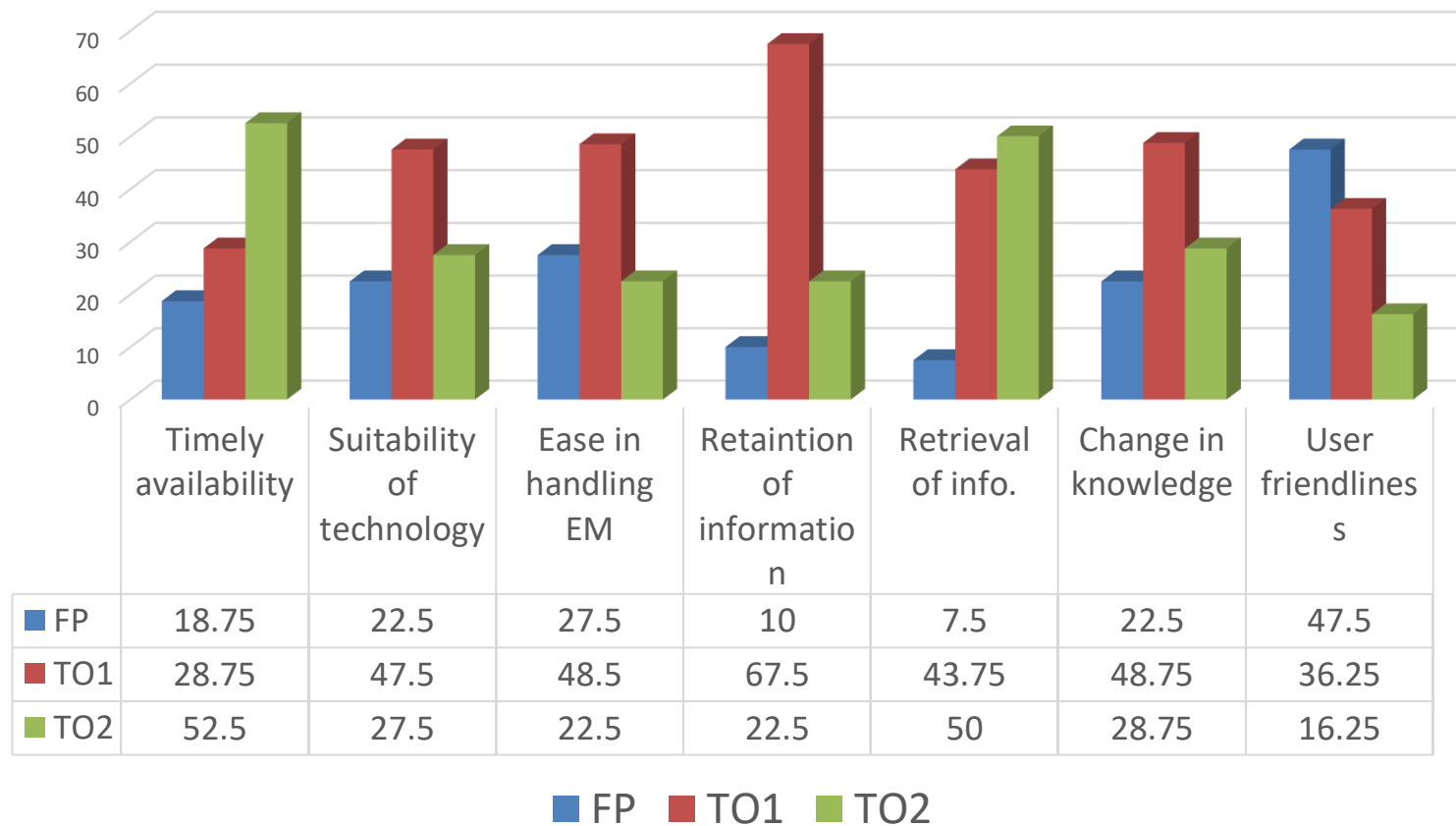
FP: Farmers getting information from peer group, input dealers, extension functionaries, mass media and, KMA

TO-1: FP + Short Video Lecture+ Clarification session

TO-2: FP + Using of "riceXpert" App.

Results:

## Effectiveness of different extension methods



## OFT-10

1.	Title of On farm Trial	Assessment of the performance of FPOs with varied levels of task and commodity to enhance income
2.	Problem diagnosed	Unorganized farmers fetching low price due to distress sale of farm produce
3.	Details of technologies selected for assessment/refinement	FP: Farmers marketing their produce through intermediaries TO1: FPO dealing with a single commodity with multiple task i.e., Fish production-shorting, grading, packaging and marketing TO2: FPO dealing with multi-commodity with single task i.e., Rice, pulses, sunflower-Marketing TO3- FPO dealing with multi-commodity with multi-task i.e., Rice, Pulses, Oilseeds, Mushroom- sorting, grading, packing, value addition, branding, leveling and marketing
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	
5.	Production system and thematic area	Rice-pulses, Rice- Sunflower Fishery, mushroom
6.	Performance of the Technology with performance indicators	
7.	Final recommendation for micro level situation	
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	

*Thematic area:*

Problem definition:

Technology assessed:

FP: Farmers marketing their produce through intermediaries

TO1: FPO dealing with a single commodity with multiple task i.e., Fish production- shorting, grading, packaging and marketing

TO2: FPO dealing with multi-commodity with single task i.e., Rice, pulses, sunflower-Marketing

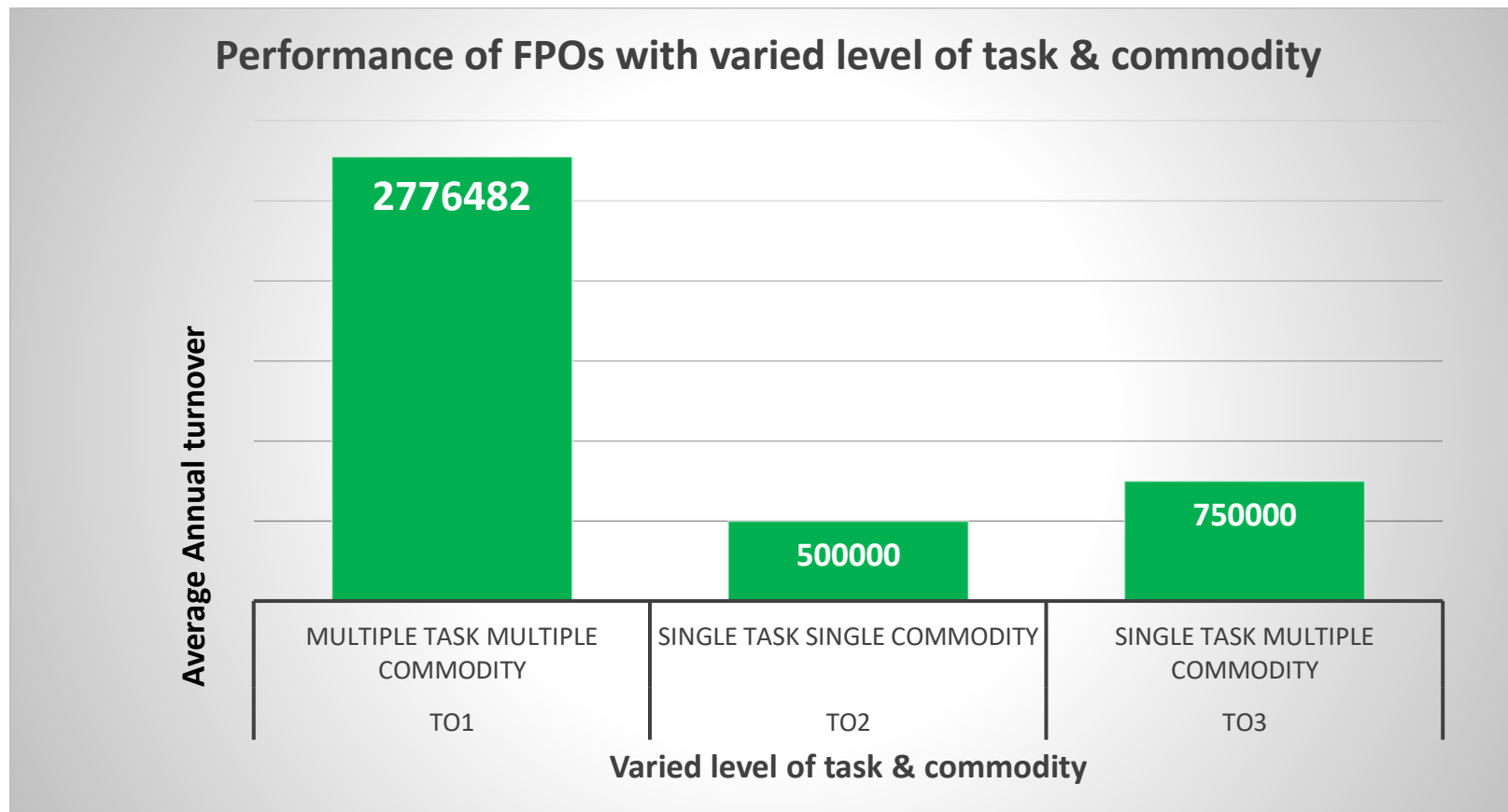
TO3- FPO dealing with multi-commodity with multi-task i.e., Rice, Pulses, Oilseeds, Mushroom- sorting, grading, packing, value addition, branding, leveling and marketing

Table:

Parameters	S.A,	A	DA	MS	Rank
	F(%)	F(%)	F(%)		
Easy to join new members	25(41.6)	20(33.3)	15(25.0)	2.16	I
Easy to produce in bulk	8(13.3)	26(43.3)	26(43.3)	1.7	II
Easy to sell the produce	7(11.6)	25(41.6)	28(46.6)	1.65	III
Easy to develop market linkage	5(8.3)	24(40)	31(51.6)	1.56	IV
Easy to manage group	0	23(38.3)	37(61.6)	1.33	V
Easy to develop business plan	2(3.3)	12(20)	46(76.6)	1.26	VI
Easy to implement business plan	2(3.3)	10(16.6)	48(80.6)	1.23	VII

N.B.- SA- Strongly agree, A- Agree, DA- Disagree, MS- Mean score, F- Frequency





### OFT-11

1	Title of On farm Trial	Assessment of packaging practices of <i>V. vulvacea</i> mushroom
2	Problem diagnosed	Distress sale and low income due to short shelf life

3 .	Details of technologies selected for assessment/refinement	FP: Without treatment of mushroom buds packing in polythene bag for selling purpose TO1: 75 $\mu$ HIPS punnet can be used for packing in modified EPS cabinet with 6kg ice placed in the separate side compartment TO2: Mushroom packing in 75 $\mu$ paper pack covering thin polythene inner side of the bag
4 .	Source of Technology (ICAR/AICRP/SAU/other, please specify)	OUAT, 2018
5 .	Production system and thematic area	Homestead & Income generation
6 .	Performance of the Technology with performance indicators	Self life of the mushroom increased by keeping the mushroom in thermocool box with ice pack up to 72 hrs.
7 .	Final recommendation for micro level situation	Storing and marketing of the mushroom in punnet having 32 holes increase the self life of mushroom.
8 .	Constraints identified and feedback for research	Lack of availability of thermocool box.
9 .	Process of farmers participation and their reaction	Satisfactory.

*Thematic area:* Income generation

Problem definition: Distress sale and low income due to short shelf life

Technology assessed:

FP: Direct sale of mushroom in polythene bag

TO1: Packaging of mushroom in 75 $\mu$  HIPS punnet in modified EPS cabinet +6 kg ice

TO2: Packaging in 75 $\mu$  paper pack with thin inner polythene lining

Table:

Technology option	No. of trials	Yield component		Income of Mushroom (Rs./kg) After 18hrs	Income of Mushroom (Rs./kg) After 24 hrs	Income of Mushroom (Rs./kg) After 48hrs	Income of Mushroom (Rs./kg) After 72 hrs
		Mushroom contain in packet/kg	Self life of mushroom				
FP	10	10	12hrs	110	35	0	0

TO1	10	10	72hrs	150	150	140	120
TO11	10	10	20hrs	150	120	30	0

Results: Packaging of mushroom in 75 $\mu$  HIPS punnet in modified EPS cabinet +6 kg ice (TO1) is found to increase shelf-life of mushroom to 72hrs. The same mushroom can be sold in market in good condition after 18, 24, 48 and 72hrs of harvest and provides ways to avoid distress sale and higher income.

## OFT-12

1	Title of On farm Trial	Assessment of production of paddy straw mushroom in semi composted substrate
2	Problem diagnosed	Unavailability of unthreshed paddy straw
3	Details of technologies selected for assessment/refinement	FP: Use of bundled straw for mushroom cultivation TO1: Paddy straw + wheat bran@ 6% + Chicken manure @1.2% + CaCO <sub>3</sub> @2% TO 2:Paddy straw/ cotton waste + rice bran@5% (dry wt. basis)+ CaCO <sub>3</sub> @1%
4	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	OUAT, 2018 NRCM, 2007
5	Production system and thematic area	Mushroom production & Income generation
6	Performance of the Technology with performance indicators	Mycelium developed after 3days, Pin head appeared at 9days and mushroom plucked at 12days
7	Final recommendation for micro level situation	Maintain 32 <sup>0</sup> -34 <sup>0</sup> C temperature and 75-85% humidity in the production unit.
8	Constraints identified and feedback for research	Non availability of low cost boiler.
9	Process of farmers participation and their reaction	Good but it is costly

*Thematic area:* Income generation

Problem definition: Unavailability of unthreshed paddy straw

Technology assessed:

TO1: Paddy straw + wheat bran@ 6% + CaCO<sub>3</sub> @2% (Paddy straw will chopped into 2-3 inches. The cut pieces will spread in a thin layer and keep wet for 24 hours by sprinkling water to maintain 70 to 80 % moisture in the wet straw. All the ingredients will mixed with the wet straw except calcium carbonate and form a heap and cover by a thin polythene sheet. A turning will be given on the second day and the heap will restored. The second turning will be given on the 3rd or 4th day, calcium carbonate will mixed thoroughly and heap was restored again. Compost will ready on the 6th day to prepare bed)

TO 2: Paddy straw + rice bran@5% (dry wt. basis)+ CaCO<sub>3</sub> @1%

Table:

Technology option	No. of trials	Yield (kg/bed)	Cost of cultivation (Rs./bed)	Gross return (Rs/bed)	Net return (Rs./bed)	BC ratio
FP	5	1.2	75	180	105	2.4
TO1	5	2	100	300	200	3.0
TO2	5	1.5	85	225	140	2.6

Results:

### 3.2 Achievements of Frontline Demonstrations

#### A. Details of FLDs conducted during the year

##### Cereals

Sl. No	Crop	Thematic area	Technology Demonstrated with detailed treatments	Area (ha)		No. of farmers/ demonstration										Reasons for shortfall in
				Proposed	Actual	SC		ST		Others		Total				
						M	F	M	F	M	F	M	F	T		

																achievement
1.	Rice	DSR	Dry seeding with seed-cum-ferti drill, line sowing, seed rate@40kg/ha, fertilizer along with seeding, Bispyribac sodium@250ml/ha at 15-20 DAE	4	4					10		10				
2	Rice	IWM	Fenoxaprop-p-ethyl + Ethoxysulfuron (50+15 g/ha) at 15 days after transplanting(DAT) + HW at 45 DAT	4	4					9	1	9	1	10		

#### Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil (Kg/ha)			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O					
Rice	Kharif, 2022	RF	lowland	251-464	15-59	72-103	Fallow	June, 2022	Nov., 2022	1171.4	63

Rice	Kharif, 2022	Irrigated	Medium-shallow low land	226-477	16-48	66-88	Fallow	Aug., 2022	Dec., 2022	1175.8	64
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In both the Tables, information of same crop should be provided. For example, if in Table 3.2A crops are mentioned as a,b,c,d etc., in the table for Details of farming situation, the same crop should be mentioned in the identical sequence.

#### Performance of FLD

Crop	Yield (q/ha)		% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
	Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Rice	56.4	54.2	4.05	61500	104340	42840	1.70	77750	100270	22520	1.29
Rice	54.4	48.9	11.2	53900	97920	44020	1.82	52500	88020	35520	1.68

#### Oilseeds:

#### Frontline demonstrations on oilseed crops

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Mustard	ICM	Var. NRCHB 101, line sown with seed-ferti drill, NPK 60-30-30, use of B and S, Neem oil + need based PP measures	13	2	8.9	7.3	22.1	19500	31231	11731	1.6	16500	25577	9077	1.55

Groundnut	ICM	Var.Dharani, line sown with seed-ferti drill, line spacing: 30cm, NPK 20-40-40, use of B and S, Neem oil + need based PP measures	13	1.44	20.56	17.48	17.6	88405	143920	55515	1.62	85375	122360	36985	1.43
Sunflower	Nutrient management	Application of NPK 90:90:60 with 2 splits of N, 60% + 40%	13	2	20.74	17.58	17.97	47790	82960	35170	1.74	43100	70320	27220	1.63

\* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.

\*\* BCR= GROSS RETURN/GROSS COST

### Pulses

#### Frontline demonstration on pulse crops

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demon	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
	Total														

\* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.

\*\* BCR= GROSS RETURN/GROSS COST

## Other crops

Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	Other parameters		*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demonstration	Check		Demo	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Okra	INM	Application of vermicompost @5 t/ha+RDF @ NPK::110:60 :80 kg/ha + mixed culture of bio-fertilizers i.e. Azotobacter, Azospirillum and PSB (1:1:1) during sowing	13	0.1	144.7	126.9	14	Fruit length (cm)-15.6, Plant height(cm)-71.6	Fruit length (cm)-18.9, Plant height(cm)-61.5	170813	434135	263322	2.54	170435	380769	210334	2.23
Brinjal	INM	Application of 75% of STBR (RD-NPK::120:80 :100 Kg/ha) Fertilizer N + Azotobacter 4 Kg/ha + Azospirillum 4 Kg/ha + full P and K	13	0.2	311.7	289.2	7.78	Fruit wt.(g)-48.01, No. of fruits/Plant-7.36	Fruit wt.(g)-42.04, No. of fruits/Plant-6.9	178825	467596	288771	2.61	178375	433846	255471	2.43



Brinjal	IPM	Pheromone trap @20/ac for mass trapping + weekly release of 50,000-60,000 Trichogramma chilonis from 45DAT for 5 times+ alternate spraying of Bt@2g/lit of water and neem oil 1500ppm @3ml/l at 15 days interval from 20-25 DAT. Need based spraying of Spinosad 45 SC @160ml/ha at flower initiation stage, regular clipping of affected shoots and burying those in soil	10	0.4	240	180	25%	Per cent fruit infested was 15.6%	Per cent fruit infested was 25.8%	1,90,000	4,80,000	2,90,000	2.52	2,20,000	3,60,000	1,40,000	1.63
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Bitter gourd	IPM	Seed treatment with Imidacloprid 600 FS @ 5 ml/ kg seed. + Soil application of Rynaxypyr 0.4 G @ 10 kg/ ha at 30 DAS + Yellow Sticky Trap at 2-3 leaf stage+ Alternate need based application of Flonicamid 50 WG @ 150 g/ ha and neem oil formulations (1500 ppm) @ 1.5 l/ ha + Foliar application of vegetable micronutrien t mixture @ 2.5 g/ l of water twice at 15 days interval reduced the population of leaf hopper and	10	0.4	117.5	92.6	27%	Per cent leaf damaged by leaf curl virus 18.5%	Per cent leaf damaged by leaf curl virus 33.7%	92,000	2,35,0 00	1,43,0 0	2.55	1,08,0 00	1,85,2 00	77,20 0	1.71
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		minimised the incidence of little leaf disease in bitter gourd															
Okra	IWM	Weed management in okra using pendimethalin @750g a.i/ha followed by Mechanical weeding (power weeder) at 30 & 45 DAS	10	0.4	112.0	82,5	35	No of weeds/m <sup>2</sup> 49.2	No of weeds/m <sup>2</sup> 241	11740 6	22400 0	10659 4	1.90	12180 0	16500 0	43200	1.35
Cucumber	ICM	The application of Etherel @50ppm each starting from the first or the third leaf stage and continuing 3times more at weekly interval in cucumber	10	0.4	130.59	99.01	31	No of femaleflowers/ plant 11.7	No of femaleflowers/ plant 10	89000	13059 0	41590	1.46	87200	99100	11900	1.13

Coconut	INM	Husk burial to be done in coconut basins to overcome drought and button shedding. Bury husks @ 100 Nos. with concave surface facing upwards or 25 kg of coir pith /palm in circular trenches, dug 30 cm width and 60 cm depth at 1.5 metre radius with vermicompost @30kg/palm +bio fertilizer application Azospirillum and PSB @200g/tree+ green manuring(in situ)+ vermiwash 10l/palm	10	0.4	15027 nuts	12213n uts	23	Fruit drop/plant 13.6	Fruit drop/plant 31	I2744 0	15027 7	22837	1.17	11115 6	12213 0	10974	1.09
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Pointed Gourd	ICM	Artificial pollination by plucking male flowers, removal of petals ,collection of pollen by hammering with wooden stick in a glass ,diluting with water, sieving using net and pollinating female flowers by putting a drop of solution by dropper	10	0.4	100.3	75.3	33	No of fruits/plant86	No of fruits/plant65	13980 0	20060 0	60800	1.43	13647 0	15060 0	14130	1.1
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Nutritional garden	Nutritional security	Trellis structure with PP rope for raising cucurbits, raising seedlings in trays, vermi composting in ring tank Growing leafy vegetables, brinjal, tomato, chilli, yam, elephant foot yam, pumpkin, bottle gourd, bitter gourd etc , 2 papaya, 1 lemon, 1 drumstick and 2 banana plants	20	20	5.7kg/day	3.82kg/day	49	1.52kg	1.22kg	4320	11800	7980	2.73	3760	8870	5110	2.3
Acacia-turmeric	Production technologies	Turmeric (var. Rajendra Sonia) to be planted as per the interspace availability in the existing block plantation of Acacia spp.	5	0.1	10	8	25	No. of Rhizome/plant – 7  wt. of Rhizome/plant – 250g	4  235g	11000 0	15000 0	40000	1.3	0	0	0	0

Marigold	ICT	Transplanting of seedlings at spacing 60×45 cm, topping of apical shoots at 15days interval (3 times), application of DAP+ Potash @ 50g/plant before flowering and flowering stage	10	0.8	172	98	54	-	-	18200	51600	33400	2.83	12000	24500	12500	2.04
	Total																

## Livestock

[illegible]

Poultry	Rainbow rooster	Brooding management for 21 days with floor space of 0.3 sqft/bird with help of chick guards, artificial heat @ 1-3 watt per chick, feeders and drinkers @ 1 each per 50 chicks, vaccination with against RD on 7 <sup>th</sup> day, 28 <sup>th</sup> day, IBD on 14 <sup>th</sup> day. Use of electrolytes, preventive	20	20	300g/21 days old chicks	130g/21 days old chicks	130.7	5% mortality rate	30% mortality rate	900/20 nos of chicks	1600/20 nos of chicks	700	1.8	700/20 nos of chicks	950/20 no of chicks	250	1.35
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[illegible]

\* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.

**\*\* BCR= GROSS RETURN/GROSS COST**

## Fisheries

[illegible]

Ornam ental fishes																	
Fish	Small scale income generati on	Feeding of Carp starter -II compound feed in nursery pond with a gradually decreasing feeding rate of 10-5% of biomass	10	10	6,37, 500 nos./ ha	4,80, 000	32.8	1.7	1.3	3468 0	9248 0	57,8 00	2.6	207 60	5536 0	34,6 00	1.6
Fish	Income generati on	Stocking fish fry@7,50,000 numbers/ha and feeding of Carp starter -II compound feed with a gradually decreasing feeding rate of 10-5% of biomass	10	10	6225 00 nos./ ha	4050 00	53.7	2.1	1.2	4074 0	1086 40	6790 0	2.6	329 20	7112 0	3820 0	2.1
Fish	Nutrient manage ment	Application of Sea weed extract @ 1Kg/Acre/Mont h and mineral mixture1Kg/Acr e/Month	10	10	25.6 q/ha	18.2	40.6	1.9	1.5	9288 0	2476 80	1548 00	2.7	757 90	1923 90	1166 00	2.5

Fish		Stocking ratio Catla: Rohu : Mrigal :Amur carp :: 30:40:15:15	6	6	35.2	27.8		2.1	1.7	1047 00	2792 00	1745 00	2.6	888 55	2255 55	1367 00	2.5
		Total															

\* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.

**\*\* BCR= GROSS RETURN/GROSS COST**

## Other enterprises

[illegible]

Moringa powder	Demonstration of Moringa powder-preparation, its packaging and branding for income generation of WSHGs	20	20	100	80	25	-	-	10900	16000	5100	1.5	2725	3200	475	1.2
Total																

\* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.

\*\* BCR= GROSS RETURN/GROSS COST

#### Women empowerment

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

#### Farm implements and machinery

Name of the implement	Crop	Name of the technology demonstrated	No. of Farmer	Area (ha)	Filed observation (output/man hour)	% change in major parameter	Labor reduction (man days)	Cost reduction (Rs./ha or Rs./Unit)
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[illegible]

\* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.

\*\* BCR= GROSS RETURN/GROSS COST

## Demonstration details on crop hybrids

[illegible]

[illegible]

**Technical Feedback on the demonstrated technologies**

Sl. No	Crop	Feed Back

**Extension and Training activities under FLD**

Sl. No.	Activity	Date	No. of activities organized	Number of participants	Remarks
1.	Training programme	06.01.23	1	30	ICM in marigold
2.	Field day	25.01.23	1	50	Marigold cultivation
3.	Field Day	22.03.23	1	50	FLD on ICM in groundnut
4.	Field Day	23.03.23	1	50	FLD on INM in okra
5	Field Day	25.03.23	1	50	FLD on INM in brinjal
6	Field Day	28.03.23	1	50	FLD on rate & schedule of fertilizer application in sunflower

**Performance of the demonstration under CFLD on Pulse and Oilseed Crops during Kharif 2022 and Rabi 2021-22:****A. Technical Parameters:**

Sl. No.	Crop demonstrated	Existing (Farmer's) variety name	Existing yield (q/ha)	Yield gap (Kg/ha) w.r.to			Name of Variety + Technology demonstrated	Number of farmers	Area in ha	Yield obtained (q/ha)			Yield gap minimized (%)		
				District yield (D)	State yield (S)	Potential yield (P)				Max.	Min.	Av.	D	S	P
1	Greengram var. Virat	Local greengram	5.5				Greengram variety Virat • Line sowing by seed drill • Seed treatment with Rhizobium culture • Soil test based fertilizer application	25	10	7.28	4.23	6.46			

Sl. No.	Variety demonstrated & Technology demonstrated	Farmer's Existing plot				Demonstration plot			
		Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C ratio	Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C Ratio
1	Greengram var. Virat	17500	26600	9100	1.52	22800	44800	22000	1.96



**C. Socio-economic impact parameters**

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/ household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/ household)
1	Greengram var. Virat	646	466	70.00	100	80	Household expenditure	25MD

**D. Pulse Farmers' perception of the intervention demonstrated**

Sl. No.	Technologies demonstrated (with name)	Farmers' Perception parameters					
		Suitability to their farming system	Likings (Preference)	Affordability	Any negative effect	Is Technology acceptable to all in the group/village	Suggestions, for change/improvement, if any
	Greengram variety Virat	Suitable	Liked by farmers	Affordable	No	Yes	-
	Line sowing by seed drill	Suitable	Mixed response	Affordable	No	Mixed response	Skilled man power required for the technology
	Seed treatment with Rhizobium culture	Suitable	Liked by farmers	Affordable	No	Yes	
	Soil test based fertilizer application	Suitable	Liked by farmers	Affordable	No	Yes	
	Installation of yellow sticky trap	Suitable	Liked by farmers	Affordable	No	Yes	A very effective technology
	Installation of pheromone trap with heli lure	Suitable	Liked by farmers	Affordable	No	Yes	Good technology, but not available with local dealers

	Installation of Tricho card	Suitable	Liked by farmers	Affordable	No	Yes	Availability issue
	Application of NPK consortia	Suitable	Liked by farmers	Affordable	No	Yes	
	Application of neem oil	Suitable	Liked by farmers	Affordable	No	Yes	Very effective technology
	Application of boron	Suitable	Liked by farmers	Affordable	No	Yes	Very effective technology
	Use of need based PP chemicals (thiamethoxam, EB)	Suitable	Liked by farmers	Affordable	No	Yes	Good technology
	Use of hermetic storage bags for safe storage of grains	Suitable	Liked by farmers	Affordable	No	Yes	Availability is an issue

#### E. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
YMV tolerance of the demo var.	No incidence of YMV in demo var.	No incidence of YMV in demo crop as compared to local check variety	The variety is not associated with YMV incidence
Micronutrient application	More fruiting	Profuse fruiting in B applied field	Micronutrient application found to be beneficial
Yellow sticky trap	Effectively controlled white fly	No incidence of leaf curl	A good insect catcher

#### F. Extension activities under FLD conducted:

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
1	Method demonstration on line sowing of greengram by seed cum fertilizer drill	10.02.2023	20

2	Method demonstration on Rhizobium inoculation in greengram	10.02.2023	20
3	Field day on CFLD greengram	30.03.2023	50

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



**H. Farmers' training photographs**





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



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

[illegible]

[illegible]

[illegible]

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST			M	F	T
		M	F	T	M	F	T	M	F	T			
<b>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													
Others													
<b>Total</b>													
<b>IX. Production of Input at site</b>													
Seed Production													
Planting material production													
Bio0agents production													
Bio0pesticides production													
Bio0fertilizer production													
Vermi0compost production													
Organic manures production													
Production of fry and fingerlings													
Production of Bee0colonies and wax sheets													
Small tools and implements													
Production of livestock feed and fodder													
Production of Fish feed													
Mushroom production													
Apiculture													
Others													
<b>Total</b>													
<b>X. Capacity Building and Group Dynamics</b>													
Leadership development													
Group dynamics													
Formation and Management of SHGs													
Mobilization of social capital													
Entrepreneurial development of farmers/youths													
WTO and IPR issues													
Others(FPO management)	1	25	5	30	0	0	0	0	0	0	25	5	30
<b>Total</b>	<b>1</b>	<b>25</b>	<b>5</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>25</b>	<b>5</b>	<b>30</b>
<b>XI. Agro forestry</b>													
Production technologies													
Nursery management													
Integrated Farming Systems													
Others													
<b>Total</b>													
<b>XII. Others (Pl. Specify)</b>													
<b>GRAND TOTAL</b>	<b>3</b>	<b>59</b>	<b>15</b>	<b>74</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>60</b>	<b>15</b>	<b>75</b>



**B) Rural Youth (on campus)**

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Nursery Management of Horticulture crops	1	5	15	20							5	15	20
Training and pruning of orchards													
Protected cultivation of vegetable crops													
Commercial fruit production													
Integrated farming													
Seed production													
Production of organic inputs													
Planting material production													
Vermiculture													
Mushroom Production	2	35	9	44	6	0	6	-	-	-	41	9	50
Beekeeping													
Sericulture													
Repair and maintenance of farm machinery and implements													
Value addition													
Small scale processing													
Post Harvest Technology													
Tailoring and Stitching													
Rural Crafts													
Production of quality animal products													
Dairying													
Sheep and goat rearing													
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Composite fish culture	3	34	12	46	9	5	14				43	17	60
Freshwater prawn culture													
Shrimp farming													
Pearl culture	1	11	7	18	1	1	2	0	0	0	12	8	20
Cold water fisheries													
Fish harvest and processing technology	1	2	0	2	1	17	18	0	0	0	3	17	20
Fry and fingerling rearing													
Vermicomposting & vermiwash production	1	22	1	23	1	0	1	0	0	0	23	1	24

### C) Extension Personnel (on campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops													
Integrated Pest Management													
Integrated Nutrient management	1	7	11	18	0	1	1	0	1	1	7	13	20
Rejuvenation of old orchards													
Protected cultivation technology	1	12	3	15	2	2	4	1	1	2	15	5	20
Production and use of organic inputs													
Care and maintenance of farm machinery and implements													
Gender mainstreaming through SHGs													
Formation and Management of SHGs	1	0	17	17	0	3	3	0	0	0	0	17	17
Women and Child care													
Low cost and nutrient efficient diet designing													
Group Dynamics and farmers organization													
Information networking among farmers													
Capacity building for ICT application													
Management in farm animals													
Livestock feed and fodder production													
Household food security	1	-	17	17	-	3	3	0	0	0	0	20	20
Income generation activities for empowerment of Rural Women	1		20	20	0	0	0	0	0	0	0	20	20
Advances in pesticide management	1	10	5	15	0	0	0	0	0	0	10	5	15
Nutrient management through Soil Health Card and its interpretation	1	7	7	14	4	2	6				11	9	20
Modern approaches in fish farming techniques	1	13	5	18	1	1	2				14	6	20
BMP in shrimp farming	1	10	6	16	2	2	4				12	8	20
Total	9	59	91	150	9	14	23	1	2	3	69	103	172

**D) Farmers and farm women (off campus)**

[illegible]

[illegible]

[illegible]

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST			M	F	T
		M	F	T	M	F	T	M	F	T			
Rural Crafts													
Women and child care													
Others													
<b>Total</b>	<b>4</b>	<b>4</b>	<b>99</b>	<b>103</b>	<b>0</b>	<b>28</b>	<b>28</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>129</b>	<b>133</b>
<b>VI. Agril. Engineering</b>													
Farm machinery & its maintenance													
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													
Others													
<b>Total</b>													
<b>VII. Plant Protection</b>													
Integrated Pest Management	4	80	25	105	5	10	15	0	0	0	85	35	120
Integrated Disease Management													
Bio0control of pests and diseases													
Production of bio control agents and bio pesticides													
Others													
<b>Total</b>	<b>4</b>	<b>80</b>	<b>25</b>	<b>105</b>	<b>5</b>	<b>10</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>85</b>	<b>35</b>	<b>120</b>
<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													
Pre and post stocking water quality management	1	16	8	24	5	1	6				21	9	30
Six species composite carp culture	1	24	3	27	2	1	3				26	4	30
Preventive and curative measures for common fish diseases	1	22	6	28	1	1	2				23	7	30
Feed and feeding management in composite fish farming	1	25	2	27	2	1	3				27	3	30
Fish farming in community ponds	1	20	5	25	3	2	5				23	7	30
Cultural practices for improving growth rate of fishes.	1	15	8	23	5	2	7				20	10	30
Management of pond bottom for increasing productivity in fish farming	1	22	3	25	2	3	5				24	6	30

### **E) RURAL YOUTH (Off Campus)**

[illegible]

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST			M	F	T
		M	F	T	M	F	T	M	F	T			
Commercial fruit production													
Integrated farming													
Seed production													
Production of organic inputs													
Planting material production													
Vermiculture													
Mushroom Production	2	35	9	44	6	0	6	-	-	-	41	9	50
Beekeeping													
Sericulture													
Repair and maintenance of farm machinery and implements													
Value addition													
Small scale processing													
Post Harvest Technology													
Tailoring and Stitching													
Rural Crafts													
Production of quality animal products													
Dairying													
Sheep and goat rearing													
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Composite fish culture	3	34	12	46	9	5	14				43	17	60
Freshwater prawn culture													
Shrimp farming													
Pearl culture	1	11	7	18	1	1	2	0	0	0	12	8	20
Cold water fisheries													
Fish harvest and processing technology	1	2	0	2	1	17	18	0	0	0	3	17	20
Fry and fingerling rearing													
Vermicomposting & vermiwash production	1	22	1	23	1	0	1	0	0	0	23	1	24
Biofloc based fish farming	2	23	9	32	6	2	8				29	11	40
Natural farming	1	11	7	18	2	0	2				13	7	20
<b>Total</b>	<b>12</b>	<b>143</b>	<b>60</b>	<b>203</b>	<b>26</b>	<b>25</b>	<b>51</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>169</b>	<b>85</b>	<b>254</b>

#### F) Extension Personnel (Off Campus)

### **i. Farmers & Farm Women**

[illegible]



[illegible]

[illegible]

[illegible]

## ii. RURAL YOUTH (On and Off Campus)

[illegible]

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Mushroom Production	2	35	9	44	6	0	6	-	-	-	41	9	50
Beekeeping													
Sericulture													
Repair and maintenance of farm machinery and implements													
Value addition													
Small scale processing													
Post Harvest Technology													
Tailoring and Stitching													
Rural Crafts													
Production of quality animal products													
Dairying													
Sheep and goat rearing													
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Composite fish culture	3	34	12	46	9	5	14				43	17	60
Freshwater prawn culture													
Shrimp farming													
Pearl culture	1	11	7	18	1	1	2	0	0	0	12	8	20
Cold water fisheries													
Fish harvest and processing technology	1	2	0	2	1	17	18	0	0	0	3	17	20
Fry and fingerling rearing													
Vermicomposting & vermiwash production	1	22	1	23	1	0	1	0	0	0	23	1	24
Biofloc based fish farming	2	23	9	32	6	2	8				29	11	40
<b>Total</b>	<b>11</b>	<b>138</b>	<b>40</b>	<b>178</b>	<b>26</b>	<b>25</b>	<b>49</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>164</b>	<b>70</b>	<b>234</b>

### iii. Extension Personnel (On and Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops													
Integrated Pest Management													
Integrated Nutrient management	1	7	11	18	0	1	1	0	1	1	7	13	20
Rejuvenation of old orchards													
Protected cultivation technology	1	12	3	15	2	2	4	1	1	2	15	5	20

[illegible]

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

Discipline	Clientele	Title of the training programme	Duration in days	Venue (Off / On Campus)	Number of participants			Number of SC/ST		
					Male	Female	Total	Male	Female	Total
<b>Agronomy</b>	F/FW	Integrated Weed management in rice	1	Off	18	12	30	5	8	13
	F/FW	ICM in rice under flood affected areas	1	Off						
	F/FW	Weed and nutrient management under direct seeded rice	1	Off	29	3	32	2	-	2
	F/FW	Nutrient and weed management in green gram	1	Off						
	F/FW	Integrated crop management in sunflower	2	Off	29	1	30	5	-	5
<b>Soil Science</b>										
	F/FW	Production technology for raising Azolla nursery	2	Off	61	3	64	12	-	12
	F/FW	Vermicompost production and its uses	6	Off	28	62	90	8	11	19
	F/FW	Role of natural farming & promotion of ITKs in maintaining soil health and quality of produce	2	Off	25	5	30	-	-	-
	RY	Vermicomposting & vermiwash production	3	On	23	1	24	1		1
	IS	Nutrient management through Soil Health Card and its interpretation	2	On	11	9	20	4	2	6
<b>Horticulture</b>										
	F/FW	Moisture conservation methods in coconut	1	off	4	26	30	0	0	0
	F/FW	Use of growth regulator in cucurbits	1	Off	16	14	30	0	0	0
	F/FW	Weed management in vegetables	1	Off	24	6	30	0	0	0
	F/FW	Types of flower and pollination behavior in cucurbits	1	Off	23	7	30	2	2	0
	F/FW	Grafting in vegetable crops	1	Off	18	12	30	0	0	0
	F/FW	ICM in potato cultivation	1	Off	16	14	30	0	0	0
	RY	Natural farming	3	On	13	7	20	2	0	2



	RY	Nursery raising in horticultural crops	3	On	5	15	20	0	0	0
	IS	Protected cultivation	1	On	7	13	20	2	1	3
	IS	Use of PGR in Horticultural crops	1	On	15	5	20	4	2	6
<b>Plant Protection</b>										
	F/FW	Integrated pest management in rice	1	Off	27	3	30	2	0	2
	F/FW	IPM strategy for management of leaf curl and mealy bug in papaya	1	Off	23	7	30	0	6	6
	F/FW	Integrated pest management in bittergourd	1	Off	25	5	30	3	2	5
	F/FW	IPM in brinjal	1	Off	18	12	30	0	2	2
	F/FW	IPM in sunflower	1	Off	22	8	30	0	0	0
	IS	Pesticide management	1	On	10	5	15	0	0	0
<b>Fishery science</b>										
	F/FW	Pre and post stocking water quality management	1	Off	21	9	30	5	1	6
	F/FW	Six species composite carp culture	1	Off	26	4	30	2	1	3
	F/FW	Preventive and curative measures for common fish diseases	1	Off	23	7	30	1	1	2
	F/FW	Feed and feeding management in composite fish farming	1	Off	27	3	30	2	1	3
	F/FW	Fish farming in community ponds	1	Off	23	7	30	3	2	5
	F/FW	Cultural practices for improving growth rate of fishes.	1	Off	20	10	30	5	2	7
	F/FW	Management of pond bottom for increasing productivity in fish farming	1	Off	24	6	30	2	3	5
	F/FW	Alternate low cost farm made fish feed Management of Plankton in fish culture ponds	1	Off	22	8	30	3	1	4
	F/FW	Management of Plankton in fish culture pond	1	Off	23	7	30	1	2	3

	RY	Stocking and nursery pond management for minimizing mortality	2	on	12	8	20	5	3	8
	RY	Biofloc based fish farming	5	On	14	6	20	4	1	5
	RY	Preparation of low cost balanced feed using available ingredients	3	On	17	3	20	1	1	2
	RY	Biofloc based fish farming	3	on	15	5	20	2	1	3
	RY	Round the year stunted fingerling production	3	on	14	6	20	3	1	4
	RY	Freshwater pearl farming	2	On	12	8	20	1	1	2
	RY	Production of dry fish using solar drier	3	On	3	17	20	1	17	18
	IS	Modern approaches in fish farming techniques	1	On	14	6	20	1	1	2
	IS	BMP in shrimp farming	1	On	12	8	20	2	2	4
<b>Home Science</b>										
	F/FW	Preparation of Moringa powder for income egeneration ofSG	1	Off	0	25	25	0	5	30
	F/FW	Crop planning and method of vegetable seedling production for nutritional garden	1	Off	0	30	30	0	0	30
	F/FW	Cultivation practices of different varieties of oyster mushroom	1	Off	0	18	18	0	12	30
	F/FW	Packaging technology in mushroom	1	<b>ON</b>	24	5	29	1	0	30
	F/FW	Brooding management of poultry chicks by women SHGs	1	Off	0	28	28	-	4	32
	F/FW	Humidity and temperature management in paddy straw mushroom beds	1	Off	0	24	24	0	6	30
	F/FW	Storage loss minimization Technique of pulses.	1	Off	4	14	18	2	10	30
	F/FW	Cultivation practices of paddy Straw mushroom by using loose straw	1	Off	0	29	29	0	1	30
	F/FW	Nutritional garden for nutritional security of farm families	<b>1</b>	Off	-	30	30	0	13	43
	F/FW	Disease and pest management in paddy straw mushroom	<b>1</b>	Off	0	26	26	0	4	30
	RY	Skill training on mushroom production	3	On	22	2	24	6	0	30

	RY	Skill training on mushroom production	3	On	13	7	20	0	0	20
	IS	Household food security by nutritional gardening	1	On	0	20	20	0	20	20
	IS	Income generation activities for empowerment of Rural Women	1	On	0	17	17	0	3	20
<b>Agril Extension</b>										
	F/FW	Formation and management of SHG	1	Off	0	54	54	0	4	4
	F/FW	Income generating activities for rural women	1	Off	0	30	30	0	4	4
	F/FW	ICM in marigold	1	Off	0	30	30	0	5	5
	F/FW	Leadership development and formation of farmers organization	1	On	28	13	41	0	0	0
	F/FW	Use of ITK in agriculture	1	Off	4	26	30	0	0	0
	F/FW	Application of ICT in agriculture	1	Off	5	29	34	0	4	4
	IS	Formation and management of SHGs	1	Off	0	17	17	0	3	3
<b>Agroforestry</b>										
	F/FW	Techniques of Teak stumps preparation	1	Off	30	0	30	0	0	0
	F/FW	Propagation technology of bamboo species	1	Off	30	0	30	0	0	0
	F/FW	Flora management for honeybees	1	Off	28	02	30	2	0	2
	F/FW	Management practices of fodder species	1	Off	30	0	30	0	0	0
	F/FW	Silvicultural operations of <i>Acacia spp.</i>	1	Off	30	0	30	20	0	20
	F/FW	Management of seasonal and perennial components in the IFS unit	1	Off	30	0	30	0	0	0

## H) Vocational training programmes for Rural Youth

### a) Details of training programmes for Rural Youth

Crop / Enterprise	Identified	Training title*	Duration (days)	No. of Participants	Self employed after training	Number of persons employed elsewhere
-------------------	------------	-----------------	-----------------	---------------------	------------------------------	--------------------------------------

[illegible]

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

### b) Details of participation

[illegible]

### a) Details of Sponsored Training Programme

## b) Details of participation

[illegible]

[illegible]

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

Nature of Extension Activity	No. of activities	Farmers				Extension Officials			Total		
		M	F	T	SC/ST (% of total)	Male	Female	Total	Male	Female	Total
Field Day	10	371	89	460	0	28	12	40	399	101	500
Kisan Mela	4	893	189	1082	8	22	6	28	915	195	1110
Kisan Ghosthi	0	0	0	0	0	0	0	0	0	0	0
Exhibition	4	893	189	1082	8	22	6	28	915	195	1110
Film Show	22	511	65	576	5	0	0	0	511	65	576
Method Demonstrations	8	112	42	154	12	4	2	6	116	44	160
Farmers Seminar	4	109	39	148	12	10	2	12	119	41	160
Workshop	2	23	6	29	3	4	2	6	27	8	35
Group meetings	31	156	35	191	12	0	0	0	156	35	191
Lectures delivered as resource persons	21	970	280	1250	9	0	0	0	970	280	1250
Advisory Services	15	0	0	0	0	0	0	0	0	0	0
Scientific visit to farmers field	88	897	212	1109	33	9	6	15	906	218	1124
Farmers visit to KVK	0	1723	397	2120	49	0	0	0	1723	397	2120
Diagnostic visits	27	317	65	382	10	0	0	0	317	65	382
Exposure visits	5	128	12	140	0	6	0	0	134	12	146
Ex-trainees Sammelan	0	0	0	0	0	0	0	0	0	0	0
Soil health Camp	0	0	0	0	0	0	0	0	0	0	0
Animal Health Camp	0	0	0	0	0	0	0	0	0	0	0
Agri mobile clinic	0	0	0	0	0	0	0	0	0	0	0
Soil test campaigns	0	0	0	0	0	0	0	0	0	0	0
Farm Science Club Conveners meet	0	0	0	0	0	0	0	0	0	0	0
Self Help Group Conveners meetings	0	0	0	0	0	0	0	0	0	0	0
Mahila Mandals Conveners meetings	0	0	0	0	0	0	0	0	0	0	0
Celebration of important days (Akshaya Tritiya, World bee day, , Vigilance awareness week, International womens day,	9	467	44	511	10	0	0	0	467	44	511

Women in Agriculture Day, World Food Day, World Soil Day, OUAT foundation day, ICAR foundation day, World Millet Day)											
Sankalp Se Siddhi	0	0	0	0	0	0	0	0	0	0	0
Swatchta Hi Sewa	12	265	180	445	8	0	0	0	265	180	445
Mahila Kisan Divas	1	0	50	50	5	0	0	0	0	50	50
Any Other ( Awareness prog on scope of Agroforestry in coastal areas, use of balanced fertilizer and celebration of international yoga day )	1	36	0	36	3	0	0	0	36	0	36
<b>Total</b>	<b>264</b>	<b>7871</b>	<b>1894</b>	<b>9765</b>		<b>105</b>	<b>36</b>	<b>135</b>	<b>7976</b>	<b>1930</b>	<b>9906</b>

#### B. Other Extension activities

Nature of Extension Activity	No. of activities
Newspaper coverage	29
Radio talks	6
TV talks	0
Popular articles	0
Extension Literature	7
Other, if any	

### 3.5 a. Production and supply of Technological products

#### *Village seed*

Crop	Variety	Quantity of seed (q)	Value (Rs)	No. of farmers involved in village seed production	Number of farmers to whom seed provided							
					SC		ST		Other		Total	
					M	F	M	F	M	F	M	F
Rice	Swarna	218.4	7,77,941	2					2		2	
	Kalachampa	81.8	2,91,372	1					1		1	
<b>Total</b>		<b>300.2</b>	<b>10,69,313</b>	<b>3</b>					<b>3</b>		<b>3</b>	



**KVK farm**

Crop	Variety	Quantity of seed (q)	Value (Rs)	Number of farmers to whom seed provided							
				SC		ST		Other		Total	
				M	F	M	F	M	F	M	F
Rice	Swarna	82	2,92,084								
	Kalachampa	68	2,42,216								
	Khandagiri	31.8	1,15,402								
	MTU 1140	56	1,99,472								
	CR 1009 Sub-1	92	3,68,000								
Toria	Sushree	Not processed									
Sesame	Smarak	Crop not harvested									
<b>Grand Total</b>			12,17,174								

**Production of planting materials by the KVKs**

Crop	Variety	No. of planting materials	Value (Rs)	Number of farmers to whom planting material provided							
				SC		ST		Other		Total	
				M	F	M	F	M	F	M	F
<b>Vegetable seedlings</b>											
Cauliflower	Barkha	1478	3695								
Cabbage	Indu	1600	4000								
Brinjal	Akshita	12400	31000								
Chilli	Daiya	7888	19720								
Knolkhol	Indian Jumbo	1908	4770								
Drumstick	PKM-1	698	10440								
<b>Fruits</b>											
Banana	Bantala, Patakopara	80	1400								
Papaya	Redlady	2334	56730								
Others											
Ornamental plants											
<b>Medicinal and Aromatic</b>											
Amla		100	2500								
Mint		500	750								
Plantation											
<b>Spices</b>											
Turmeric	Rajendra Sonia	4.6q	16100								
<b>Tuber</b>											
Elephant yams	Gajendra	3.3q	10080								
Yam	Odisha Elite	3.3q	10080								
<b>Fodder crops</b>	HYb. Nappier	17500	26250								
<b>Forest Species</b>											
Acacia		500	5000								

[illegible][illegible]

Piglet											
Hog											
Others (Pl. specify)											
Fisheries											
Indian carp											
Exotic carp											
Mixed carp											
Fish fingerlings											
Spawn											
Others (Pl. specify)											
Grand Total											

### 3.5. b. Seed Hub Programme - “Creation of Seed Hubs for Increasing Indigenous Production of Pulses in India”

i) Name of Seed Hub Centre:

Name of Nodal Officer :	Dr. Aurovinda Das
Address :	KrishiVigyan Kendra, Bhadrak Ranital, Odisha-756111
e-mail :	<a href="mailto:kvkbhadrak.ouat@gmail.com">kvkbhadrak.ouat@gmail.com</a>
Phone No. :	06784-265825
Mobile :	08895417939

ii) Quality Seed Production Reports

Season	Crop	Variety	Production (q)			
			Target	Area sown (ha)	Production	Category of Seed (F/S, C/S)
Summer 2023	Green gram	Virat	300	60	Not Harvested	CS-2

iii) Financial Progress

Fund received (2019-20, 2020-21, 2021-22 and 2022-23)	Expenditure (Rs. in lakhs)		Unspent balance (Rs. in lakhs)	Remarks
	Infrastructure	Revolving fund		
2019-20		2.03353	22,77,033	
2020-21		20.94751	26,46,425	
2021-22			24,71,290	
2022-23		8,97949		

iv) Infrastructure Development

Item	Progress
Seed processing unit	<b>Completed</b>
Seed storage structure	

3.6.

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

Item	Title	Author's name	Number	Circulation
Research paper				
Seminar/conference/symposia papers				
Books	IGA for small holders	Dr A. Das, Dr B R Samantaray, Dr D Dash, Dr J R Maharana, Dr B L Rout, Dr R Mohanta	300	300
Bulletins				
News letter	Salandi	Dr A. Das, Dr B R Samantaray, Dr D Dash, Dr J R Maharana, Dr B L Rout, Dr R Mohanta, Sri G Sial, Sri M Choudhury	500	500
Popular Articles				
Book Chapter				
Extension Pamphlets/ literature	Natural Farming	Dr A. Das, Dr R Mohanta, Dr D Dash	3000	3000
	Vermicomposting	Dr A. Das, Dr R Mohanta, Dr D Dash	200	200
	Polylining of farm pond	Dr B R Samantaray	200	200
	Rice fallow management	Dr A. Das, Dr U S Nayak, Dr R Mohanta	100	100
	Summer greengram	Dr A. Das, Dr U S Nayak, Dr R Mohanta	50	50
Technical reports				
Electronic Publication (CD/DVD etc.)	3		Mass	Mass
TOTAL				

N.B.: Please enclose a copy of each. In case of literature prepared in local language please indicate the title in English

(B) Details of HRD programmes undergone by KVK personnel:

Sl. No.	Name of programme	Name of course	Name of KVK personnel and designation	Date and Duration	Organized by
	Online International workshop	Statistical Data Analysis using SPSS	Dr Biswa Ranjan Samantaray, Scientist (Fishery Science)	21 to 27 May, 2022	Science Tech Institute, Lucknow
	Capacity building	training programme	Dr J.R.Maharana, Scientist (Horticulture)	22.8.22 to 23.8.22	CRIDA,Hyderabad

	Training cum orientation workshop	Training cum orientation workshop on commercial vegetable seed production in Odisha	Dr J.R.Maharana, Scientist (Horticulture)	11.10.22 to 12.10.22	CHES,BBSR
	Workshop	National Workshop on Natural farming	Dr. Debiprasad Dash, Scientist (Soil Science)	3 December, 2022	RVSKVV, Gwalior
	Orientation cum Training programme	Orientation cum Training programme of SMSs of KVKs implementing Natural farming	Dr. Debiprasad Dash, Scientist (Soil Science)	12 to 13 December, 2022	State natural farming Centre, Gurukul, Kurukshetra
	Skill development training	Skill development in short video production	Dr Rojalin Mohanta, SMS(Agril. Extension)	15 to 17 December 2022	DEE, OUAT
	Training for Master Trainers	Training for Master Trainers on FPO management	Dr Rojalin Mohanta, SMS(Agril. Extension)	19 to 21 December 2022	DEE, OUAT
	Training for Master Trainers	Training for Master Trainers on FPO management	Dr Biswa Ranjan Samantaray, Scientist (Fishery Science)	19 to 21 December 2022	DEE, OUAT
	Refresher course	Refresher training on IPMin Horticultural crops for scientist of Horticulture and PP of KVK	Dr J.R.Maharana	16.1.23 to 18.1.23	The Directorate Of EE, OUAT,BBSR
	Workshop cum Capacity Building programme	Outscaling of natural Farming through KVKs	Dr. Debiprasad Dash, Scientist (Soil Science)	15 to 16 February, 2023	West Bengal University of Animal & Fishery Sciences, Kolkata
	Exposure visit	Exposure visit of kvk scientist to other districts	Dr J.R.Maharana, Scientist (Horticulture)	19.3.23 to 20.3.23	Keonjhar KVK
	Exposure visit	Exposure visit of kvk scientist to other districts	Gayadhar Shial, Prog. Asst (Forestry)	19.3.23 to 20.3.23	Keonjhar KVK
	Exposure visit	Exposure visit of kvk scientist to other districts	Mantu Choudhury, Farm Manager	19.3.23 to 20.3.23	Keonjhar KVK
	Refresher training cum exposure visit	Training cum exposure visit on integrated farming system	Dr Rojalin Mohanta, SMS(Agril. Extension)	27 to 28 March, 2023	DEE, OUAT
	Training cum exposure visit	Training cum exposure visit on IFS	Dr J.R.Maharana, Scientist (Horticulture)	27.3.2023 to 28.3.2023	DEE, OUAT

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

Name of farmer	Smita Aich
Address	Kuanrda, Bonth, Bhadrak
Contact details (Phone, mobile, email Id)	8117071908

Landholding (in ha.)	1.2
Name and description of the farm/enterprise	Ms. Aich is a marginal farmer having total 1.2ha land out of which she is doing rice cultivation in 0.8ha, vegetables in 0.2ha, marigold cultivation in 0.1ha and has a mushroom unit in which she is putting 8beds/day
Economic impact	She earns a total net profit of Rs 2.53 lakh per year from her farm. From rice she is getting a net profit of Rs.45,400, from vegetables she is getting Rs.52,000, from marigold and mushroom she is getting Rs. 60,000 and Rs. 96,000 respectively
Social impact	More labour mandays have been generated for different agriculture and allied activities. She also gives hand holding support to farm women of her village in mushroom cultivation
Environmental impact	The agricultural residues have been utilized for mushroom cultivation, composting and vermicomposting
Horizontal/ Vertical spread	8 nos. of SHGs of her village Kuanrda started doing marigold cultivation inspired by her, more than 30 farmers and farm women practicing mushroom cultivation after her
Good quality photographs (2-3)	



3.8. Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year

Sl. No.	Name/ Title of the technology	Name/ Details of the Innovator(s)	Brief details of the Innovative Technology

3.9. a. Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs)

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

b. Give details of organic farming practiced by the farmer

Sl. No.	Crop / Enterprise	Area (ha)/ No. covered	Production	No. of farmers involved	Market available (Y/N)

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

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

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

Sl. No	Name of the Equipment	Qty.
1	Spectrophotometer	1
2	Nitrogen analyzer	1
3	pH meter	1
4	EC meter	1
5	Flame photometer	1
6	Physical Balance	1
7	Digital balance	1
8	Mechanical shaker	1
9	MRIDAPARIKSHAK	2

**3.11.b. Details of samples analyzed so far :**

Number of soil samples analyzed			No. of Farmers	No. of Villages	Amount realized (in Rs.)
Through mini soil testing kit/labs	Through soil testing laboratory	Total			
0	521	521	796		3980

**3.11.c. Details on World Soil Day**

Sl. No.	Activity	No. of Participants	No. of VIPs	Name (s) of VIP(s)	Number of Soil Health Cards distributed	No. of farmers benefitted
1	Technical Seminar on the topic Natural Farming for sustainable food production and soil health management	123	2	Sj. Ramdas Tudu, ADM, Bhadrak  Sj. Prafulla Jena, President, Zilla Parishad	50	15

**3.12. Activities of rain water harvesting structure and micro irrigation system**

No of training programme	No of demonstrations	No of plant material produced	Visit by the farmers	Visit by the officials

## 3.13. Technology week celebration

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

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

No of student trained	No of days stayed

ARS trainees trained	No of days stayed

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

Date	Name of the person	Purpose of visit
31.05.2022	Sri Bishnu Charan Sethy, MLA, Dhamnagar	Chief guest of Garib Kalayn Mela
16.06.2022	Maxwell Mkondiwa, Special Economist, CIMMYT	Visit to KVK
16.06.2022	Peter Crufurd, CSISA PI, Katmandu, Nepal	Visit to KVK
19.09.2022	Dr. Manmohan Mishra, Dean of Research, OUAT	Visit to KVK
19.09.2022	Dr. Prasannjit Mishra, Dean Extension Education, OUAT	Visit to KVK
14.02.23	Dr. Munindra Sarma, NO, OPIU, Agri, APART, Asam	Visit to KVK
02.03.2023	Sri Pratap Pritimaya, CDO, Zilla Parishad	Visit to demo units of KVK
21.03.2023	Sri Pratap Pritimaya, CDO, Zilla Parishad	Guest of Natural farming fair
21.03.2023	Sri Prafulla Kumar Jena, President, Zilla Parisha	Chief guest of Natural farming fair

## IMPACT

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)

NB: Should be based on actual study, questionnaire/group discussion etc. with ex-participants

## 4.2. Cases of large scale adoption

(Please furnish detailed information for each case)

Horizontal spread of technologies
-----------------------------------



Technology	Horizontal spread

Give information in the same format as in case studies

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

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

#### 4.4. Details of innovations recorded by the KVK

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

#### 4.5. Details of entrepreneurship development

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

#### 4.6. Any other initiative taken by the KVK

### 5. LINKAGES

#### 5.1. Functional linkage with different organizations

Name of organization	Nature of linkage
CSISA, Bhubaneswar	Financial and technical support for conducting experiments
Agriculture Department	Convergence of Govt schemes with KVK programs, Providing technical support,
Government of Odisha	Financial support for conduct of demonstration for rice fallow management

5.2. List of special programmes undertaken during 2022 by the KVK, which have been financed by ATMA/ Central Govt/ State Govt./NABARD/NHM/NFDB/Other Agencies **(information of previous years should not be provided)**

a) Programmes for infrastructure development

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

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

Name of the programme/ scheme	Purpose of programme	Date/ Month of initiation	Funding agency	Amount (Rs.)
FPO meet	Capacity building of CEOs and BoDs of FPOs for FPO management and business activity	28 February 2023	NABARD	14500

## 6. PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl. No.	Name of demo Unit	Year of estt.	Area (Sq. mt)	Details of production			Amount (Rs.)		Remarks
				Variety/bre ed	Produce	Qty.	Cost of inputs	Gross income	
1.									
2.									
3.									
4.									
5.									
	Total								

6.2. Performance of Instructional Farm (Crops)

Name Of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.(q)	Cost of inputs	Gross income	

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

Sl. No.	Name of the Product	Qty. (Kg)	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1.	Vermicompost	3310	21180	54650	
2	Vermi culture	10			

## 6.4. Performance of instructional farm (livestock and fisheries production)

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1.							
2.							
3.							

## 6.5. Utilization of hostel facilities

Accommodation available (No. of beds)

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

(For whole of the year)

## 6.6. Utilization of staff quarters

Whether staff quarters has been completed:

No. of staff quarters:

Date of completion:

Occupancy details:

Months	Q I	Q II	Q III	QIV	Q V	QVI

7. FINANCIAL PERFORMANCE

## 7.1. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
Contingency Account	SBI	Bhadrak	11403397791
Revolving fund account	SBI	Charampa	30530545584
Pulse Seed Hub account	SBI	Charampa	36055571236

## 7.2. Utilization of funds under CFLD on Oilseed (Rs. In Lakhs)

Item	Released by ICAR		Expenditure		Unspent balance as on -
	Kharif	Rabi	Kharif	Rabi	

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

Item	Released by ICAR		Expenditure		Unspent balance as on 1 <sup>st</sup> April 2023
	Kharif	Rabi	Kharif	Rabi	
CFLD Pulse		0.9		0.9	0

## 7.4 Utilization of KVK funds during the year 2022-23 (Not audited)

Sl. No.	Particulars	Sanctioned	Released	Expenditure
<b>A. Recurring Contingencies</b>				
1	Pay & Allowances			
2	Traveling allowances	1,50,000	1,50,000	1,19,042
3	HRD	30,000	30,000	9,000
4	<b>Contingencies</b>			
A	Cont.	6,33,800	6,33,800	6,33,800
B				
C				
D				
E	SCSP	20,00,000	20,00,000	20,00,000
F				
G				
H				
I				
J	Swachhta Expenditure	17,250	17,250	17,250
<b>TOTAL (A)</b>		<b>28,31,050</b>	<b>28,31,050</b>	<b>27,79,092</b>
<b>B. Non-Recurring Contingencies</b>				
1	Works	5,00,000	5,00,000	5,00,000
2	Vehicle	9,00,000	9,00,000	9,00,000
3	Information Technology	80,000	80,000	80,000
4	Equipment & Furniture	75,000	75,000	75,000
5	Library	10,000	10,000	10,000
<b>TOTAL (B)</b>		<b>15,65,000</b>	<b>15,65,000</b>	<b>15,65,000</b>
<b>C. REVOLVING FUND</b>		0	0	0
<b>GRAND TOTAL (A+B+C)</b>		<b>43,96,050</b>		<b>43,44,092</b>

## 7.5. Status of revolving fund (Rs. in lakh) for last three years

Year	Opening balance as on 1 <sup>st</sup> April	Income during the year	Expenditure during the year	Net balance in hand as on 1 <sup>st</sup> April of each year (Kind + cash)
2019-20	3,52,354	11,20,175	6,13,118+6,00,000 (Refunded to DEE)=12,13,118	2,59,411
2020-21	2,59,411	9,20,945	7,38,591	4,41,765
2021-22	4,41,765	20,20,481	9,70,192+6,00,000 (Refunded to DEE)=15,70,192	8,92,054
2022-23	8,92,054	21,86,235	14,16,067+6,00,000 (Refunded to DEE)=20,16,067	10,62,222

## 7.6. (i) Number of SHGs formed by KVKs

(ii) Association of KVKs with SHGs formed by other organizations indicating the area of SHG activities

(iii) Details of marketing channels created for the SHGs

## 7.7. Joint activity carried out with line departments and ATMA

Name of activity	Number of activity	Season	With line department	With ATMA	With both

## 8. Other information

## 8.1. Prevalent diseases in Crops

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

## 8.2. Prevalent diseases in Livestock/Fishery

Name of the disease	Species affected	Date of outbreak	Number of death/ Morbidity rate (%)	Number of animals vaccinated	Preventive measures taken in pond (in ha)

## 9.1. Nehru Yuva Kendra (NYK) Training

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

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

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

## 9.3. mKisan Portal (National Farmers' Portal/ SMS Portal)

Type of message	No. of messages	No. of farmers covered
Crop	9	8,92,413
Livestock	1	1,04,629
Fishery	2	2,08,070

Weather		
Marketing	3	3,42,032
Awareness		
Training information		
Other		
<b>Total</b>	<b>15</b>	<b>15,47,144</b>

#### 9.4. KVK Portal and Mobile App

Sl. No.	Particulars	Description
1.	No. of visitors visited the portal	23,256
2.	No. of farmers registered in the portal	
3.	Mobile Apps developed by KVK	
4.	Name of the App	
5.	Language of the App	
6.	Meant for crop/ livestock/ fishery/ others	
7.	No. of times downloaded	

#### 9.5. a. Observation of Swachh Bharat Programme

Date/ Duration of Observation	Activities undertaken
01.11.22/2	Orientation of school children on various topics like hygiene, sanitation, cleanliness
05.11.22/2	Adoption of villages for microbial based agricultural waste management using vermi compost
06.02.23 /3	Awareness programme about Swachhata & crop residue management

#### b. Details of Swachhta activities with expenditure

Activities	Number	Expenditure (in Rs.)
1. Digitization of office records/ e-office		
2. Basic maintenance		
3. Sanitation and SBM		
4. Cleaning and beautification of surrounding areas		
5. Vermicomposting/ Composting of biodegradable waste management & other activities on generate of wealth for waste	2	5500
6. Used water for agriculture/ horticulture application		
7. Swachhta Awareness at local level	5	11450
8. Swachhta Workshops		

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## 9.10. Details of Swachhta Hi Suraksha programme organized

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

## 9.11. Details of Mahila Kisan Divas programme organized

Sl. No.	Activity	No. of villages Involved	No. of Participants	No. of VIPs	Name (s) of VIP(s)
1	Awareness programme on income generation activities	3	45	-	-

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

Sl. No.	Name of Farmer	Address of the farmer with contact no.	Innovation/ Leading in enterprise

## 9.13. Revenue generation

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

## 9.14. Resource Generation:

Sl.No.	Name of the programme	Purpose of the programme	Sources of fund	Amount (Rs. lakhs)	Infrastructure created

## 9.15. Performance of Automatic Weather Station in KVK

Date of establishment	Source of funding i.e. IMD/ICAR/Others (pl. specify)	Present status of functioning

## 9.16. Contingent crop planning

Name of the state	Name of district/KVK	Thematic area	Number of programmes organized	Number of Farmers contacted	A brief about contingent plan executed by the KVK



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

a) Year: 2022- 23

b) Introduction / General Information:

	Title	Objective	Treatment details	Date of sowing	Replication	Result with photographs
Experiment 1	Evaluate the effect of agronomic and genetic biofortification approaches in manual puddled transplanted rice	To compare the individual and combined effect of Zn enriched variety and Zn fertilizer application on productivity, profitability, and grain quality (Zn content) of rice under manual	T1: Control: Farmer variety (FV) + No Zn application T2: Zn-enriched variety (ZV) + No Zn application T3: FV + ZnSO <sub>4</sub> basal application @ 25 kg/ha + 0.5% Zn foliar spray at grain filling T4: ZV + ZnSO <sub>4</sub> basal application @ 25 kg/ha + 0.5% Zn foliar spray at grain filling	1 <sup>st</sup> week of August		Attached separately
Experiment 2	Evaluate the effect of	To compare the	T1: Control:	2 <sup>nd</sup> week		Attached separately

	agronomic and genetic biofortification approaches in manual puddled transplanted rice in Odisha	individual and combined effect of Zn enriched variety and Zn fertilizer application on productivity, profitability, and grain quality (Zn content) of rice under <b>manually puddled transplanted rice (PTR)</b> in Odisha	Farmer variety (FV) + No Zn application T2: Zn-enriched variety (ZV) + No Zn application T3: FV + ZnSO <sub>4</sub> basal application @ 25 kg/ha + 0.5% Zn foliar spray at grain filling T4: ZV + ZnSO <sub>4</sub> basal application @ 25 kg/ha + 0.5% Zn foliar spray at grain filling	of August		
Experiment 3	Evaluate suitable hybrids under transplanted rice in Odisha	To compare the performance of different duration of hybrids under transplanted rice for enabling timely planting of succeeding rabi crops in Bhadrak	T1: Swarna T2: Dhani DT T3: Arize 6444 Gold T4: Arize 8344	August 2 <sup>nd</sup> week		Attached separately

...						
..						
Others (If any)						

### RESULT: Experiment 1

Treatments	Avg. Grain Yield(q/ha)
<b>T<sub>1</sub></b> : Farmer variety (FV) + No Zn application	47.69
<b>T<sub>2</sub></b> : Zn-enriched variety (ZV) + No Zn application	46.42
<b>T<sub>3</sub></b> : FV + ZnSO <sub>4</sub> basal application @ 25 kg/ha + 0.5% Zn foliar spray at grain filling	48.28
<b>T<sub>4</sub></b> : ZV + ZnSO <sub>4</sub> basal application @ 25 kg/ha + 0.5% Zn foliar spray at grain filling	48.80



### RESULT: Experiment 2

Treatments	Avg. Grain Yield(q/ha)
<b>T<sub>1</sub></b> : Farmer variety (FV) + No Zn application	49.15
<b>T<sub>2</sub></b> : Zn-enriched variety (ZV) + No Zn application	45.20
<b>T<sub>3</sub></b> : FV + ZnSO <sub>4</sub> basal application @ 25 kg/ha + 0.5% Zn foliar spray at grain filling	49.28
<b>T<sub>4</sub></b> : ZV + ZnSO <sub>4</sub> basal application @ 25 kg/ha + 0.5% Zn foliar spray at grain filling	49.27
<b>T<sub>5</sub></b> : FV +Foliar spray of nano-zinc 4 ml/litre at grain filling stage	49.71
<b>T<sub>6</sub></b> : ZV+ Foliar spray of nano-zinc 4 ml/litre at grain filling stage	46.62



### RESULT: Experiment 3

Treatments	Avg. Grain Yield(q/ha)
T <sub>1</sub> : Swarna	46.69
T <sub>2</sub> : Dhani DT	55.50
T <sub>3</sub> : Arize 6444 Gold	53.37
T <sub>4</sub> : Arize 8344	72.50







## 11. Details of TSP

### a. Achievements of physical output under TSP during 2022-2023

Programmes	Physical achievements
Asset creation (Number; Sprayer, ridge maker, pump set, weeder etc.)	
On-farm trials (Number)	
Frontline demonstrations (Number)	
Farmers training (in lakh)	
Extension personnel training (in lakh)	
Participants in extension activities (in lakh)	
Seed production (in tonnes)	
Planting material production (in lakh)	
Livestock strains and fingerlings production (in lakh)	
Soil, water, plant, manures samples testing (in lakh)	
Provision of mobile agro – advisory to farmers (in lakh)	
No. of other programmes (Swachha Bharat Abhiyaan, Agriculture knowledge in rural school, Planting material distribution, Vaccination camp etc.)	

### b. Fund received under TSP in 2022-23 (Rs. In lakh):

### c. Achievements of physical outcome under TSP during 2022-2023

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

### d. Location and Beneficiary Details during 2022-2023

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

12. Progress report of NICRA KVK (Technology Demonstration component) during the period  
(Applicable for KVKs identified under NICRA)

Natural Resource Management

Water Resource Management														
Name of intervention undertaken	Numbers under taken	No of units	Area (ha)	No of farmers covered / benefitted									Remarks	
				SC		ST		Other		Total				
				M	F	M	F	M	F	M	F	T		
Renovation of irrigation channel	1	1						20	5	20	5	25	For strengthening of irrigation system	
New Pond created	4	4						4	0	4	0	4	For strengthening of irrigation system	
Azolla in transplanted rice	1	10	0.4					7	3	7	3	10	For insitu moisture conservation	
Organic mulching in vegetables (Tomato)	1	10	0.2					5	5	5	5	10	For weed control and moisture conservation	
Rice fallow management utilizing the residual soil moisture(crop-Black gram)	1	100	40					60	40	60	40	100	For insitu moisture conservation and profitability	
Sprinkler irrigation in crops (vegetable crop)	1	25	2					15	10	15	10	25	Strengthening of irrigation system and increasing water use efficiency	

Crop Management

Name of intervention undertaken	Area (ha)	No of farmers covered / benefitted									Remarks
		SC		ST		Other		Total			
		M	F	M	F	M	F	M	F	T	
Direct seeded rice using flood tolerant rice variety (Swarna sub-1 and CR-1009 sub-1)	10					25	15	25	15	40	Low cost of cultivation and adaptability to climatic risk.
Crop diversification to Sweet corn	1					15	10	15	10	25	More income generation
IPM practices in summer rice	2					7	3	7	3	10	For crop protection in flood effected area
IPM for YMV management in greengram	2					6	4	6	4	10	For crop protection in flood effected area
Blackgram for Rice fallow management	40					60	40	60	40	100	For insitu moisture conservation and profitability
Use of trellis in cucurbits	0.2					5	5	5	5	10	Reduce incidence of fruit rot
Critical inputs for Integrated crop management	1					14	6	14	6	20	Planting of low input and high value crops in unutilized pond dykes
Fodder cultivation	1					30	20	30	20	50	Increase milk yield
Hermetic storage bags for safe storage of grain						10	30	10	30	40	Reduction of storage pest incidence
Mushroom production technology						5	35	5	35	40	For income generation

### Livestock and fisheries

Name of intervention undertaken	Number of animals covered	No of units	Area (ha)	No of farmers covered / benefitted									Remarks
				SC		ST		Other		Total			
				M	F	M	F	M	F	M	F	T	
Fish production in community tank		1						20	10	20	10	30	For income generation
Round the year yearling production		6						4	2	4	2	6	For income generation
Demonstration on commercial floating pellet		10						5	5	5	5	10	Reduce wastage of feed

feed for fish production													
Deworming	30	1						20	10	20	10	30	Reduce disease pest incidence in livestock
Mineral mixture	40	1						25	15	25	15	40	To increase milk yield
Backyard poultry –Rainbow rooster	500	50						35	15	35	15	50	For income generation

## Institutional interventions

Name of intervention undertaken	No of units	Are a (ha)	No of farmers covered / benefitted									Remarks
			SC		ST		Other		Total			
			M	F	M	F	M	F	M	F	T	
Custom hiring centre	1						70	30	70	30	100	Reduce hiring charges of agricultural implements

## Capacity building

Thematic area	No of Courses	No of beneficiaries								
		SC		ST		Other		Total		
		M	F	M	F	M	F	M	F	T
IPM in Chilli for leaf curl virus	1					20	10	20	10	30
IPM in Sugarcane for early shoot borer & Red rot in sugarcane	1					15	15	15	15	30
Mushroom production technology	1					5	25	5	25	30
Preparation of farm made feed	1					17	13	17	13	30
Preparation of table size fish	1					16	14	16	14	30
Cultivation of high value and low input crops on pond dykes	1					13	17	13	17	30

## Extension activities

Thematic area	No of activities	No of beneficiaries								
		SC		ST		Other		Total		
		M	F	M	F	M	F	M	F	T



PRA Survey	1					20	10	20	10	30
Field day on azolla cultivation	1					15	10	15	10	25
Field day on composite fish culture	1					21	09	21	09	30
Village Climate Risk Management Committee (VCRMC) meeting	7					45	35	45	35	80

Detailed report should be provided in the circulated Performa

### 13. Awards/Recognition received by the KVK

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

Award received by Farmers from the KVK district

Sl. No.	Name of the Award	Name of the Farmer	Year	Conferring Authority	Amount	Purpose
1	Best farmer	Sri Brundaban Behera	2022-23	OUAT	-	Best farmer in seed production category

14. Any significant achievement of the KVK with facts and figures as well as quality photograph

15. Number of commodity based organizations/ farmers' cooperative society/ FPO formed/ associated with during last one year (Details of the group/society may be indicated)

Sl. No.	Name of the organization/ Society	Trust Deed No.& date	Date of Trust Registration Address	Proposed Activity	Commodity Identified	No. of Members	Financial position (Rupees in lakh)	Success indicator

### 16. Integrated Farming System (IFS)

Details of KVK Demo. Unit

Sl. No.	Module details (Component-wise)	Area under IFS (ha)	Production (Commodity-wise)	Cost of production in Rs. (Component-wise)	Value realized in Rs. (Commodity-wise)	No. of farmer adopted practicing IFS	% Change in adoption during the year
1							
2							
3							

## 17. Technologies for Doubling Farmers' Income

Sl. No.	Name of the Technology	Brief Details of Technology (3-5 bullet points)	Net Return to the farmer (Rs.) per ha per year due to adoption of the technology	No. of farmers adopted the technology in the district	One high resolution 'Photo' in 'jpg' format for each technology
1					
2					

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

Phase	Database prepared/ covered for		KVK level Committee		Various activity conducted for farmers
	Total no. of villages	Total no. of farmers	Date of formation	Name of members	
I (up-to 15.03.2018)					
II (up-to 24.04.218)					
Total					

## 19. Information on Visit of Ministers to KVKs, if any

Date of Visit	Name of Hon'ble Minister	Name of Ministry	Salient points in his/ her observation (2-3 bulleted points)

## 20. a) Information on ASCI Skill Development Training Programme, if undertaken during 2022

Name of the Job role	Name of the certified Trainer of KVK for the Job role	Date of start of training	Date of completion of training	No. of participants						Whether uploaded to SIP Portal (Y/N)	Fund utilized for the training (Rs.)
				SC		ST		Other			
				M	F	M	F	M	F		

## b) Information on Skill Development Training Programme (Other than ASCI or less than 200 hrs., if any) if undertaken during 2022

Thematic area of training	Title of the training	Duration (in hrs.)	No. of participants								Fund utilized for the training (Rs.)
			SC		ST		Other		Total		
			M	F	M	F	M	F	M	F	

## 21. Information on NARI Project (if applicable)

Name of Nodal Officer	No. of OFT on specified aspects	Title(s) of OFT	No. of FLD on specified aspects	No. of capacity development programme on	Total no. of farm women/	Details of Issues related to gender

				specified aspects	girls involved in the project	mainstreaming addressed through the project

## 22. Information on Krishi Kalyan Abhiyan Phase-III, if applicable

### a) Training achievements

Name of KVK	Period	No. of Training on diversified farming practices for doubling farmers' income organized	No. of farmers trained	
			Male	Female
	01.01.2022 to 31.12.2022			

### b) Other achievements

Sl. No.	Particulars	January, 2022 to December, 2022
1	Number of demonstrations other than oilseeds and pulses	
2	Number of demonstrations on oilseed crops	
3	Number of demonstrations on pulse crops	
4	Number of farmers trained	
5	Number of participants in Extension activities	
6	Number of farmers for Mobile Advisory	
7	Production of seeds (in quintal)	
8	Production of planting material (Number)	
9	Number of soil sample tested	
10	Number of farmers covered in Climate Resilient villages	
11	Number of farm families covered in Farmer FIRST project	
12	ARYA project: Number of youth trained	
13	ARYA project: Number of entrepreneurial activities started	
14	Number of farm families in DFI villages	

## 23. Any other programme organized by KVK, not covered above

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

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



Assessment of Nano Urea in rice



Assessment of integrated pest management modules in sunflower



Assessment of growing media for raising seedlings in portrays



Assessment of different trellies in bitter gourd for higher production





**Assessment of genetically improved Catla spawn for maximizing fish productivity**



**Assessment of packaging practices of *V. vulvacea* mushroom**



**Demonstration of drill seeded direct seeded rice**



**Demonstration of Rate and schedule of fertilizer application in sunflower**



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