

# ANNUAL REPORT

2020-21

*Contact Details:***KRISHI VIGYAN KENDRA, JAGATSINGHPUR**

ODISHA UNIVERSITY OF AGRICULTURE & TECHNOLOGY, BHUBANESWAR  
At- Nimakana, P.O-Manijanga, Dist-Jagatsinghpur, PIN Code:754160

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Contact No.876380576 (Senior Scientist & Head)

**PROFORMA FOR ANNUAL REPORT 2020 (January 2020 to December 2020)****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, Jagatsinghpur At-Nimakana, P.O- Manijanga, Dist-Jagatsinghpur Pin-754160, State-Odisha	8249447374		kvkjagatsinghpur.ouat@gmail.com

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

Address	Telephone		E mail
	Office	FAX	
OUAT, Bhubaneswar Pin-751003 Orissa	(0674) 2392677	(0674) 2391780	registrarouat@gmail.com

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Biswa Ranjan Pattanaik		8249447374	biswaranjan.pattanaik2010@gmail.com

## 1.4. Year of sanction of KVK: 2005

1.5. Staff Position (as on 1<sup>st</sup> Jan, 2021)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline/	Pay Scale with present basic	Date of joining	Permanent/ Temporary	Category (SC/ST/OBC/Others)
1	Senior Scientist& Head	Dr. Biswa Ranjan Pattanaik	Senior Scientist & Head	Agril. Extension	15,600-39,100 AGP:8,000 Basic:28,230	25.05.2018	Temporary	OTHER
2	Subject Matter Specialist	Mr. Ashis Ku. Mohanty	Scientist (Horticulture)	Horticulture	15,600-39,100 AGP:6,000 Basic:25,780	23.09.2009	Temporary	OTHER
3	Subject Matter Specialist	Dr. Prabhat Kumar Padhi	Scientist (Animal Science)	Veterinary Science	15,600-39,100 AGP:6,000 Basic:17,610	16.06.2015	Temporary	OTHER
4	Subject Matter Specialist	Mr. Bijay Ku Routray	Scientist (Plant protection)	Entomology	15,600-39,100 AGP:6,000 Basic:23,950	03.02.2016	Temporary	OTHER
5	Subject Matter Specialist	Mr. Dibyendu Mondal	SMS (Agronomy)	Agronomy	15,600-39,100 AGP: 5400 Basic: 15600	20.08.2018	Temporary	SC
6	Subject Matter Specialist	Dr. Pradipta Majhi	SMS(Soil Sc. & Agril. Chemistry)	Soil Sc. & Agril. Chemistry	15,600-39,100 AGP: 5400 Basic: 15600	27.11.2018	Temporary	OTHER
7	Subject Matter Specialist	Mrs. Sasmita Purohit	Scientist(Home Science)	Home Science	15,600-39,100 AGP:6,000 Basic:25,780	22.12.2018	Temporary	OTHER
8	Programme Assistant	Mrs. Sarita Das	Programme Assistant(Fishery)	Fishery Science	9,300-34,800 G.P:4,200 Basic:15,100	25.07.2018	Temporary	OTHER
9	Computer Programmer	Samir Kumar Pattanaik*	Prog. Asst. (Comp Sc)	Computer Sc.	9,300-34,800 G.P:4,200 Basic:12,430	31.01.2015	Temporary	OTHER
10	Farm Manager	Mr. Rabindra Kumar Pradhan	Farm Manager	Horticulture	9,300-34,800 G.P:4,200 Basic:10,560	16.11.2012	Temporary	OBC
11	Accountant / Superintendent							
12	Stenographer	Mr. Kamal Lochan Mahanta	Jr. Steno-cum-Computer Operator	Arts, MCA	5,200-20,200 G.P: 2,400 Basic: 8,490	10.07.2014	Temporary	OBC
13.	Driver	Mr. Pradipta Kumar Barik,	Driver-cum-Mechanic	-	5,200-20,200 G.P: 1,900 Basic:7,970	04.08.2008	Temporary	OBC

14.	Driver	Mr. Sanjay Kumar Panda	Driver-cum-Mechanic	-	5,200-20,200 G.P: 1,900 Basic:7,970	14.09.2017	Temporary	OTHER
15.	Supporting staff	Mr. Karunakar Singh	Peon-cum-Watchman	-	4,750-14,680 G.P: 1,500 Basic:6,270	18.09.2017	Temporary	OTHER
16.	Supporting staff	Smt. Urbasi Nayak	Peon-cum-Watchman	-	4,750-14,680 G.P: 1,500 Basic:6,740	22.12.2007	Temporary	ST

\*Sri Samir Kumar Pattanaik, Prog. Asst (Computer) has been relieved from KVK, Jagatsinghpur on pending handing over charges on dt 09.05.2016. He is being deployed at Office of the Directorate of Extension Education, OUAT & drawing salary from salary head of KVK, Jagatsinghpur since 24.07.2017.

1.6. Total land with KVK (in ha) :

S. No.	Item	Area (ha)
1	Under Buildings	1.19
2.	Under Demonstration Units	1.5
3.	Under Crops	9.53
4.	Orchard/Agro-forestry	-
5.	Others with details	1.0
	<b>Total</b>	<b>13.22</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					2008		Use	ICAR
2.	Farmers Hostel					2008		Use	ICAR
3.	Staff Quarters (6)					2012		Use	ICAR
4.	Piggery unit					2017		Use	RKVY
5	Fencing					2015		Use	RKVY
6	Rain Water harvesting structure					-			
7	Threshing floor					2007		Use	ICAR
8	Farm godown					2013		Use	ICAR
9.	Dairy unit					2017		Use	ICAR
10.	Poultry unit					2011		Use	RKVY
11.	Goatary unit					2011		Use	RKVY
12.	Mushroom Lab					2011		Use	RKVY
13.	Mushroom production unit					2017		Use	ICAR
14.	Shade house					2014		Use	RKVY
15.	Soil test Lab					2017		Use	ICAR
16	Others, Please Specify								
	• Vermi Yard					2011		Use	RKVY
	• IFS Unit					2017		Use	ICAR
	• Herbal Garden					2017		Use	ICAR
	• Carp Hatchery					2011		Use	ICAR

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

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total km. Run	Present status
Bolero	2005-06		1,79,493	Condemned since 30.11.2017
Tractor	2018-19	7,00,000	58	Running
Motor cycle	2010-11	65,000/-	21,712	Running

## C) Equipment &amp; AV aids

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
<b>a. Lab equipment</b>				
Automatic Nitrogen Analyzer with digestion Unit	2017	2,79,000	Working	ICAR
KES 08 LE	2017	77,500	Working	ICAR
KEL VAC VA	2017	69,900	Working	ICAR
Flame Photometer	2017	51,600	Working	ICAR
Digital Soil Moisture Meter	2017	27,706	Working	ICAR
Physical Balance	2017	3,350	Working	ICAR
All Glass Double Distillation Unit	2017	58,000	Working	ICAR
Distillation Appts Power Supply	2017	9,770	Working	ICAR
PH Meter-Micro Controller	2017	28,550	Working	ICAR
Conductivity Meter	2017	18,900	Working	ICAR
Rotary Shaker	2017	22,050	Working	ICAR
Flask Holding Clamp	2017	6,000	Working	ICAR
Mechanical Stirrer	2017	8,000	Working	ICAR
Bouycocus Hydrometer	2017	9,775	Working	ICAR
Hot Air Oven (Digital)	2017	27,310	Working	ICAR
Thermometer	2017	300	Working	ICAR
Water Quality Analyzer	2017	70,870	Working	ICAR
Vortex Shaker	2017	15,500	Working	ICAR
Magnetic Stirrer with Hot Plate	2017	16,800	Working	ICAR
Wooden Geological Hammer	2017	900	Working	ICAR
Sieve Brassframe	2017	3,570	Working	ICAR
Keen Cup	2017	3,600	Working	ICAR
Soil Moisture Sample Box	2017	3,300	Working	ICAR
Soil Agar Screw Type	2017	3,600	Working	ICAR
Electronic Balance	2017	64,000	Working	ICAR
Top Pan Balance	2017	36,000	Working	ICAR
PC based double beam UV Vis Spectrometer	2017	3,52,013	Working	ICAR
Refrigerated Centrifuge	2017	1,92,000	Working	ICAR
Angle Head R-244m -12x15ml	2017	17,000	Working	ICAR
Angle Head	2017	13,000	Working	ICAR
Voltage Stabilizer	2017	13,200	Working	ICAR
Hot Air Oven	2011	15,000	Working	RKVY
Autoclave fully automatic	2011	79,750	Working	RKVY
Pan Electronic Balance	2011	5,460	Working	RKVY
Honda Gen Set	2009	35,873	Working	ICAR
Laminar Air Flow	2011	55,125	Working	RKVY
Honda Brush Cutter	2018	27,585	Working	ICAR
Refregerator	2011	19,000	Working	RKVY
Desktop Computer	2016	38,500	Working	ICAR
Printer	2018	14,000	Working	ICAR
Stabilizer	2018	4,800	Working	ICAR
Photo copier	2016	13,333	Working	ICAR
Xerox machine	2016	72,556	Working	ICAR
UPS	2016	1,636	Working	ICAR
Inverter with Battery	2017	34,349	Working	ICAR
Tablet	2017	10,004	Working	ICAR
Grinder	2016	2,600	Working	ICAR
Air Conditioner	2018	47,200	Working	ICAR
Desktop Computer	2018	47,750	Working	ICAR
Air Conditioner	2009	29,390	Working	ICAR
Air Conditioner	2011	30,190	Working	ICAR
<b>b. Farm machinery</b>				

MB Plough			Working	ICAR
Rotavator	2012	79,800	Working	ICAR
Cultivator	2012		Working	ICAR
Power sprayer	2012	9,054	Working	ICAR
Pumpset	2012	11,146	Working	ICAR
Pumpset	2015	19,000	Working	ICAR
<b>c.AV Aids</b>				
LCD projector	2009		Working	ICAR
Laptop	2009	47,300	Working	ICAR
DVD	2007	2,133	Working	ICAR
TV	2007	9,955	Working	ICAR
Amplifier	2017	10,500	Working	ICAR
Video Camera	2017	32,990	Working	ICAR
Digital Camera	2012	19,700	Not Working	ICAR

#### D) Farm implements

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
MB Plough			Working	ICAR
Rotavator	2012	79,800	Working	ICAR
Cultivator	2012		Working	ICAR
Power sprayer	2012	9,054	Working	ICAR
Pumpset	2012	11,146	Working	ICAR
Pumpset	2015	19,000	Working	ICAR

#### 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.	10.02.2021	25	Integrated approaches for pest and Nutrient management should have a combination of all management practices like Cultural methods, Chemical methods and Biological methods instead of a single method of approach.	<ul style="list-style-type: none"> <li>OFT on management practices against neck blast in rice by covering 1.0 ha area conducted at village Bhansar, Bagoi and Japa with 13 farmers.</li> <li>FLD taken on INM in Greengram at village Achyutdaspur, Saharadia &amp; kanimula with 10 nos. of farmers.</li> <li>Demonstration of Integrated management of wilt complex of brinjal conducted at village Saharadia &amp; Bagoi with 10 Nos. of farmers.</li> </ul>	
			Awareness training on management practices to check kid mortality should be taken up.	<ul style="list-style-type: none"> <li>Training programme conducted at village Bhansar with 30 participants</li> <li>Awareness programme conducted in village Haldia, Garama, Tirtol, Saharadia, Bagoi, Narua, Mandasahi, Alanahat involving 225 goat farmers one goat producer group of Garam in collaboration with Line Deptt.</li> </ul>	
			Programme may be designed for improving growth rate of	<ul style="list-style-type: none"> <li>FLD on Artificial brooding management in Kadaknath chicks at village Garama and</li> </ul>	

			Kadaknath through feed supplementation.	<p>saharadia involving 20 farmers and farm women</p> <ul style="list-style-type: none"> <li>• Training Programme conducted at village Garama with 30 participants</li> <li>• Feed supplementation and management advisory given to 300 nos. of farmers from 34 villages procuring chicks (5000 nos.) through KVK.</li> </ul>	
			Use of media for awareness creation activity on a wide scale throughout the district	<ul style="list-style-type: none"> <li>• AIR and TV programme conducted</li> <li>• Awareness creation activity through Relience Foundation</li> <li>• Article published on Print Media</li> </ul>	
			Fodder cultivation should be promoted through training and demonstration programmes.	<ul style="list-style-type: none"> <li>• FLD on cultivation of Hybrid Napier CO-5 and fodder cow pea conducted at village Saharadiha involving 10 farmers</li> <li>• Training programme conducted at adopted villages.</li> <li>• Promoted Dairy farmers of villages Kanakpur, Jagannathpur, Ramchandrapur, Redhua, Nagapura through providing planting material and advisory on feed management in collaboration with line department.</li> </ul>	
			Vermicompost may be demonstrated in KVK adopted villages.	<ul style="list-style-type: none"> <li>• Demonstration on HDPE bag for Vermicompost production at village Saharadia, Sanimula, Achyutdaspur, Bhansar, Bagoi, Nimakana and Gamhapur</li> <li>• Awareness programme conducted at village Gamhapur , Bhansar, Bagoi, Sanimula, Saharadia, Achyutadaspur and Nimakana through method demonstration.</li> </ul>	
			During distribution of soil health card, the officials of line department may be included.	<ul style="list-style-type: none"> <li>• On 5<sup>th</sup> December,2020 World Soil Day was organized jointly with Agriculture department.</li> </ul>	
			Farmers should be counseled on the right time and right dose of pesticides as prevention is better than cure.	<ul style="list-style-type: none"> <li>• KMAS is being sent every month</li> </ul>	
			Green manuring in rice may be taken up./ Management of Acidic & Saline soil	<ul style="list-style-type: none"> <li>• Demonstration on Green manuring of Dhaincha for salinity management in rice</li> </ul>	
			IMC production should be doubled	<ul style="list-style-type: none"> <li>• Demonstration of “Jayanti Rohu” in composite carp culture for more yield and</li> </ul>	



				Demonstration of Amur carp in composite pisciculture	
			YVMV in green gram is a major problem in the district.	<ul style="list-style-type: none"> <li>• Demonstration of Integrated management of YVMV in green gram</li> </ul>	
			Discolouration, cracking and poor quality of curd in cauliflower.	<ul style="list-style-type: none"> <li>• Assessment of Sulphur and Boron application in Cauliflower</li> </ul>	
			Less oil content and poor quality pod in Groundnut	<ul style="list-style-type: none"> <li>• Demonstration on Secondary and micro nutrient(Sulphur and Boron) application in Groundnut</li> </ul>	
			Weeding in brinjal by farm women is a tedious process	<ul style="list-style-type: none"> <li>• Demonstration of Wheel Cycle Weeder in Brinjal for drudgery reduction of farmwomen</li> </ul>	
			Khaira disease of rice	<ul style="list-style-type: none"> <li>• Assessment of zinc deficiency in lowland rice</li> </ul>	
			Low yield of paddy straw mushroom	<ul style="list-style-type: none"> <li>• Assessment of humidity/moisture management in paddy straw mushroom in low temp.</li> </ul>	
			Farmers getting low price of milk due to low fat percentage	<ul style="list-style-type: none"> <li>• Assessment of bypass fat feeding for increasing milk production in dairy cows conducted at Gamhapur, Bagoi, saharadia&amp;Mohammadabad and Garam Village</li> </ul>	
			Sheath Blight in rice is a problem	<ul style="list-style-type: none"> <li>• Assessment of Integrated practices of management of Sheath Blight in rice</li> </ul>	
			Malnutrition in members of farm family	<ul style="list-style-type: none"> <li>• Demonstration of nutritional garden for Improving Nutritional Security of farm family</li> </ul>	
			Stunted growth of chickens in backyard poultry	<ul style="list-style-type: none"> <li>• Comparative assessment of multi-enzyme mixture and probiotics on growth of chickens in semi intensive system of rearing conducted at Saharadia, Bagoi, Gamhapur village</li> </ul>	
			Deficiency of micro-nutrients in vegetables	<ul style="list-style-type: none"> <li>• Assessment of sulphur and boron for curd size, keeping quality and higher yield in cauliflower</li> <li>• Demonstration on sulphur application in tomato crop</li> <li>• Demonstration of application of Micro-nutrient mixture for increasing fruit yield in Okra</li> </ul>	
			Seedling raising in coco peat may be tried	<ul style="list-style-type: none"> <li>• Assessment of different methods of portray nursery raising for quality seedling production in tomato</li> </ul>	
			Yard long bean is being widely cultivated. Suitable variety may be tried	<ul style="list-style-type: none"> <li>• Demonstration of Yard Long Bean variety “Arka Mangala” for higher yield</li> </ul>	

			Popularise Salt tolerant Varieties like Luna Sampad in saline areas	<ul style="list-style-type: none"> <li>One varietal trial has been initiated at KVK farm for multiplication of seeds. Rice seeds of different salt tolerant varieties has been distributed during kharif season. Training programme conducted at Japa village</li> </ul>	
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\* *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 (2020-21)

Sl. no.	Item	Information
1	Major Farming system/enterprise	Rice- Green gram/,Rice Vegetables /Dairy /Fishery
2	Agro-climatic Zone	<b>East &amp; south eastern coastal plain</b>
3	Agro ecological situation	Costal irrigated alluvium Rain-fed alluvium Costal alluvial saline Costal waterlogged
4	Soil type	Sandy loam to clay loam
5	Productivity of major 2-3 crops under cereals, pulses, oilseeds, vegetables, fruits and others	Paddy-3.6t/ha Greengram -0.432t/ha Black gram -0.450t/ha Chilli-1.13t/ha,Sugarcane-70.t/ha,Groundnut-2.36t/ha
6	Mean yearly temperature, rainfall, humidity of the district	30 °C & 18 °C, Annual rainfall – 1521.16 mm, 98%
7	Production of major livestock products like milk, egg, meat etc.	Dairy -102TMT milk/year, Psciculture-Inland- 494.4 ton /year Marine fish -8000 ton/year , Poultry - 29.1 Million (Egg) 3.07 TMT (Meat) , Goatery -2.13 TMT (Meat), Mushroom - 10-12 q/day

Note: Please give recent data only

#### 2.b. Details of operational area / villages (2020-21)

Sl. No	Name of Taluk	Name of the block	Name of the villages	Major crops & enterprises	Major problems identified (crop-wise)	Identified Thrust Areas
1	Tirtol	Tirtol	Nagapura	Rice, Greengram, Vegetables, Dairy, Poultry	Low yield in rice, Heavy incidence of pest and disease in rice Low yield in pulse, Low milk yield in Dairy, Low yield in vegetables	Boron application in low land rice, IPM in rice, IPDM in vegetables Introduction of high yielding varieties of vegetables, Entrepreneurship development, Farm mechanization,

2	Erasama	Ersama	Japa	Rice, greengram, Dairy, Poultry, Pisciculture	Low yield in rice, Heavy incidence of pest and disease in rice Low yield in pulse, Low milk yield in Dairy, Less availability of inputs like seed fertilizer and fingerlings, Underutilization of marine fish	INM in rice, IPM in rice, Management of saline soil, INM in Greengram, Fish pond management, Entrepreneurship development, Farm mechanization
3	Kujanga	Kujanga	Saharadia	Rice, greengram, dairy, poultry, vegetables, Pisciculture	Low yield in rice, Heavy incidence of pest and disease in rice Low yield in pulse, Low milk yield in Dairy, Underutilization of marine fish	IPM in rice, INM in Greengram, IPDM in vegetables Introduction of high yielding varieties of vegetables, Fish pond management, INM in vegetable, Entrepreneurship development, Farm mechanization
4	Raghunathpur	Raghunathpur	Gamhapur	Rice, greengram, dairy, poultry, vegetables	Low yield in rice, Heavy incidence of pest and disease in rice Low yield in pulse, Low milk yield in Dairy,	IPM in rice, IPDM in vegetables Farm mechanization Introduction of high yielding varieties of vegetables, Entrepreneurship development
5	Jagatsinghpur	Jagatsinghpur	Gobindapokhari	Rice, greengram, dairy, poultry, Mushroom	Low yield in rice, Heavy incidence of pest and disease in rice Low yield in pulse, Low milk yield in Dairy, Low yield in mushroom	IPM in rice, Farm mechanization Entrepreneurship development

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

Name of the villages adopted by PC and SMS (2020-21) for its development and action plan

Name of village	Block	Action taken for development
Nagapura	Tirtol	OFT on Okra hybrids for resistance to YVMV. OFT on Micro-nutrient formulations in Bitter gourd. FLD on Yard Long Bean variety "Arka Mangala" for higher yield FLD on High yielding Onion variety Bhima Shakti
Saharadia	Kujanga	OFT on submergence tolerant rice varieties OFT on Weed management in rice FLD on Weed management in green gram FLD on Nutrient management in Blackgram FLD on Green manuring in rice OFT on Okra hybrids for resistance to YVMV. OFT on Micro-nutrient formulations in Bitter gourd. FLD on Yard Long Bean variety "Arka Mangala" for higher yield FLD on High yielding Onion variety Bhima Shakti

		FLD on Seedling raising technique in pro-trays with Arka Microbial Consortium (AMC) fermented Cocopeat. FLD on STBF+ seed treatment with Arka Microbial Consortium @10gm/100gm seed +soil application with 5kg AMC mixed with 500kg FYM FLD On Integrated management of wilt complex of brinjal FLD on integrated management for sucking pest complex in chilli
Japa	Ersama	FLD on Green manuring in rice FLD on management of sheath blight in rice
Gamhapur	Raghunathpur	OFT on submergence tolerant rice varieties OFT on Weed management in rice OFT on Okra hybrids for resistance to YVMV. OFT on Micro-nutrient formulations in Bitter gourd. FLD on Yard Long Bean variety “Arka Mangala” for higher yield FLD on High yielding Onion variety Bhima Shakti FLD on Seedling raising technique in pro-trays with Arka Microbial Consortium (AMC) fermented Cocopeat. FLD on STBF+ seed treatment with Arka Microbial Consortium @10gm/100gm seed +soil application with 5kg AMC mixed with 500kg FYM OFT on assessment of Integrated management practice against surpentine leaf minor in tpmato OFT-on assessment of Integrated management practices against neck blast in rice FLD on management of sheath blight in rice FLD Oon <b>Integrated management of wilt complex of brinjal</b> FLD on integrated management for sucking pest complex in chilli FLD on <b>Integrated management of YMV in green gram</b>
Gobindapokhari	Jagatsinghpur	OFT on Micro-nutrient formulations in Bitter gourd. FLD on Yard Long Bean variety “Arka Mangala” for higher yield FLD on High yielding Onion variety Bhima Shakti

## 2.1 Priority thrust areas

S. No	Thrust area
1.	Management of saline soil
2.	IPM and IDM in rice and vegetables
3.	Popularization of scented rice
4.	Introduction of high yielding varieties of vegetables and fruits
5.	Use of plasticulture
6.	Popularization of floriculture and high value crops
7.	IDM in betel vine
8.	Fish pond management
9.	Management practices in Dairy farming
10.	Empowerment of SHGs through agro enterprise
11.	Use of bio-fertilizers and bio-pesticides
12.	Feeding management in small ruminants
13.	Disease management in livestock and poultry
14.	Farm mechanization

## Achievements on technologies assessed and refined

### OFT-1

1.	Title of On farm Trial	Assessment of submergence tolerant rice variety
2.	Problem diagnosed	Lower yield due to less tolerant of local varieties to water logging
3.	Details of technologies selected for assessment/refinement	Technology option-I (TO-I): Cultivation of submergence tolerant, Swarna Sub 1 Technology option-II (TO-II): Cultivation of submergence tolerant, CR 1009 sub 1
4.	Source of Technology (ICAR/AICRP/SAU/other, please specify)	NRRI, Cuttack, Odisha,2014 & TNAU, Coimbatore 2015
5.	Production system and thematic area	Rice- Greengram/Black gram/Vegetables & Varietal assessment
6.	Performance of the Technology with performance indicators	Water submergence period, Effective panicles/m <sup>2</sup> , No of Filled grains /Panicle, 1000 grain weight
7.	Final recommendation for micro level situation	Swarna Sub1 performs better than CR 1009 Sub 1
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	Active participation of farmer from planning to execution. Encouraging response from the farmer end as they got better price due to higher yield.

*Thematic area:* Varietal assessment

Problem definition: Lower yield due to less tolerant of local varieties to water logging

Technology assessed: Technology option-I (TO-I): Cultivation of submergence tolerant, Swarna Sub 1  
Technology option-II (TO-II): Cultivation of submergence tolerant, CR 1009 sub 1

Table: 1

Technology option	No. of trials	Yield component			Period of submergence tolerant ( Days)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		No. of effective tillers/m <sup>2</sup>	No. of grains per panicle	Test wt. (100 grain wt.)						
FP	7	398	179	21.0	6	39.6	39500	63360	23800	1.60
TO-I	7	482	205	21.8	12	44.8	40500	71380	31180	1.76
TO-II	7	448	193	22.2	14	42.9	40500	68640	28140	1.69

Results: Swarna sub 1 performed better than CR 109 Sub 1 in terms of yield under low land condition.

## OFT-2

1.	Title of On farm Trial	Assessment of herbicides for weed management in transplanted <i>kharif</i> rice
2.	Problem diagnosed	Low yield due to high weed infestation and high cost due to manual weeding
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Technology option-I (TO-I): Post emergence application of Bispyribac Sodium 10 SC @ 25 ml/ha at 25 DAT Technology option-II (TO-II): Early PoE application of Almix 20 WP (metsulfuron methyl 10% + chlorimuron ethyl 10% WP) @ 4 g/ha at 15 DAT
4.	Source of Technology (ICAR/AICRP/SAU/other, please specify)	RRTTS, Ranital, Odisha, 2015 & AICRP on Weed management, Odisha, 2015
5.	Production system and thematic area	Rice- Greengram/Black gram/Vegetables & Weed Management
6.	Performance of the Technology with performance indicators	Weed flora composition, Weed control efficiency Effective panicles/m <sup>2</sup> , No of Filled grains /Panicle, 1000 grain weight
7.	Final recommendation for micro level situation	Post emergence application of Bispyribac Sodium 10 SC @ 25 ml/ha at 25 DAT helps the farmers to reduce weed population bellow ETL & at the same time helps to increase the yield of Rice
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	Active participation of farmer from planning to execution. Encouraging response from the farmer end as they got better price due to higher yield.

*Thematic area:* Varietal assessment

Problem definition: Low yield due to high weed infestation and high cost due to manual weeding

Technology assessed: Technology option-I (TO-I): Post emergence application of Bispyribac Sodium 10 SC @ 25 ml/ha at 25 DAT

Technology option-II (TO-II): Early PoE application of Almix 20 WP (metsulfuron methyl 10% + chlorimuron ethyl 10% WP) @ 4 g/ha at 15 DAT

Table: 1

Technology option	No. of trials	Yield component			Weed Control efficiency (%)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		No. of effective tillers/m <sup>2</sup>	No. of grains per panicle	Test wt. (100 grain wt.)						
FP	7	336	162	22.1	60.16	38.1	40120	61440	21320	1.53
TO-I	7	482	203	22.2	84.30	16.1	39600	73760	34160	1.86
TO-II	7	398	182	22.2	73.54	42.8	38100	68480	30380	1.79

Results: Post emergence application of Bispyribac Sodium 10 SC @ 25 ml/ha at 25 DAT helps the farmers to reduce weed population bellow ETL & at the same time helps to increase the yield of Rice

## OFT-3

1.	Title of On farm Trial	Assessment of different methods of portrays nursery raising for quality seedling production in tomato.
2.	Problem diagnosed	High seedling mortality in main field
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmers Practice (FP): Seedling rising in Nursery bed. Technology option-I (TO-I): Use of normal Cocopeat for seedling production using CIWA technology. Technology option-II (TO-II): Use of Arka Microbial Consortium Fermented Cocopeat for raising seedlings.
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	ICAR-CIWA, Bhubaneswar & ICAR-IIHR, Bangalore
5.	Production system and thematic area	Vegetable-Vegetable; Nursery management
6.	Performance of the Technology with performance indicators	Seedling mortality percentage, Height and no of leaves per seedling, Days to seedling readiness for transplanting.
7.	Final recommendation for micro level situation	Use of Arka Microbial Consortium fermented Cocopeat for raising seedlings reduces the seedling mortality in main field thereby increases yield by increasing plant population in the main field.
8.	Constraints identified and feedback for research	Arka Microbial Consortium not available in local market.
9.	Process of farmers participation and their reaction	Active participation of farmer from planning to execution. Encouraging response from the farmers end as they got better income due to higher yield.

*Thematic area:* Nursery management

Problem definition: High seedling mortality in main field.

Technology assessed: Technology option-I (TO-I): Use of normal Cocopeat for seedling production using CIWA technology.

Technology option-II (TO-II): Use of Arka Microbial Consortium Fermented Cocopeat for raising seedlings.

Table: 1

Technology option	No. of trials	Yield component			No. of leaves	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Germination %	Seedling mortality % in field	Height of seedlings (cm) at 25 days)						
FP	7	92.7	14.9	8.4	9.2	242.2	72200	145398	73198	2.01
TO-I	7	97.6	2.4	10.1	12.1	376.12	78640	227246	148606	2.88
TO-II	7	98.4	1.2	10.8	12.4	396.22	78800	237852	159052	3.01

Results: Use of Arka Microbial Consortium fermented Cocopeat for raising seedlings reduces the seedling mortality in main field thereby increases yield by increasing plant population in the main field.

## OFT-4

1.	Title of On farm Trial	Assessment of Okra hybrids for resistance to YVMV.
2.	Problem diagnosed	High infection of YVMV.
3.	Details of technologies selected for assessment/refinement	Farmers Practice (FP): Use of Okra hybrid Radhika susceptible to YVMV. Technology option-I (TO-I): Use of Okra hybrid Arka Nikita resistant to YVMV. Technology option-II (TO-II): Use of Okra hybrid Kashi Kranti resistant to YVMV.
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	IIHR, Bengaluru and IIVR, Varanasi.
5.	Production system and thematic area	Vegetable- Vegetable, Varietal evaluation
6.	Performance of the Technology with performance indicators	Plant height (cm), No. of branches per plant, Days to 50% flowering, pod length(cm), No. of pods per plant, yield/plant, Yield(q/ha).
7.	Final recommendation for micro level situation	Okra hybrid Arka Nikita is resistant to YVMV and is suitable for kharif season.
8.	Constraints identified and feedback for research	Okra hybrid Arka Nikita is light green in colour. It's colour should be dark green for more acceptability in local market
9.	Process of farmers participation and their reaction	Active participation of farmer from planning to execution. Encouraging response from the farmers end as they got better income due to higher yield.

*Thematic area:* Varietal evaluation

Problem definition: High infection of YVMV.

Technology assessed: Technology option-I (TO-I): Use of Okra hybrid Arka Nikita resistant to YVMV.

Technology option-II (TO-II): Use of Okra hybrid Kashi Kranti resistant to YVMV.

Table: 1

Technology option	No. of trials	Yield component				Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Plant height (cm)	Fruit length(cm)	No. of fruits/plant	50% of flowering (days)					
FP	7	106.4	11.93	11.80	61.60	81.80	52800	98160	45360	1.85
TO-I	7	101.1	13.84	14.20	60.00	138.60	56800	166320	109520	2.92
TO-II	7	103.3	14.81	15.50	52.30	112.42	56400	134904	78504	2.39

Results: Okra hybrid Arka Nikita is resistant to YVMV and is suitable for kharif season.

## OFT-5



1.	Title of On farm Trial	Assessment of zinc deficiency in lowland rice
2.	Problem diagnosed	Low yield due to Zn deficiency
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	TO-1: Soil Test Based Recommendation (STBR) NPK+ Zn @ 5 kg ha <sup>-1</sup> TO-2: STBR NPK + 5t FYM ha <sup>-1</sup> + Zn @ 2.5 kg ha <sup>-1</sup>
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	AICRP on LTFE, OUAT, Bhubaneswar, Odisha, 2014 AICRP on Micronutrient, OUAT, Bhubaneswar, Odisha, 2014
5.	Production system and thematic area	Rice-Green/Black Gram & Nutrient Management
6.	Performance of the Technology with performance indicators	Initial and after harvest soil test value, Root growth ( cm), Plant height, No. of tillers m <sup>2</sup> , No. of filled grain per panicle, 1000 grain weight (gm), Cost of intervention. Additional income over additional investment Yield (q ha <sup>-1</sup> ), B:C ratio
7.	Final recommendation for micro level situation	STBR NPK + 5t FYM ha <sup>-1</sup> + Zn @ 2.5 kg ha <sup>-1</sup> gives better yield
8.	Constraints identified and feedback for research	STBR NPK + 5t FYM/ ha + Zn @ 2.5 kg/ha resulted 21.32% better yield than FP
9.	Process of farmers participation and their reaction	Active participation of farmer from planning to execution. Encouraging response from the farmer end as they got better price due to higher yield.

*Thematic area:* Varietal assessment

Problem definition: Low yield due to Zn deficiency

Technology assessed: Technology option-I (TO-I): Soil Test Based Recommendation (STBR) NPK+ Zn @ 5 kg ha<sup>-1</sup>

Technology option-II (TO-II): STBR NPK + 5t FYM ha<sup>-1</sup> + Zn @ 2.5 kg ha<sup>-1</sup>

Table: 1

Technology option	No. of trials	Yield component			Root Length (cm) at 55 DAT	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		No. of effective tillers/m <sup>2</sup>	No. of grains per panicle	Test wt. (100 grain wt.)						
FP	8	402	171	21.4	10.2	36.1	37500	57760	20260	1.54
TO-I	8	429	184	22.4	12.5	39.3	40000	62880	22880	1.57
TO-II	8	452	198	22.7	13.7	43.8	43200	70080	26880	1.62

Results: STBR NPK + 5t FYM ha<sup>-1</sup> + Zn @ 2.5 kg ha<sup>-1</sup> gives better yield

1.	Title of On farm Trial	Assessment of Sulphur and Boron for curd quality and higher yield in cauliflower
2.	Problem diagnosed	Low curd keeping quality, flavour and yield due to secondary and micro nutrient deficiency
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	TO-1: STB R(NPK) + Sulphur @ 30 kg ha <sup>-1</sup> as basal application TO-2: STBR (NPK) + Sulphur @ 30 kg ha <sup>-1</sup> + 1 kg Boron as basal application TO-3: STBR (NPK) + 1 kg Boron as basal application
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	AICRP on Micronutrient, OUAT, Bhubaneswar, Odisha, 2016
5.	Production system and thematic area	Rice-Green/Black Gram/ Vegetables & Nutrient Management
6.	Performance of the Technology with performance indicators	Curd weight (gm), plant spread (cm), no. of days harvesting, soil test value (before sowing and after harvesting)
7.	Final recommendation for micro level situation	STBR (NPK) + Sulphur @ 30 kg ha <sup>-1</sup> + 1 kg Boron as basal application is recommended for higher yield in cauliflower.
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	Active participation of farmer from planning to execution. Encouraging response from the farmer end as they got better price due to higher yield.

*Thematic area:* Varietal assessment

Problem definition: Low curd keeping quality, flavour and yield due to secondary and micro- nutrient deficiency

Technology assessed: TO-1: STBR (NPK) + Sulphur @ 30 kg ha<sup>-1</sup> as basal application

TO-2: STBR (NPK) + Sulphur @ 30 kg ha<sup>-1</sup> + 1 kg Boron as basal application

TO-3: STBR (NPK) + 1 kg Boron as basal application

Table: 1

Technology option	No. of trials	Yield component	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Curd weight(g)					
FP	7	336.22	232.8	75400	186240	110840	2.47
TO-I	7	516.41	258.6	77200	206880	129680	2.67
TO-II	7	542.48	286.2	78400	228960	118197	2.92
TO-III	7	528.32	271.6	76200	217280	141080	2.85

Results: STBR (NPK) + Sulphur @ 30 kg ha<sup>-1</sup> + 1 kg Boron as basal application gives highest yield and B:C ratio.

OFT-7

1.	Title of On farm Trial	Assessment of packaging practices of <i>V.volvacea</i>
2.	Problem diagnosed	Distress sale and low income due to short shelf life
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Technology option-I (TO-I): Fresh Mushrooms Buds washed with potassium meta bisulphite (KMS 0.1% and 0.1% citric acid,) for 10 minutes and allowed to air dry on muslin cloth for 30 min and then packed in perforated polypropylene bags punched with 10 holes stored at room temperature.  Technology option- II (TO-II): Fresh Mushrooms Buds treated with potassium meta bisulphite (KMS 0.1% and 0.1% citric acid,) for 10 minutes and allowed to air dry on muslin cloth for 30 min and then packed in paper Bags punched with 10 holes (0.5 cm diameter) stored at room temperature
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	PAU,2010
5.	Production system and thematic area	Mushroom-Mushroom
6.	Performance of the Technology with performance indicators	Cost of input(Rs),Additional Income (Rs),B:C ratio,sensory evaluation,wt. loss(%),shelf life (Months)
7.	Final recommendation for micro level situation	shelf life is better in paper bags means it will fresh upto 24 hrs.,so market price will be high.
8.	Constraints identified and feedback for research	-
9.	Process of farmers participation and their reaction	Farmwomen are interested to adopt this technology

*Thematic area:* Mushroom cultivation

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

*Technology assessed:* Technology option-I (TO-I): Fresh Mushrooms Buds washed with potassium meta bisulphite (KMS 0.1% and 0.1% citric acid,) for 10 minutes and allowed to air dry on muslin cloth for 30 min and then packed in perforated polypropylene bags punched with 10 holes stored at room temperature.

Technology option-II (TO-II): Fresh Mushrooms Buds treated with potassium meta bisulphite (KMS 0.1% and 0.1% citric acid,) for 10 minutes and allowed to air dry on muslin cloth for 30 min and then packed in paper Bags punched with 10 holes (0.5 cm diameter) stored at room temperature

Table:1

Technology option	No. of trials	Output (Kg/bed)	Colour	Texture	Wt. loss (gm.)	Shelf life (hr.)	Cost of Cultn. (Rs/)	Gross Return (Rs/)	Net Income (Rs/)	BC Ratio
FP	7	1 kg.	Brown	Delicate	100(10%)	10	70	140	70	2
TO-I	7	1 kg.	Palebrown	spongy	40(4%)	18	75	160	85	2.13
TO-II	7	1 kg.	Grey	spongy	70(7%)	24	85	200	115	2.35

Results: shelf life is better in paper bags means it will fresh upto 24 hrs.,so market price will be high.

**OFT-8**

1.	Title of On farm Trial	Assessment of humidity/moisture management in paddy straw mushroom in low temp.
2.	Problem diagnosed	Low yield of paddy straw mushroom due to low humidity and environmental rise in temperature
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Technology option-I (TO-I): Cultivation of paddy straw mushroom with bundle straw substrate (3 layers) with covering the floor with 2 inch sand in moist condition. Technology option- II (TO-II): Cultivation of paddy straw mushroom with bundle straw substrate (3 layers) with covering the floor with sand in moist condition and spreading wet gunny bag along the windows / wall
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	OUAT-2014 (KVK- Bargarh)
5.	Production system and thematic area	Mushroom-Mushroom
6.	Performance of the Technology with performance indicators	Cost of intervention. Additional income over additional investmen, Yield (kg/bed), B:C ratio, Days to first flush, Size of fruit budding, Average fruit body wt. Pin head appearance (Days), Biological efficiency,
7.	Final recommendation for micro level situation	Yield of mushroom is better with bundle straw substrate (3 layers) with covering the floor with sand in moist condition and spreading wet gunny bag along the windows / wall
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	Farmwomen are interested to adopt this technology

*Thematic area:* Mushroom cultivation

Problem definition: Low yield of paddy straw mushroom due to low humidity and environmental rise in temperature

Technology assessed: Technology option-I (TO-I): Cultivation of paddy straw mushroom with bundle straw substrate (3 layers) with covering the floor with 2 inch sand in moist condition.

Technology option-II (TO-II): Cultivation of paddy straw mushroom with bundle straw substrate (3 layers) with covering the floor with sand in moist condition and spreading wet gunny bag along the windows / wall

Table: 1

Technology option	No. of trials	Production/unit (10 beds)	Biological efficiency(%)	Cost of input(Rs/)	Incremental income (Rs/)	Net Income (Rs/)	BC Ratio
FP	7	8	8	800	1440	640	1.8
TO-I	7	9.23	9.23	870	1661	791	1.9
TO-II	7	12	12	900	2160	1210	2.4

Results: Yield of mushroom is better with bundle straw substrate (3 layers) with covering the floor with sand in moist condition and spreading wet gunny bag along the windows / walls

**OFT-9**

1.	Title of On farm Trial	Assessment of inclusion of broken rice as a substitute for maize as feed ingredient in poultry feed.
2.	Problem diagnosed	poor growth rate of growing chicks due to poor feed provisioning due to high cost of commercially available poultry feed
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Technology option-I (TO-I): provisioning of feed with ground maize 35%, GNOC 23%, fish meal 10%, wheat bran 15%, <b>Broken rice 15%</b> , Di calcium phosphate 1%, vitamins amino acids 1.6%, salt 0.4%.  Technology option-II (TO-II): provisioning of feed with ground maize 30 %, GNOC 23%, fish meal 10%, wheat bran 15%, <b>Broken rice 20%</b> , Di calcium phosphate 1%, vitamins amino acids 1.6%, salt 0.4%.
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	ICAR- CIWA 2016
5.	Production system and thematic area	Livestock Production management
6.	Performance of the Technology with performance indicators	Body weight at 15 days, 30 days, 45 days, mortality rate. Feed cost/ chick/ 1 <sup>st</sup> month
7.	Final recommendation for micro level situation	Broken rice at the level of 20% is as much effective as substituted feed in growth of birds without any adverse health effects.
8.	Constraints identified and feedback for research	Broken rice is easily available. Research may be done on appropriate feed formulation with broken rice for optimum egg production.
9.	Process of farmers participation and their reaction	Field visit, group discussion, Telephonic contact. Feed cost reduced when broken rice is added to it at 15-20% level. Previous feeding of only broken rice not good for production of birds.

*Thematic area:* Feed Management

Problem definition: poor growth rate of growing chicks due to poor feed provisioning due to high cost of commercially available poultry feed

Technology assessed: Technology option-I (TO-I): provisioning of feed with ground maize 35%, GNOC 23%, fish meal 10%, wheat bran 15%, **Broken rice 15%**, Di calcium phosphate 1%, vitamins amino acids 1.6%, salt 0.4%.

Technology option-II (TO-II): provisioning of feed with ground maize 30 %, GNOC 23%, fish meal 10%, wheat bran 15%, **Broken rice 20%**, Di calcium phosphate 1%, vitamins amino acids 1.6%, salt 0.4%.

Table: 1

Technology option	No. of trials	Yield component			Mortality rate	Feed cost/ chick/ month	Gross return (Rs/ 10 birds)	Net return ((Rs/ 10 birds)	BC ratio
		Body weight at 15 days	Body weight at 30 days	Body weight at 45 days					
FP	10	185	465	875	9.2	25.15	750	170	1.28
TO-I	10	190	445	880	4.8	23.60	750	185	1.33
TO-II	10	182	458	845	5.6	23.10	750	190	1.35

Results: technology option II i.e inclusion of Broken rice at 20% level is effective in ensuring body weight gain in chicks.

**OFT-10**

1.	Title of On farm Trial	Assessment of low cost concentrate mixtures on milk production in dairy cows
2.	Problem diagnosed	low milk production in cows
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Technology option-I (TO-I): Straw + wheat bran ( 80%)+ GNOC (17%) + mineral mixture 2.5% + salt 0.5%  Technology option-II (TO-II): Straw + Wheat Bran (92%) + GNOC (5%)+ mineral mixture 2.5% + salt 0.5%
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	ICAR-IGFRI-2017
5.	Production system and thematic area	Livestock Production management
6.	Performance of the Technology with performance indicators	Average daily milk production in kg/day/cow, feed cost/day/animal, Milk fat%
7.	Final recommendation for micro level situation	Wheat bran at the level of 80% and Groundnut oil cake at the level of 17% is effective in improving body score of cows and milk production,
8.	Constraints identified and feedback for research	Cost of feed is more, hence research may be done to substitute wheat bran with rice bran at appropriate levels.
9.	Process of farmers participation and their reaction	Field visit, group discussion, Telephonic contact. Quality of milk and price per unit of milk also improved in addition to health of the animal.

*Thematic area:* Feed Management

Problem definition: low milk production in cows

Technology assessed: Technology option-I (TO-I): Straw + wheat bran ( 80%)+ GNOC (17%) + mineral mixture 2.5% + salt 0.5%

Technology option-II (TO-II): Straw + Wheat Bran (92%) + GNOC (5%)+ mineral mixture 2.5% + salt 0.5%

Table: 1

Technology option	No. of trials	Yield component			Cost of rearing (Rs./animal/30 days)	Gross return (Rs/ animal/ day)	Net return (Rs/ animal/ day)	BC ratio
		Milk Yield KG/day 30 day average	Feed cost per day/animal in rupees	Milk Fat %				
FP	10	8.2	174	3.8	5220	233	59	1.33
TO-I	10	9.4	195	4.4	5850	284	89	1.45
TO-II	10	8.7	178	4.3	5340	260	82	1.46

Results : Technology option I i.e incorporating GNOC at 17% level is more effective in causing milk yield increase as compared to other treatments.

## OFT-11

1.	Title of On farm Trial	Assessment of Integrated management practice against surpentine leaf minor in tpmato
2.	Problem diagnosed	Lower yield due heavy leaf minor incidence and no Suitable chemical control measure is not available
3.	Details of technologies selected for assessment/refinement	Technology option-I (TO-I): Removal of alternate host, growing of seedlings in protected condition, pruning of affected leaves from the beginning, placing of plastic trays@10-12/ha at the base of the plant for monitoring and alternate spraying of Abamectin @1.4ml/ltr & Cryomazine 50WP @ 2gm/ltr at 10 days interval Technology option-II (TO-II): Removal of alternate host, growing of seedlings in protected cultivation, pruning of affected leaves from the beginning, placing of plastic trays @10-12/ha at the base of the plant for monitoring and alternate spraying of Cartap hydrochloride 50 SP @ 2gm/ ltr of water & Spinosad 45 SC @ 1ml/ 3 ltr of water at 10 days interval
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Kerala Agrl.University,2016
5.	Production system and thematic area	Rice- Greengram/Black gram/Vegetables Rice - Vegetables
6.	Performance of the Technology with performance indicators	Technology is easily adoptable by the farmers and available in local market and reduced the leaf minor infestation
7.	Final recommendation for micro level situation	TO11 is suitable and effectively manage the leaf minor in tomato
8.	Constraints identified and feedback for research	Pesticides molecule is ecofriendly and higher cost
9.	Process of farmers participation and their reaction	Active participation of farmer from planning to execution. Encouraging response from the farmer end as they got better price due to higher yield.

**Thematic area:** Varietal assessment

**Problem definition:** Lower yield due to no suitable control measures

**Technology assessed:** Technology option-I (TO-I): Removal of alternate host, growing of seedlings in protected condition, pruning of affected leaves from the beginning, placing of plastic trays@10-12/ha at the base of the plant for monitoring and alternate spraying of Abamectin @1.4ml/ltr & Cryomazine 50WP @ 2gm/ltr at 10 days interval

Technology option-II (TO-II): Removal of alternate host, growing of seedlings in protected cultivation, pruning of affected leaves from the beginning, placing of plastic trays @10-12/ha at the base of the plant for monitoring and alternate spraying of Cartap hydrochloride 50 SP @ 2gm/ ltr of water & Spinosad 45 SC @ 1ml/ 3 ltr of water at 10 days interval

Table: 1

Technology option	No. of trials	Percent leaf infestation	Yield (q/ha)	% Change in yield	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
FP	7	25.6	160.85		55850	160850	105000	2.9
TO-I	7	8.07	201.25	25,1	58500	201250	142750	3.4
TO-II	7	6.25	212.85	32.1	59450	212850	153400	3.6

Results: I (TO-II): Removal of alternate host, growing of seedlings in protected cultivation, pruning of affected leaves from the beginning, placing of plastic trays @10-12/ha at the base of the plant for monitoring and alternate spraying of Cartap hydrochloride 50 SP @ 2gm/ ltr of water & Spinosad 45 SC @ 1ml/ 3 ltr of water at 10 days interval reduces the leaf minor incidence effectively .

## OFT-12

1.	Title of On farm Trial	Assessment of Management practices against neck blast in rice
2.	Problem diagnosed	Low yield due to high blast incidence
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Technology option-I <b>To1</b> -Seed treatment with either Tricyclazole @ 3 gm/kg of seed or carboxin 37.5%+ thiram 37.5% @2.5 gm/kg and foliar spraying of either tricyclazole @ 300gm/ha or spraying of Isoprothilane 40% EC @ 750 ml/ha twice at 15 days interval Technology option-II <b>To-2</b> Seed treatment with carboxin 37.5%+ thiram 37.5% @2.5 gm/kg .Two sprays of Trifloxystrobin 25% + Tebuconazole 50% (Nativo 75 WG) @ 200 g/ha at 15 days interval starting first spray at disease (leaf blast) appearance
4.	Source of Technology (ICAR/AICRP/SAU/other, please specify)	SLREC Proc. 2018,OUAT Bhubaneswar
5.	Production system and thematic area	Rice- Greengram/Black gram/Vegetables and disease management
6.	Performance of the Technology with performance indicators	Reduced the disease incidence up to the ETL
7.	Final recommendation for micro level situation	Seed treatment with carboxin 37.5%+ thiram 37.5% @2.5 gm/kg .Two sprays of Trifloxystrobin 25% + Tebuconazole 50% (Nativo 75 WG) @ 200 g/ha at 15 days interval starting first spray at disease (leaf blast) appearance
8.	Constraints identified and feedback for research	Molecule is higher cost than the TO-I
9.	Process of farmers participation and their reaction	Active participation of farmer from planning to execution. Encouraging response from the farmer end as they got better price due to higher yield.

*Thematic area:* Varietal assessment

Problem definition: Low yield due to high blast incidence

Technology assessed: Technology option-I **To1**-Seed treatment with either Tricyclazole @ 3 gm/kg of seed or carboxin 37.5%+ thiram 37.5% @2.5 gm/kg and foliar spraying of either tricyclazole @ 300gm/ha or spraying of Isoprothilane 40% EC @ 750 ml/ha twice at 15 days interval  
Technology option-II **To-2** Seed treatment with carboxin 37.5%+ thiram 37.5% @2.5 gm/kg .Two sprays of Trifloxystrobin 25% + Tebuconazole 50% (Nativo 75 WG) @ 200 g/ha at 15 days interval starting first spray at disease (leaf blast) appearance

Table: 1

Technology option	No. of trials	Yield component			PDI (%)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		No. of effective tillers/m <sup>2</sup>	No. of grains per panicle	Test wt. (100 grain wt.)						
FP	7	336	162	22.1	17.5	38.1	40120	61440	21320	1.53
TO-I	7	398	182	22.2	9.2	42.8	38100	68480	30380	1.79
TO-II	7	482	203	22.2	7.4	16.1	39600	73760	34160	1.86

Results: Seed treatment with carboxin 37.5%+ thiram 37.5% @2.5 gm/kg .Two sprays of Trifloxystrobin 25% + Tebuconazole 50% (Nativo 75 WG) @ 200 g/ha at 15 days interval starting first spray at disease (leaf blast) appearance



## A. Details of FLDs conducted during the year

## Cereals

Sl. No.	Crop	Thematic area	Technology Demonstrated with detailed treatments	Area (ha)		No. of farmers/ demonstration									Reasons for shortfall in achievement
				Proposed	Actual	SC		ST		Others		Total			
						M	F	M	F	M	F	M	F	T	
1.	Rice	Nutrient Management	Green manuring through <i>Sesbania aculeate</i> in paddy to reduce the salinity problem	2.0	2.0	3	0	0	0	7	0	10	0	10	
2.	Groundnut	Nutrient Management	Application sulphur @ 30 kg/ha and Boron @ 1.25 kg /ha as Borax	2.0	2.0	1	0	0	0	9	0	10	0	10	
3.	Greengram	Weed Management	Post emergence application of Quizalofop ethyl 5 EC @ 50 ml/ha at 20-25 DAS	2.0	2.0	4	0	0	0	6	0	10	0	10	
4.	Blackgram	Nutrient Management	Application of RDF of Blackgram in shape of DAP and MOP at PI stage of Rice and foliar application of 1% DAP+1% MOP at 20 and 40 DAS of Blackgram	2.0	2.0	2	0	0	0	8	0	10	0	10	
5	Greengram	Nutrient Management	STBR (NPK) with FYM @5t/ha and seed inoculation with rhizobium @20g/kg seed and treatment with Ammonium Molybdate @10g/25 kg of seed	2.0	2.0	0	0	0	0	10	0	10	0	10	-
6.	Yard long bean	Varietal Introduction	Demonstration on Yard Long Bean variety "Arka Mangala" for higher yield	1.0	1.0	6	0	0	0	4	0	10	0	10	-
7	Chilli	Integrated crop management	Demonstration of Chilli variety "Arka Harita"	1.0	1.0	3	0	0	0	7	0	10	0	10	
8	Tomato	Integrated crop management	Demonstration of Tomato variety "Arka Rakshak"	1.0	1.0	4	0	0	0	6	0	10	0	10	
9.	Okra	Nutrient management	Application of Arka vegetable Micro-nutrient formulation as spray after flowering @10-20 g/litre	1	1	3	0	0	0	7	0	10	0	10	
10	Tomato	Nutrient Management	STBR (NPK) + FYM @10t/ha + S @25kg/ha at the time of transplanting of tomato crop	1.0	1.0	2	0	0	0	8	0	8	0	10	-

11	Rice	Nutrient Management	STBR(NPK) + Boron @1 kg/ha	2.0	2.0	0	0	0	0	10	0	10	0	10	-
12	Mushroom	Mushroom cultivation	During low temp. cultivation of Oyster mushroom var: <i>Hypsizyous ulmarius</i>	200 beds	200 beds	0	0	0	4	0	6	0	10		
13	Mushroom	Mushroom cultivation	Production of paddy straw mushroom with threshed straw	200 beds	200 beds	0	0	0	3	0	7	0	10		
14	HYV vegetable	Nutritional security	Vegetable 10 plots:spinach,amaranthus,coriander,carrot, radish,tomato,cauliflower,cabbage ,cowpea,cucurbits in fencing according to the season with papaya,drumstick,lime in one side	0.2 ha	0.2 ha	0	0	0	2	0	3	0	05		
15	paddy	Drudgery reduction	This equipment is suitable for line sowing of sprouted paddy seeds in puddled field. It has 18 holes of 10 mm dia for dropping the sprouted seed in puddled field. Light in weight, and easy to transport and handle. Hill dropping of seed is achieved and continuous drilling is eliminated.	1 ha	1 ha	0	3	0	0	0	7	0	10	10	
16	paddy	IDM	Making alleys at a distance of 2 m in paddy field. use of spider trap @ 25/ha, neem based Alternate Spraying of flonicamid 50 WG @ 150 gm /ha and neem based pesticide 3000 ppm @ 1.5l/ha at 10 days interval	2.0ha	2.0ha	3	0	0	0	7	0	10	0	10	
17	brinjal	IDM	Seed treatment with (Metalaxyl + Mancozeb) @ 2gm/kg followed by soil application of <i>T viridae</i> @ 5kg /ha at planting with FYM and soil drenching with Carbendazim 0.15% + Streptocycline 0.015%	2.0ha	2.0ha	5	0	0	0	5	0	10	0	10	
18	Greengram	IPM	Seed treatment with Imidaclopid 600 FS @ 5 ml / kg seed + Yellow sticky trap @ 50/ha + Neem oil 5 @5ml/lit spray on appearance of white fly on YST + Spraying of Diafenthiuron 50 WP @ 312.5 g a.i./ha	2.0	2.0	4	0	0	0	6	0	10	0	10	

19	Chilli	IPM	Soil application of neem cake @2.5 qt/ha, Installation of Blue sticky traps @50nos/ha, & need based application of Difenthiuron @1gm/lt & Spiromesifen 240 SC @ 0.6ml/ lit alternately at 10 days interval	1.0	1.0	2	0	0	0	8	0	8	0	10	
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## 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					
Yard long bean	Kharif	Rainfed	Alluvial soil	210-272	15-34	132-217	Beans/ Cowpea	22.7.20-30.7.20	27.11.20- 02.12.20	480.8	20.2
Onion	Rabi	Irrigated	Alluvial soil	210-272	15-34	132-217	Cucumber/Bitter gourd	13.10.20-16.10.20	21.2.21- 26.2.21	212.6	10
Tomato	Rabi	Irrigated	Alluvial soil	210-272	15-34	132-217	Cucumber/Bitter gourd	16.10.20-20.10.20	16.02.21- 24.02.21	216.8	11
Cabbage	Rabi	Irrigated	Alluvial soil	210-272	15-34	132-217	Cucumber/Bitter gourd	01.11.20-03.11.20	24.01.21- 31.01.21	195.6	6.5
Tomato	Rabi	Irrigated	Alluvial soil	198-246	10.38- 20.54	112-178	Cucumber/Ca bbage	22.10.20-26.10.20	30.02.21- 10.03.21	201.7	8
Rice	Kharif	Rainfed	Alluvial soil	168-295	11.05- 20.16	146-330	Greengram	30.06.20-15.07.20	25.11.20- 14.12.20	730.6	11
Greengram	Summer	Rainfed	Alluvial soil	141-238	10.54- 19.96	92-171	Rice	15.01.2020-12- 02.2020	17.04.2020- 15.05.2020	35.2	0
Greengram	Rabi	Rainfed	Alluvial soil	210-272	15-34	132-217	Cucumber/Bitter gourd	13.10.20-16.10.20	21.2.21- 26.2.21	212.6	10
Chilli	Rabi	Irrigated	Alluvial soil	210-272	15-34	132-217	Cucumber/Bitter gourd	16.10.20-20.10.20	16.02.21- 24.02.21	216.8	11
Rice	Kharif	Irrigated	Alluvial soil	210-272	15-34	132-217	Cucumber/Bitter gourd	01.11.20-03.11.20	24.01.21- 31.01.21	195.6	6.5
Brinjal	Kharif	Irrigated	Alluvial soil	198-246	10.38- 20.54	112-178	Cucumber/Ca bbage	22.10.20-26.10.20	30.02.21- 10.03.21	201.7	8

In both the Tables, information of same crop should be provided. For example, if in Table 3.2A crops are mentioned as a,b,c,d etc., in the table for Details of farming situation, the same crop should be mentioned in the identical sequence.

## Performance of FLD

Oilseeds:

## Frontline demonstrations on oilseed crops

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Groundnut	Nutrient Management	Application sulphur @ 30 kg/ha and Boron @ 1.25 kg /ha as Borax	10	1	19.2	15.8	21.51	43470	92160	58690	2.12	41400	75840	34440	1.83
Total			10	1											

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

\*\* BCR= GROSS RETURN/GROSS COST

## Pulses

## Frontline demonstration on pulse crops

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Blackgram	Nutrient Management	Application of RDF of Blackgram in shape of DAP and MOP at PI stage of Rice and foliar application of 1% DAP+1% MOP at 20 and 40 DAS of Blackgram	10	2	7.3	5.6	23.28	19200	43800	24600	2.28	17200	33600	16400	1.95
Greengram	Weed management	Post emergence application of Quizalofop ethyl 5 EC @ 50 ml/ha at 20-25 DAS	10	2	6.96	5.73	14.4	18470	41760	23290	2.26	17450	34380	16930	1.97

Greengram	Nutrient Management	STBR (NPK) with FYM @5t/ha and seed inoculation with rhizobium @20g/kg seed and treatment with Ammonium Molybdate @10g/25 kg of seed	10	2	7.26	5.95	22.01	20050	39828	19778	1.99	18650	29730	11080	1.59
Greengram	Integrated pest management	Seed treatment with Imidacloprid 600 FS @ 5 ml / kg seed + Yellow sticky trap @ 50/ha + Neem oil 5 @5ml/lit spray on appearance of white fly on YST + Spraying of Diafenthiuron 50 WP @ 312.5 g a.i./ha	10	2	6.9	5.5	14.4	18470	41760	23290	2.26	17450	34380	16930	1.97
Total			40	08											

\* 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
Rice	Problem Soil Management	Green manuring through <i>Sesbania aculeate</i> in paddy to reduce the salinity problem	10	2.0	26.8	22.6	18.58	Panicles/m <sup>2</sup> : 178 Grains/Panicle: 84	Panicles/m <sup>2</sup> : 152 Grains/Panicle: 72	27500	42880	15380	1.56	25000	36160	11160	1.43
Yard long bean	Varietal Introduction	Demonstration on Yard Long Bean variety "Arka Mangala" for higher yield	10	1.0	232.6	188.4	23.46	No. of pods/plant-36 Length of pods(cm)-69.8	No. of pods/plant-22 Length of pods(cm)-56.4	48500	139560	91060	2.87	46800	113040	66240	2.41
Chilli	Integrated crop management	Demonstration of Chilli variety "Arka Harita"	10	1.0	282.61	224.81	25.71	Plant height at 120 DAT-95.42 cm Yield/plant-1.37 kg	Plant height at 120 DAT-78.16 cm Yield/plant-0.96 kg	68600	226088	64580	3.29	62400	179848	25730	2.88

Tomato	Integrated crop management	Demonstration of Tomato variety "Arka Rakshak	10	1.0	396.42	242.33	63.58	Plant height at 120 DAT-102.55 cm Yield/plant-7.10 kg	Plant height at 120 DAT-64.21 cm Yield/plant-4.23 kg	78800	237852	87520	3.01	72200	145398	46600	2.01
Cauliflower	Nutrient Management	Demonstration of Arka Microbial Consortium (Microbial Plant Growth Promoters) for enhancing yield in Cauliflower	10	1.0	282.6	248.9	13.53	Curd weight(g)-549.84	Curd weight(g)-486.40	78600	226080	118197	2.87	78400	199120	103710	2.53
Rice	Nutrient management	STBR(NPK) + Boron @1 kg/ha	10	2.0	44.4	39.6	12.12	No. of tiller/hill-17.76, Plant height (cm)-94.31,	No. of tiller/hill-15.92, Plant height (cm)-87.48,	41500	69000	27500	1.66	38000	59000	21000	1.55
Tomato	Nutrient management	STBR (NPK) + FYM @10t/ha + S @25kg/ha at the time of transplanting of tomato crop	10	1.0	431.9	375.6	13.03	No. of fruits/Plant-30.13, Fruit diameter-4.97 cm	No. of fruits/Plant-26.93, Fruit diameter-4.60 cm	78800	215950	137150	2.74	76200	187800	111600	2.46
Rice	IDM	Spraying of Trifloxystrobin 25%+Tebuconazole 50% 75 WG twice after 30 & 60 DAT	10	2.0	47.5	40.2	16.13	PDI-17	PDI-9	33500	78340	44840	2.2	31500	66330	37485	1.9
Chilli	IPM	Soil application of neem cake @2.5 qt/ha, Installation of Blue sticky traps @50nos/ha, & need based application of Difenthiuron @1gm/lt & Spiromesifen 240 SC @ 0.6ml/ lit alternately at 10 days interval	10	2.0	135.25	108.7	24.5	<b>Upward leaf curl (%-16.5)</b>	<b>Upward leaf curl (%)-42.5</b>	64250	270500	206250	4.2	55850	217350	161450	3.8



Poultry	Poultry management	Brooding management in chicks	20	20	Body weight at 14 days 76 grams, 28 days 138 grams	14 day-60 Gram 28 days 126 grams	26.6% 9.5%	Mortality rate-6.2%	Mortality -15%	2175/ 25 chicks/30 days	2645	470	1.21	2075/25 chicks/30 days	2415	340	1.16
Rabbitry																	
Pigerry																	
Sheep and goat	Feed Management	Supplementary feeding in Goats	20	20	body weight at 1 month - 2.8 kg, 3 month - 4.6 kg	Bodyweight at 1 month 2.2 kg 3 month 3.8 kg	10.3% 27% 21%	Kid Survival rate-96%	Survival -87%	1240 /goat/ 3 month	2400/g oat	1160	1.93	920/goat/ 3 months	1650	730	1.79
Duckery																	
Others (pl. specify)	Feed management	Fodder cultivation- CO-5 and cow pea	5	5	Milk yield in Kg/day	continuing											
Total			65	65													

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

\*\* BCR= GROSS RETURN/GROSS COST



## Fisheries

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Common carps	Replacement of species	Mixed culture of Amur carp along with other carps	8	5	Continuing...												
Mussels																	
Ornamental fishes																	
Jayanti rohu	Replacement of species	Culture practice of Jayanti Rohu and fresh water prawn along with other carps	8	5	Continuing...												
Common carps	Replacement of species	Mixed culture of Amur carp along with other carps	5	5	30qt		29%	Average growth rate 750gm/year and average length 45cm/year	Average growth rate 550gm/year and average length 30cm/year	95000	360000	265000	2.78	92000	252000	160000	1.73
Jayanti rohu	Replacement of species	Culture practice of Jayanti Rohu and fresh water prawn along with other carps	5	5	31qt		27%	Average growth rate 700gm/year and average length 40cm/year	Average growth rate 550gm/year and average length 25cm/year	10000	372000	272000	2.72	95000	265000	165000	1.73
<b>Total</b>			26	20													

\* 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

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

\*\* BCR= GROSS RETURN/GROSS COST

## Women empowerment

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

## Farm implements and machinery

Name of the implement	Crop	Name of the technology demonstrated	No. of Farmer	Area (ha)	Filed observation (output/man hour)		% change in major parameter	Labor reduction (man days)	Cost reduction (Rs./ha or Rs./Unit)
					Demonstration	Check			
4 row paddy drum seeder	Paddy	4 row paddy drum seeder In Paddy	10	1ha	08	38	1760	7600	26576

\* 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





## Technical Feedback on the demonstrated technologies

Sl. No	Crop	Feed Back
1.	Rice	Green manuring through <i>Sesbania aculeate</i> in paddy resulted 8.20% more yield than FP and also reduces soil salinity problem
2.	Greengram	Due to better performance of Quizalofop ethyl the farmers are interested to adapt this technology in large scale.
3.	Groundnut	Farmers are interested to use B & S in large scale in near future as it shows better yield performance
4.	Rice	Rice yield was enhanced substantially as compared to previous seasons. They were also observed good quality of grains which can fetch higher price in this season. Moreover, they were also experienced more filled panicles which was not the case in preceding seasons.
5.	Yard long bean	Yard Long Bean variety "Arka Mangala" is a good variety with tender and long green pods having local demand, higher yield.
6.	Chili	Chili var Arka Harita is a F1 hybrid with higher yield, More return, liked by people, suitable for local market, tolerant to powdery mildew and wilt disease.
7.	Tomato	Tomato var. Arka Rakshak is an excellent hybrid, Higher yield, No wilt seen, more demand in Cuttack and Paradeep market.
8.	Cauliflower	Arka Microbial Consortium (Microbial Plant Growth Promoters) helps in increasing curd size and yield.
9.	Vermicompost	In there traditional method, they were not getting good quality of compost for farm use, but using suggested technology including the release of earthworm, they got good quality of compost in granular form(cocoons).They are also using this compost in there backyard farm as well as in cultivable field.
10.	Tomato	Good quality of tomatoes with flavoured was experienced. In there previous methods, plants were looked like yellow-green lower leaves. Application of sulphur overcome this problem and enhanced yield was obtained as per the farmer's conception.
11.	Rice	The technology demonstrated is cost effective and easily adoptable by the farmers and they are ready to adopt this technology in large scale in their field
12.	Brinjal	The technology demonstrated is cost effective , reduced the wilting incidence up to the ETL level (5% infestation)and easily adoptable by the farmers and they are ready to adopt this technology in large scale in their field
13.	Chilli	The technology demonstrated is cost effective , reduced the sucking pest incidence up to the ETL level (10% affected plants )easily adoptable by the farmers and they are ready to adopt this technology in large scale in their field
14.	Greengram	The technology demonstrated is cost effective , reduced the sucking pest incidence up to the ETL level (4-5 adult/leaf)easily adoptable by the farmers and they are ready to adopt this technology in large scale in their field
15.	Poultry	Pallishree birds are very fast growing reaching 2 kg in 2.5 months. Need this breed of bird available in large numbers locally.
16.	Poultry	Brooding of chicks is not very difficult. It saves lot of money on purchase of developed chick.
17.	Gotary	Addition of GNOC, Mineral mixture, Soyabean meal and Maize is more beneficial for body condition of mother goats. Higher milk yield in Does and better survival of kids
18.	Foddar	Hybrid Napier cultivation leads to increase in milk yield in initial days and decrease in milk price. This situation improves with continued feeding of grass.

19.	Oyster mushroom	Yield of blue oyster is better than other species of Oyster during low temperature, so they are demanding easily availability of this type of spawn due to additional income for their families
20.	Paddy straw mushroom	: Farm women are delighted by using loose straw as a byproduct of mushroom cultivation because previously it is used for only cattle feed & fuel purposes. It is cost effective as it reduces cost of cultivation. Demanding development of technology to minimize infection of mushroom raised in loose straw.
21	Nutritional garden	It gives nutrition security for their family members and rotation wise proper utilization of backyard space
22.	Jayanti Rohu	Jayanti Rohu is getting more popular due to its faster growth rate and disease resistance

#### Extension and Training activities under FLD

Sl. No.	Activity	Date	No. of activities organized	Number of participants	Remarks
1.	Field days	07.12.2020, 11.02.2020, 16.01.2020, 2.12.2020, 16.12.2020	5	250	
2.	Farmers Training	29.07.2020, 20.09.2020, 12.10.2020, 06.11.2020, 15.10.2020, 18.11.2020, 01.12.2020, 15.10.2020	8	240	
3.	Media coverage				
4.	Training for extension functionaries				

#### Performance of the demonstration under CFLD on Pulse and Oilseed Crops during Kharif 2020 and Rabi 2020-21:

##### 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	JHAINMOONG	3.3	3.4	3.37	7.5	Seed treatment with Imidacloprid 600 FS @ 5 ml / kg seed + Yellow sticky trap @ 50/ha + Neem oil 5 @ 5ml/lit spray on appearance of white fly on YST + Spraying of Diafenthuro n 50 WP @ 312.5 g a.i./ha	25	10	5.6	7.8	7.10	10.8	100	100

2	GROUNDN UT	Devi	20.54	17.0	18.0	22.5	Foilar application boron andZinc, instalation of yellow sticky trap , release of bio agents <i>T,choilonis</i> spraying of organic extract, Bt. Neem oil and need based spraying of Dinotofuran and Profeno+cyp er,	50	20	22.2	18. 0	20. 1	18	11. 6	12
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### B. Economic parameters

Sl. No.	Variety demonstrated & Technology demonstrated	Farmer's Existing plot				Demonstration plot			
		Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C ratio	Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C ratio
1	Variety IPM-02-14Seed treatment with Imidacloprid 600 FS @ 5 ml / kg seed + Yellow sticky trap @ 50/ha + Neem oil 5 @5ml/lit spray on appearance of white fly on YST + Spraying of Diafenthiuron 50 WP @ 312.5 g a.i./ha	20800	39900	19100	1.91	24500	53200	28750	2.17
2	Foilar application boron andZinc, instalation of yellow sticky trap , release of bio agents <i>T,choilonis</i> spraying of organic extract, Bt. Neem oil and need based spraying of Dinotofuran and Profeno+cyper,	41400	80640	39240	1.95	43470	96480	53010	2.21



### C. Socio-economic impact parameters

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
1	Groundnut	2010	1800	48	-	-	Family manage	55
2	Greengram	710	500	80	25	15	Family manage	35

### D. Oilseed Farmers' perception of the intervention demonstrated

Sl. No.	Technologies demonstrated (with name)	Farmers' Perception parameters					
		Suitability to their farming system	Likings (Preference)	Affordability	Any negative effect	Is Technology acceptable to all in the group/village	Suggestions, for change/improvement, if any
1	Foilar application boron and Zinc, instalation of yellow sticky trap , release of bio agents <i>T,choilonis</i> spraying of organic extract, Bt. Neem oil and need based spraying of Dinotofuran and Profeno+cyper	Variety Devi is suitable for Rabi season grown after kharif paddy	More no of pods /plants , 2 seeded pods , bold, lustrous, suitable for water stress condition , bunchy type	Highly affordable seed cost as seed cost of Farmers variety and Variety Devi is at par i.e Rs 80/- /kg	Lack of irrigation facility at critical stage ( pegging & pod filling stage,)	Acceptable	Demonstration towards inputs should be more. Seed availability must be ensured before time.

### E. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
Variety Devi ,( ICGV 91114),90-110 days to maturity,	Average yield -20.1 qt/ha	Average yield -20.1 qt/ha yield of farmers variety- 18.5qt/ha	Highly affordable seed cost as seed cost of Farmers variety and Variety Devi is at par i.e Rs 80/- /kg, Variety is suitable for Rabi Season
Soil application of gypsum 250kg/ha and	Bold seeded , optimum pod yield , more oil content	More seed yield resulting good income due to gypsum application ,less incidence termite and white grubs due to soil application of Chloropyriphos	Due to soil application of Chloropyriphos white grub and termite incidence reduced significantly

Use of seed drill for sowing	Lobour cost reduced ,optimum plants population maintain	Optimum plants population with spacing 30 x 15 cm ,timely sowing , reduced drugery	Low cost of production ,timely sowing and more yield.
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**F. Extension activities under FLD conducted:**

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
1	Method demonstration on seed treatment with Vitavax power@2 gm/kg of seed	10.1.2021 AT Sanasaharadia	50
2	Groundnut seed sowing by use of Seed cum fertilizer drill	15.01.2021,Tentuliakhamar	50
3.	Field Day	15.3.2021, Sanasaharadia	60
4	Field Day	24.3.2021 Tentuliakhamar	60

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

**H. Farmers' training photographs**

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

**J. Details of budget utilization**

Crop (provide crop wise information )	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Greengram	i) Critical input	79,152.00	79,152.00	0.00
	ii) TA/DA/POL etc. for monitoring	7,248.00	7,248.00	0.00
	iii) Extension Activities (Field day)	2400.00	2400.00	0.00
	iv)Publication of literature	0.00	0.00	0.00
	<b>Total</b>	<b>90,000.00</b>	<b>90,000.000</b>	<b>0.00</b>

Crop (provide crop wise information )	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Groundnut	i) Critical input	2,14,022.00	2,14,022.00	0.00
	ii) TA/DA/POL etc. for monitoring	15,000.00	15,000.00	0.00
	iii) Extension Activities (Field day)	4,800.00	4,800.00	0.00
	iv)Publication of literature	6178.00	6178.00	0.00















Thematic Area	No. of Courses	No. of Participants									Grand Total			
		Other			SC			ST			M	F	T	
		M	F	T	M	F	T	M	F	T				
Management of potted plants														
Export potential of ornamental plants														
Propagation techniques of Ornamental Plants														
Others, if any														
<b>d) Plantation crops</b>														
Production and Management technology														
Processing and value addition														
Others, if any														
<b>e) Tuber crops</b>														
Production and Management technology														
Processing and value addition														
Others, if any														
<b>f) Spices</b>														
Production and Management technology														
Processing and value addition														
Others, if any														
<b>g) Medicinal and Aromatic Plants</b>														
Nursery management														
Production and management technology														
Post harvest technology and value addition														
Others, if any														
<b>III. Soil Health and Fertility Management</b>														
Soil fertility management	2	40	9	49	9	2	11	0	0	0	49	11	60	
Soil and Water Conservation														
Integrated Nutrient Management														
Production and use of organic inputs	2	51	0	51	9	0	9	0	0	0	60	0	60	
Management of Problematic soils	1	28	0	28	8	0	8	0	0	0	30	0	30	
Micro nutrient deficiency in crops	3	68	12	80	8	2	10	0	0	0	76	14	90	
Nutrient Use Efficiency														
Soil and Water Testing														
Others, if any														
<b>IV. Livestock Production and Management</b>														
Dairy Management	3	24	46	70	15	5	20	0	0	0	39	51	90	
Poultry Management	3	34	42	76	6	8	14	0	0	0	40	50	90	
Piggery Management														
Rabbit Management														
Disease Management	2	26	21	47	4	9	13	0	0	0	30	30	60	
Feed management	1	23	1	24	5	0	5	0	0	0	29	1	30	
Production of quality animal products														
Others, if any Goat farming	1	8	12	20	3	7	10	0	0	0	11	19	30	
<b>V. Home Science/Women empowerment</b>														
Household food security by kitchen gardening and nutrition gardening	01	-	09	09	-	21	21	-	-	-	-	30	30	
Design and development of low/minimum cost diet	01	0	25	25	0	05	05	0	0	0	0	30	30	
Designing and development for high nutrient efficiency diet	01	0	29	29	0	02	02	0	0	0	0	30	30	









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			
Micro irrigation systems of orchards													
Plant propagation techniques													
Others, if any(INM)													
<b>TOTAL</b>	1	24	0	24	6	0	6	0	0	0	30	0	30
<b>c) Ornamental Plants</b>													
Nursery Management													
Management of potted plants													
Export potential of ornamental plants													
Propagation techniques of Ornamental Plants													
Others, if any													
<b>TOTAL</b>													
<b>d) Plantation crops</b>													
Production and Management technology													
Processing and value addition													
Others, if any													
<b>TOTAL</b>													
<b>e) Tuber crops</b>													
Production and Management technology													
Processing and value addition													
Others, if any													
<b>TOTAL</b>													
<b>f) Spices</b>													
Production and Management technology													
Processing and value addition													
Others, if any													
<b>TOTAL</b>													
<b>g) Medicinal and Aromatic Plants</b>													
Nursery management													
Production and management technology													
Post harvest technology and value addition													
Others, if any													
<b>TOTAL</b>													
<b>III. Soil Health and Fertility Management</b>													
Soil fertility management	2	40	9	49	9	2	11	0	0	0	49	11	60
Soil and Water Conservation													
Integrated Nutrient Management													
Production and use of organic inputs	2	51	0	51	9	0	9	0	0	0	60	0	60
Management of Problematic soils	1	28	0	28	8	0	8	0	0	0	30	0	30
Micro nutrient deficiency in crops	3	68	12	80	8	2	10	0	0	0	76	14	90
Nutrient Use Efficiency													
Soil and Water Testing													
Others, if any													
<b>TOTAL</b>	8	187	21	208	34	4	38	0	0	0	215	25	240

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>IV. Livestock Production and Management</b>													
Dairy Management	3	24	46	70	15	5	20	0	0	0	39	51	90
Poultry Management	3	34	42	76	6	8	14	0	0	0	40	50	90
Piggery Management													
Rabbit Management													
Disease Management	2	26	21	47	4	9	13	0	0	0	30	30	60
Feed management	1	23	1	24	5	0	5	0	0	0	29	1	30
Production of quality animal products													
Others, if any (Goat farming)	1	8	12	20	3	7	10	0	0	0	11	19	30
<b>TOTAL</b>	<b>10</b>	<b>115</b>	<b>122</b>	<b>237</b>	<b>33</b>	<b>29</b>	<b>62</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>149</b>	<b>151</b>	<b>300</b>
<b>V. Home Science/Women empowerment</b>													
Household food security by kitchen gardening and nutrition gardening	01	-	09	09	-	21	21	-	-	-	-	30	30
Design and development of low/minimum cost diet	01	0	25	25	0	05	05	0	0	0	0	30	30
Designing and development for high nutrient efficiency diet	01	0	29	29	0	02	02	0	0	0	0	30	30
Minimization of nutrient loss in processing	01	0	28	28	0	02	02	0	0	0	0	30	30
Gender mainstreaming through SHGs													
Storage loss minimization techniques													
Enterprise development													
Value addition	01	0	27	27	0	02	02	0	0	0	0	30	30
Income generation activities for empowerment of rural Women													
Location specific drudgery reduction technologies	01	0	27	27	0	03	03	0	0	0	0	30	30
Rural Crafts													
Capacity building													
Women and child care													
Others, if any	02	0	60	60	0	0	0	0	0	0	0	60	60
<b>TOTAL</b>	<b>08</b>	<b>0</b>	<b>205</b>	<b>205</b>	<b>0</b>	<b>35</b>	<b>35</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>240</b>	<b>240</b>
<b>VI. Agril. Engineering</b>													
Installation and maintenance of micro irrigation systems													
Use of Plastics in farming practices													
Production of small tools and implements													
Repair and maintenance of farm machinery and implements													
Small scale processing and value addition													
Post Harvest Technology													
Others, if any													
<b>TOTAL</b>													
<b>VII. Plant Protection</b>													
Integrated Pest Management	04	62	28	90	16	14	30	0	0	0	78	42	120
Integrated Disease Management	01	12	06	18	12	0	12	0	0	0	24	06	30
Bio-control of pests and diseases	01	26	0	26	4	0	4	0	0	0	30	0	30







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
Composite fish culture													
Freshwater prawn culture													
Shrimp farming													
Pearl culture													
Cold water fisheries													
Fish harvest and processing technology													
Fry and fingerling rearing													
Small scale processing													
Post Harvest Technology													
Tailoring and Stitching													
Rural Crafts													
Enterprise development													
Others if any (ICT application in agriculture)													
<b>TOTAL</b>	06	81	21	82	16	02	12	0	0	0	97	23	120

### 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	1	08	10	18	-	02	02	-	-	-	08	12	20
Integrated Nutrient management	1	15	0	15	5	0	5	0	0	0	20	0	20
Rejuvenation of old orchards													
Value addition													
Protected cultivation technology	1	11	6	17	2	1	3	0	0	0	13	7	20
Formation and Management of SHGs													
Group Dynamics and farmers organization													
Information networking among farmers													
Capacity building for ICT application													
Care and maintenance of farm machinery and implements													
WTO and IPR issues													
Management in farm animals	1	15	0	15	4	1	5	0	0	0	19	1	20
Livestock feed and fodder production													
Household food security													
Women and Child care													
Low cost and nutrient efficient diet designing													
Production and use of organic inputs													
Gender mainstreaming through SHGs	01	-	16	16	-	04	04	-	-	-	-	20	20
Crop intensification													
Others (Integrated Farming system)	01	14	2	16	03	01	4	0	0	0	16	4	20
<b>TOTAL</b>	06	70	24	94	18	08	26	0	0	0	87	33	120

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

### H. Vocational training programmes for Rural Youth

#### Details of training programmes for Rural Youth

Crop / Enterprise	Identified Thrust Area	Training title*	Duration (days)	No. of Participants			Self-employed after training			Number of persons employed else where
				Male	Female	Total	Type of units	Number of units	Number of persons employed	
Pulse	Unavailability of Quality Seed	Pulse Seed Production	02	20	0	20	Seed Production	01	0	0

#### Sponsored Training Programmes

Sl. No	Title	Thematic area	Month	Duration (days)	Client PF/RY /EF	No. of courses	No. of Participants										Sponsoring Agency
							Male			Female			Total				
							Others	SC	ST	Others	SC	ST	Others	SC	ST	Total	
1	ASCI training on Vermicompost Production	Vermicompost Production	Feb-Mar	25	RY	01	17	03	0	0	0	0	17	03	0	20	ASCI
2.	ASCI training on Mushroom Grower	Mushroom Grower	Feb-Mar	25	RY	01	15	05	0	0	0	0	15	05	0	20	ASCI

## 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	05	250	0	25 0	22	2	2	4	252	2	254
KisanMela	01	279	79	35 8	17	2	1	3	281	80	361
KisanGhosthi											
Exhibition	03	1509	300	18 09	18	06	02	08	1515	302	1817
Film Show											
Method Demonstrations	26	220	40	26 0	12	0	0	0	220	40	260
Farmers Seminar											
Workshop	03	160	30	19 0	12	02	02	04	162	32	194
Group meetings	12	175	65	24 0	14	0	0	0	175	65	240
Lectures delivered as resource persons	27	510	300	81 0	12	21	06	27	531	306	837
Advisory Services	75	45	30	75	8	42	18	60	87	48	135
Scientific visit to farmers field	128	1090	280	13 70	11	0	0	0	1090	280	1370
Farmers visit to KVK	582	465	117	58 2	10	0	0	0	465	117	582
Diagnostic visits	35	27	08	35	6	0	0	0	27	08	35
Exposure visits											
Ex-trainees Sammelan											
Soil health Camp	5	196	54	25 0	26	4	3	7	200	57	257
Animal Health Camp	01	79	30	10 9	18	2	1	3	81	31	112
Agri mobile clinic											
Soil test campaigns	3	85	22	10 7	13	2	0	2	87	22	109











Bio -product	Name of the Bio -product	Quantity (no.)	Quantity (Kg.)	Value (Rs.)	Number of farmers	Quantity (no.)	Quantity (Kg.)	Value (Rs.)	Number of farmers	Quantity (no.)	Quantity (Kg.)	Value (Rs.)	Number of farmers	Quantity (no.)	Quantity (Kg.)	Value (Rs.)	Number of farmers	
Bio- fertilisers		A&N Islands				Odisha				West bengal				Total				
Total																		
Grand Total																		

## Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers benefitted			
				SC	ST	Other	Total
Dairy animals							
Cows							
Buffaloes							
Calves							
Others (Pl. specify)							
Small ruminants							
Sheep							
Goat							
Other, please specify							
Poultry							
Broilers							
Layers							
Duals (broiler and layer)	Kadaknath, Kuroiler, Vanraj, Black Rock	5325	419835				584
Japanese Quail							
Turkey							
Emu							
Ducks							
Others (Pl. specify)							
Piggery							
Piglet							
Hog							
Others (Pl. specify)							
Fisheries							

Indian carp	Jayanti,rohu ,Amurcarp,Advanced catla, ,freshwater prawn	70kg	7000	10
Exotic carp				
Mixed carp				
Fish fingerlings				
Spawn	Jayanti,Amurcarp,Advancedcatla,freshwater prawn	50000	68000	16
Colour fish	Guppy,molly,koicarp,barbs	550	800	5
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 :	
Address :	
e-mail :	
Phone No. : Mobile :	

ii) Details of Quality Seed Production

Season	Crop	Variety	Production (q)			Category of Seed (F/S, C/S)
			Target	Area sown (ha)	Production	
Kharif 2020						
Rabi 2020-21						
Summer/Spring 2021						

iii) Financial Progress

Fund received (2016-17, 2017-18 2018-19 and 2019-20)	Expenditure (Rs. in lakhs)		Unspent balance (Rs. in lakhs)	Remarks
	Infrastructure	Revolving fund		
2016-17				
2017-18				
2018-19				
2019-20				

iv) Infrastructure Development

Item	Progress
Seed processing unit	
Seed storage structure	

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

Item	Title	Author's name	Number	Circulation
Research paper	<ul style="list-style-type: none"> <li>Effect of Herbicides on Weed and Yield of Transplanted Winter Rice in East and South Eastern Coastal Plain Zone of Odisha</li> <li>Yield enrichment of toria through frontline demonstration in east and south eastern coastal plain zone of Odisha</li> </ul>	Dibyendu Mondal, Pradipta Majhi, Biswa Ranjan Pattanaik, Bijay Kumar Routray, Ashis Kumar Mohanty, Prabhat Kumar Padhi, Sasmita Purohit, Sarita Das and Bijay Kumar Mohapatra	2	0
Seminar/conference/ symposia papers				
Books	<ul style="list-style-type: none"> <li>Fasalare Khadya sara abhaba chinhatikarana ebam tara pratikara</li> </ul>	B.R. Pattanaik, Pradipta Majhi, Dibyendu Mondal	1	0
Bulletins				
News letter				
Popular Articles	<ul style="list-style-type: none"> <li>Herbicide options for cost-effective weed control and sustainable rice production in direct-seeded rice</li> </ul>	Suman Sen, Anannya Ghosh, Dibyendu Mondal, Rahul Sadhukhan, Debashis Roy and Koushik Paul	1	0
Book Chapter	<ul style="list-style-type: none"> <li>Seedling age and transplanting time– Two key factors for raising rice productivity in Jagatsinghpur district of Odisha</li> </ul>	B.R. Pattanaik, Bidhan K. Mohapatra, Pradipta Majhi, Anurag Ajay, Dibyendu Mondal, W. Iftikar, N.C. Banik, Ashok Kumar and Sreenivas Chilamkurthi	1	0
Extension Pamphlets/ literature	Krishishree- Quarterly Newsletter	KVK Jagatsinghpur	4	0
Technical reports	Annual report & Action Plan	KVK Jagatsinghpur	2	0
Electronic Publication (CD/DVD etc)				
TOTAL				

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

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

Sl. No.	Name of programme	Name of course	Name of KVK personnel and designation	Date and Duration	Organized by
1.					
2.					
3.					
4.					
5.					
6.					
7.					

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

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

photographs)

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

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

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

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

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

## b. Give details of organic farming practiced by the farmer

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

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

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

Sl. No	Name of the Equipment	Qty.
1	Automatic Nitrogen Analyzer with digestion Unit	01
2	KES 08 LE	01
3	KEL VAC VA	01
4	Flame Photometer	01
5	Digital Soil Moisture Meter	01
6	Physical Balance	01
7	All Glass Double Distillation Unit	01
8	Distillation Appts Power Supply	01
9	PH Meter-Micro Controller	01
10	Conductivity Meter	01
11	Rotary Shaker	01
12	Flask Holding Clamp	01
13	Mechanical Stirrer	01
14	Bouycocus Hydrometer	01
15	Hot Air Oven (Digital)	01
16	Thermometer	01
17	Water Quality Analyzer	01
18	Vortex Shaker	01
19	Magnetic Stirrer with Hot Plate	01
20	Wooden Geological Hammer	01
21	Sieve Brassframe	01
22	Keen Cup	01
23	Soil Moisture Sample Box	01
24	Soil Agar Screw Type	01
25	Electronic Balance	01
26	Top Pan Balance	01
27	PC based double beam UV Vis Spectrometer	01
28	Refrigerated Centrifuge	01
29	Angle Head R-244m -12x15ml	01
30	Angle Head	01
31	Voltage Stabilizer	01

## 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	712	712	1132	39	N/A

## 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.	Celebration & Distribution of SHC	150	03	1. Honorable MLA Mr. Raghunandan Das 2. Honorable District Collector Mr. Sangram Kishori Tripathy	108	108

				3. CDAO Mr. Rabinarayan Mohapatra		
--	--	--	--	-----------------------------------------	--	--

### 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? (Yes)

No of student trained	No of days stayed
2	45

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

## 4. IMPACT

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Demonstration of herbicide Oxyfluorofen (Zargon) in Okra	70	60	54800/ha	64600/ha
Demonstration of Onion variety "Bhima Super"	62	40	47600/ha	60400/ha
Demonstration of French bean variety "Pusa Parvati":	56	80	35900/ha	42200/ha
Demonstration of watermelon variety "Arka Jyothi":	42	70	38150/ha	46500/ha
Demonstration on rearing of white pekin ducks for meat purpose	22	60	8000/100 nos	12000/100 no.
Demonstration on backyard poultry in post adverse climatic situations	170	80	6000/100 nos.	12000/no.
Demonstration of scented rice var. "Nua kalajira"	16	60	46900/ha	54200/ha
Demonstration on application of Nimin coated urea in low land paddy	112	70	6000/ha	10000/ha

Demonstration of herbicide 'Oxyfluorofen' in brinjal	10	50	54800	64600
Demonstration of Marigold var. "Siracole"	10	40	47600	60400
Demonstration on management of Blast in Rice	10	80	59200	74350
Demonstration on management of BPH in Rice	10	80	54400	57120
Demonstration on management of YMV in Okra	10	60	62000	74000
Demonstration on management of tobacco caterpillar in Cauliflower	10	60	54800	64600
Demonstration of Self propelled rice transplanter	10	60	54400	57120
Demonstration of paddy power weeder	10	40	52800	58200

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		
	No. of villages	No. of farmers	Area in ha/no
Demonstration of herbicide Oxyfluorofen (Zargon) in Okra	06	18	2.6
Demonstration of Onion variety "Bhima Super"	08	54	32
Demonstration of French bean variety "Pusa Parvati" :	07	82	16.8
Demonstration of watermelon variety "Arka Jyothi" :	05	65	9.0
Demonstration on rearing of white pekin ducks for meat purpose	4	10	250
Demonstration on backyard poultry in post adverse climatic situations	90	780	450
Demonstration of scented rice var. "Nua kalajira"	07	42	22.0
Demonstration on application of Nimin coated urea in low land paddy	26	282	56
Demonstration of herbicide 'Oxyfluorofen' in brinjal	9	45	12
Demonstration of Marigold var. "Siracole"	2	16	2.0
Demonstration on management of Blast in Rice	56	242	82
Demonstration on management of BPH in Rice	48	231	74
Demonstration on management of YMV in Okra	12	86	24
Demonstration on management of tobacco caterpillar in Cauliflower	6	72	16
Demonstration of Self propelled rice transplanter	35	61	34
Demonstration of paddy power weeder	4	26	12

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

<b>Entrepreneurship development</b>	
Name of the enterprise	<b>Poultry Hatching unit–cum Rearing and Feed Supply Centre</b>
Name & complete address of the entrepreneur	Sri Bipin Bihari Pradhan Village - Bagoi GP - Bagoi Block - Kujanga Dist – Jagatsinghpur Mob - 9937212305
Role of KVK with quantitative data support:	Sri Pradhan was selected for the on farm trial programme on backyard poultry in the financial year 2014-15 & 2015-16. Before inducting Sri Pradhan was given intensive skill development programs on Scientific Poultry farming and management practices and low cost feed formulation of poultry from KVK, Jagatsinghpur. He also attended a lot of various awareness programmes and exposure visits to private poultry farms for gaining first hand experiences. KVK, Jagatsinghpur distributes 20 nos. Of Vanaraja and 20 nos. of Pallishree colour birds to him after 21 days of brooding programme. Dewarming and vaccination bird were done by Mr. Pradhan with technological back stopping by the Scientist of the KVK. Besides, he was linked with line department for govt. subsidy and also with bank for loan.
Timeline of the entrepreneurship development	Body weight of Vanaraja poultry at 52 weeks of age for male was about 3.6 kg while for female it was about 2.5 kg. and incase of Pallishree the body weight of male was 2.95 kg and 2.3 kg for female. Vanaraja produces 103-110 eggs and Pallishree produces 150-160 eggs per year and age of first egg laying of these breeds is almost similar i.e. 175-180 days by the time Sri Pradhan started to brood fertile egg of both Vanaraja and Pallishree by using his local hen.
Technical Components of the Enterprise	Backyard poultry farming with rural improved breed Breed upgradation by crossing these two breeds Hatching eggs of both Vanaraja and Pallishree by using local hen Supply chicks and fertile eggs of improved rural poultry breed
Status of entrepreneur before and after the enterprise	Sri Bipin Bihari Pradhan has got a net profit of 65,245/- by selling ready bird, table egg and newly hatched chicks from each unit and first batch.
Present working condition of enterprise in terms of raw materials availability, labour availability, consumer preference, marketing the product etc. (Economic viability of the enterprise):	Sri Pradhan an un-employed rural youth paved the way for other un-employed youths as well as farmers and farm women to take up poultry rearing of improved breeds like Vanaraja and Pallishree as a viable rural entrepreneurship to generate low input and high out put venture for sustainable livelihood development which can be achieve within a very short period of time.
Horizontal spread of enterprise	80 nos. of practicing women community from nearby 8 villages are now started backyard poultry farming with rural improved poultry breed.

4.6. Any other initiative taken by the KVK

## 5. LINKAGES

### 5.1. Functional linkage with different organizations

Name of organization	Nature of linkage
Dept of Agriculture /ATMA	Technology dissemination ,Capacity Building, Technology Sharing
Dept of Horticulture	Technology dissemination ,Capacity Building, Technology Sharing
Dept of Veterinary science	Veterinary Services, Training of farmers/ paravets, Backyard poultry farming, Animal health camp
Dept of Fisheries	Technical information, procurement of fingerlings, Linking beneficiaries of KVK
Odisha livelihood Misson	Backyard poultry farming, Small ruminant production
NABARD	Formation of Krishak club
NHM	Linking beneficiaries of KVK
ICAR-NRRI/CIFA/CHES/CTCRI/CIWA	Dairy farming,
CPDO/IPDP	Backyard poultry farming
FODDER FARM, BHUBANESWAR	Fodder slip/ roots supply, fodder cultivation
AICRP-FOODDER/POULTRY	Backyard poultry farming, fodder cultivation

5.2. List of special programmes undertaken during 2020-21 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.)

## 6. PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl. No.	Name of demo Unit	Year of estt.	Area( Sq.mt )	Details of production			Amount (Rs.)		Remarks
				Variety/breed	Produce	Qty.	Cost of inputs	Gross income	
1.	Poultry	2011	100	Rainbow Rooster, Pallishree	Developed chick	6500	3,80,000	4,19,000	Developed chicks supplied for backyard rearing
2.	Goatary	2011	100	Sirohi	Breeding buck	1	10000		Due for culling / Replacement
3.	Dairy	2017	100	Cross bred cow	Milk	4350 Kg	70000	128000	
4.	Fodder	2017	2000	Hybrid Napier, Guinea, Setaria, para grass, Signal grass, Green panic, Sorghum, Maize, Cow pea	Green fodder	150 quintal	4000	8000	For feeding cows of demo unit
5.	Vermi-compost	2011	50	Vermin	compost	20	1000	10000	Used in crop cafeteria

## 6.2. Performance of Instructional Farm (Crops)

Name Of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.(q)	Cost of inputs	Gross income	
Paddy	2.7.2020	10.12.2020	3	Gayatri	Foundation	117.2	213500	321000	Selling will be done in May2021
Paddy	5.7.2020	15.12.2020	4	Pooja	Foundation	146.2	285400	428000	Selling will be done in May2021
Banana	12.01.2020	1.12.2020-31.12.2020		bantala				660	
vegetable	04.11.2020	06.12.2020		Local/Hyb.				1180	
Cabbage Seedling	08.10.2020	06.11.2020		Hyb.		16830 nos.	34000	42075	

cauliflower	08.10.2020	06.11.2020		Hyb.		1000 nos.	2000	2500	
Tomato seedling	08.10.2020	06.11.2020		Hyb.		16000 nos.	36000	40000	
Drumstick seedling	01.10.2020	04.12.2020		Bhagya		716 nos.	9000	10740	
Arecanut Seedling	10.10.2019	31.03.2021		Mohit nagar		1141	22000	28525	
mushroom	08.10.2020	06.11.2020		Oyster		20 kg	1500	2000	
Mushroom Spawn	08.10.2020	06.11.2020		Oyster		200	2200	3000	
Coconut	-	2.12.2020		Sakshigopal local		1517 nos.	1000	12136	

### 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.	Vermi compost	1370	7000	17550	200 kg used in ornamental & medicinal garden
2	vermi	7	3500	3500	

### 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.	chicks	Kuroiler	Day old chicks	442 nos.	20000	35360	
2.	chicks	Kadakhnath	Day old chicks	700 nos.	60000	80500	
3	chicks	Saurangi	Day old chicks	100	9000	11500	
4	chicks	Vanaraj, black rock, RIR	Day old chicks	1500	85000	97500	
5	Colour fish	colour	spawn	780 nos.	250	780	
6	Fish	Jayanti rohu	fingerling	15000 nos.	10000	33000	
7	Fish	Advance Catla	fingerling	5500 nos.	2000	15000	
8	Fish	Fresh water prawn	fingerling	5000 nos.	3000	10000	
9	Fish	Carp fish	big	25 kg	800	2500	
10	Fish	Prawn	big	5 kg	200	500	
11	Cow	Jarsi	Adult	3 nos.	35000	40000	

## 6.5 Utilization of hostel facilities

Accommodation available (No. of beds) : 20

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
January 2021	20	1 day	
February 2021	60	1 day	
March 2021	80	4 day	
Total :	160	06	

(For whole of the year)

## 6.6 Utilization of staff quarters

Whether staff quarters has been completed: Yes

No. of staff quarters:06

Date of completion: 2012

Occupancy details:

Months	Q I	QII	Q III	QIV	Q V	QVI
January 2020 to December 2020	Filled	Filled	Filled	Filled	Filled	Vacant

7 FINANCIAL PERFORMANCE

## 7.1. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
Current Account (KVK Contingency)	State Bank of India	ADB, Jagatsinghpur	11297400655
Current Account (Revolving fund)	State Bank of India	Rahama Branch	30773631818

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

Item	Released by ICAR		Expenditure		Unspent balance as on - 1 <sup>st</sup> April 2021
	Kharif	Rabi	Kharif	Rabi	
CFLD (Oilseed) 20 ha		2.40		2.40	0.00

## 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 2021
	Kharif	Rabi	Kharif	Rabi	
CFLD (Pulses) 10 ha		0.90		0.90	0.00

## 2019.5. Utilization of KVK funds during the year 2020-21 (Not audited)

Sl. No.	Particulars	Sanctioned	Released	Expenditure
<b>A. Recurring Contingencies</b>				
1	Pay & Allowances	1,15,00,000.00	1,15,00,000.00	
2	Traveling allowances	1,00,000.00	1,00,000.00	1,00,000.00
3	HRD	30,000.00	30,000.00	Nil
4	Contingencies			
A	OE & POL	4,80,000.00	4,80,000.00	4,80,000.00
B	Training & Training Material	3,60,000.00	3,60,000.00	3,60,000.00

Sl. No.	Particulars	Sanctioned	Released	Expenditure
C	FLD	1,80,000.00	1,80,000.00	1,80,000.00
D	OFT	1,80,000.00	1,61,683.00	1,61,683.00
E	Building & Maintenance	2,00,000.00	0.00	0.00
F	SCSP	4,00,000.00	4,00,000.00	4,00,000.00
H	Swachhta Expenditure	15,000.00	0.00	0.00
TOTAL (A)		19,45,000.00	17,11,683.00	16,81,683.00
B. Non-Recurring Contingencies				
1	Non-Recurring (Library)	10,000.00	10,000.00	10,000.00
TOTAL (B)		10,000.00	10,000.00	10,000.00
C. REVOLVING FUND		0.00	0.00	7,78,403.00
GRAND TOTAL (A+B+C)				

#### 7.5. Status of revolving fund 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)
2018-19	2,94,980.00	11,05,320.00	7,25,453.6 + 2,73,265.20 (Returned to DEE)	4,01,581.30
2019-20	40,1581.3	9,71,174.00	5,91,156.49 + 4,50,000.00 (Returned to DEE)	3,31,598.81
2020-21	3,31,598.81	14,80,657.00	7,78,403.00 + 4,00,000.00 (Returned to DEE)	6,33,852.81

- 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
BGREI	Monitoring	Kharif	Dept.of Agrl.		
Farmers Scientist Interaction	01	Rabi		With ATMA	
World soil, day	01	Rabi	Dept.of Agrl.		
Capacity building prog.	20	Kharif & Rabi	Dept.of Agrl.		
Animal Health Camp	04	Kharif and Rabi	Dept. Animal Sc.		
Panipanchayat training cum awareness	01	Kharif	Dept. of Water Resources		
Planting material verification	05	Kharif and Rabi	NHM		
Formation of Farm Science Club	03	Kharif and Rabi	NABARD		
Exhibition at District level	04	Kharif -2 & Rabi-2	Dept.of Agrl/Horti/Fishery/Animal Sc.		

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

Type of message	No. of messages	No. of farmers covered
Crop	10	15408
Livestock	2	15408
Fishery	2	15408
Weather	2	15408
Marketing	0	0
Awareness	4	15408
Training information	0	0
Other	3	15408
<b>Total</b>	<b>23</b>	<b>15408</b>

9.3. *KVK* Portal and Mobile App

Type of message	No. of messages	No. of farmers covered
Crop	10	15408
Livestock	2	15408
Fishery	2	15408
Weather	2	15408
Marketing	0	0
Awareness	4	15408

Training information	0	0
Other	3	15408
<b>Total</b>	<b>23</b>	<b>15408</b>

## 9.4. a. Observation of Swachh Bharat Programme

<b>Date of Observation</b>	<b>Activities undertaken</b>
15 <sup>th</sup> September to 2 <sup>nd</sup> October 2020	<ol style="list-style-type: none"> <li>1. Celebration of Sewa Divas (17<sup>th</sup> Sept 2020)</li> <li>2. Celebration of Sarwatra Swachhata (18<sup>th</sup> Sept 2020)</li> <li>3. Celebration of Samagra Swachhata Divas (24<sup>th</sup> Sept. 2020)</li> <li>4. Cleaning of Office Garden (2<sup>nd</sup> Oct. 2020)</li> </ol>

## b. Details of Swachhta activities with expenditure

Activities	Number	Expenditure (in Rs.)
1. Digitization of office records/ e-office	4	-
2. Basic maintenance		8,000
3. Sanitation and SBM		
4. Cleaning and beautification of surrounding areas	15	6000
5. Vermicomposting/ Composting of biodegradable waste management & other activities on generate of wealth for waste	2	2400
6. Used water for agriculture/ horticulture application	1	-
7. Swachhta Awareness at local level	7	1800
8. Swachhta Workshops		
9. Swachhta Pledge		
10. Display and Banner	2	450
11. Foster healthy competition		
12. Involvement of print and electronic media		
13. Involving the farmers, farm women and village youth in the adopted villages (no of adopted village)	5	-
14. No of Staff members involved in the activities	12	
15. No of VIP/VVIPs involved in the activities	-	
16. Any other specific activity (in details)		
<b>Total</b>	<b>48</b>	<b>18,650</b>

## 9.5. Observation of National Science day



Date of Observation	Activities undertaken

#### 9.6. Programme with Seema Suraksha Bal/ BSF

Title of Programme	Date	No. of participants

#### 9.7. Agriculture Knowledge in rural school

Name and address of school	Date of visit to school	Areas covered	Teaching aids used

Give good quality 1-2 photograph(s)

#### 9.8. Details of 'Pre-Rabi Campaign' Programme

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

#### 9.9. Details of Swachhta Hi Sewa programme organized

Sl. No.	Activity	No. of villages Involved	No. of Participants	No. of VIPs	Name (s) of VIP(s)
1	1. Celebration of Sewa Divas (17 <sup>th</sup> Sept 2020) 2. Celebration of Sarwatra Swachhata (18 <sup>th</sup> Sept 2020) 3. Celebration of Samagra Swachhata Divas (24 <sup>th</sup> Sept. 2020) 4. Cleaning of Office Garden (2 <sup>nd</sup> Oct. 2020)	3	75	-	-

## 9.10. 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	Celebration of MahilaKisan Divas	2	50	-	-

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

Sl. No.	Name of Farmer	Address of the farmer with contact no.	Innovation/ Leading in enterprise
1	Sanjeet Mohanty	At- Khadala G.P : Bodhei Block: Kujanga, Dist-Jagatsinghpur Mob:9439082531	Farm mechanization
2	Laxman Sethi	At-Gamhapur, P.O-Redhua Block-Raghunathpur Dist-Jagatsinghpur Mob:9776231866	Intensive Vegetable cultivation
3	Muralidhar Behera	At- Bagoi, Kujanga, Jagatsinghour Mob -9438434252	Pulse production through farmers producer group
4	Mr. Saurav Biswal	At/P.O-Tulanga, Block-Tirtol Dist-Jagatsinghpur Mob:9237073446	Composite fish farming
5	Mr. Trilochan Mandal	At/P.O-Kunjakoti Block-Erasama Dist-Jagatsinghpur Mob:9937541303	Shrimp farming
6	Mr. Zakir Hussain	At/PO-Samang Block-Jagatsinghpur Dist-Jagatsinghpur Mob:9776707786	Poultry farming (Colour bird)
7	Mr. Jagannath Das	At-Balia, P.O- Anakhia, Block- Biridi, Dist- Jagatsinghpur Mob:933778214	Dairy farming
8	Mr. Rajib Rath	At-Putting P.O-Gopalpur Block-Tirtol Dist-Jagatsinghpur Mob:9658139870	Mushroom Spawn Production
9	Mr. Prafulla Chandra Jena	At-Bijipur, P.O-Sankheswar, Block-Tirtol Dist-Jagatsinghpur Mob:9437373297	Hi-tech Horticulture
10	Nrusingha Charan Behera	At/P.O -Teramanpur, Block-Kujang, Dist- Jagatsinghpur	Intensive Vegetable Cultivation

		Mob:9938145944	
11	Latika Swain	At/P,O- Krushnachandrapur Block-Tirtol Dist-Jagatsinghpur	Value added products
12	Sadananda Sahoo	At/PO-Taladanda, Block-Kujanga, Dist-Jagatsinghpur Mob:9438702494	Pond based IFS
13	Prakash Chandra Panda	At/Po-Kunjakoti Block-Erasama Dist-Jagatsinghpur Mob:9437317012	Mechanized farming

#### 9.12. Revenue generation

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

#### 9.13. Resource Generation:

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

#### 9.14. Performance of Automatic Weather Station in KVK

Date of establishment	Source of funding i.e. IMD/ICAR/Others (pl. specify)	Present status of functioning
2021	IMD	Structural Foundation completed but instrument not installed yet

#### 9.15. 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

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

- a) Year:  
b) Introduction / General Information:

	Title	Objective	Treatment details	Date of sowing	Replication	Result with photographs
Experiment 1						
Experiment 2						
Experiment 3						
...						
..						
Others (If any)						

## 11. Details of TSP

- a. Achievements of physical output under TSP during 2017-18

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 2020-21 (Rs. In lakh):

- c. (i) Achievements of physical outcome under TSP during 2020-21

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	

- (ii) Table:

Sl. No.	Description	Unit	Achievements
1	Number of Technologies Identified after Assessment	Number	
2	Upgraded Skills and Knowledge of farmers	Number	
3	Oriented extension personnel in frontier areas of agricultural technology	Number	

2020-21							
Name of KVK	Year since ARYA is initiated in the KVK (specify year)	No. of Training programs	No. of rural youth trained		No. of youth established units		No. of entrepreneurial units established
			M	F	M	F	

Sl. No.	Description	Unit	Achievements
4	Increased availability of quality seed	Quintal	
5	Increased availability of quality Planting material	Number	
6	Increased availability of live-stock strains and fingerlings	Number	
7	Testing of Soil & water samples for balance fertilizer use	Number	

d. Location and Beneficiary Details during 2020-21

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

12. Schedule caste Output & Outcome achievements

Sl. No.	Indicator/Activities	Unit of Indicator	Achievements
1	Farmers, farm women trained by KVKs	Number	
2	Extension personnel trained by KVKs	Number	
3	On-farm trials conducted by KVKs	Number	
4	Frontline demonstrations conducted by KVKs	Number	
5	Quantity of seeds produced	Quintal	
6	Planting materials Produced	Number	
7	Livestock strains and fingerlings produced	Number	
8	Soil & water samples tested	Number	

13. Information pertaining to ARYA Project





4	Satyasai Utpadika Gosthi		At/Po-Jagannathpur, Tirtol, Jagatsinghpur	Poultry production, plate making, Phenyl, Agarbati, Custom hiring	Poultry Implements Goat	31	25.00	Group cohesiveness, saving ability, Group Dynamics, ability to take risk on entrepreneurship, leadership at village level, Adopting new technology
5	Dharmeswar Panchayat Mahasangha		At-Koasthi, Po-Kiranti, Tirtol, Jagatsinghpur	Poultry production, plate making, Phenyl, Agarbati, Custom hiring	Poultry Implements Goat	50	21.00	Group cohesiveness, saving ability, Group Dynamics, ability to take risk on entrepreneurship, leadership at village level, Adopting new technology

### 18. 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	Pond	0.110	Not harvested	4,500	-	26	23
2	Dairy Unit	0.10	4800 liter	80,000	1,20,000	42	26
3	Mushroom Production Unit	0.50	60 kg	2400	4800	38	31
4	Vermicompost Unit	0.10	2q	500	1000	12	16
5	Poultry Unit	0.150	6500nos.	1,95,000	3,25,000	27	28
6	Piggery Unit	0.05	Not sold	15,000	-	1	2
7	Duckery Unit	0.05	Not sold	1000	-	6	2
8	Banana Unit	0.1	Not harvested	3200	-	21	27
9	Areca nut	0.05	Not harvested	2200	-	8	14
10	Single line Trellies System	0.05	Bitter gourd:125 kg Ridge gourd:105kg Country bean: 120 kg Ivy gourd:52 kg (Harvest continuing)	1200 1400 1200 1200	2500 2100 2400 1040	4	26



## 19. 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 the technology	No. of farmers adopted the technology in the district	One high resolution 'Photo' in 'jpg' format for each technology
1	Varietal substitution with Barshadhan Line transplanting STBF application	Varietal substitution with Barshadhan Line transplanting STBF application	27775	05	
2	summer cultivation of (green gram)	Cultivation of Green gram HYV : IPM 02-14 by broadcasting 20:40:20 kg NPK / ha Treatment with rhizobium and PSB	8540	05	
3	Paddy straw mushroom (2 beds/day for 4 mths) and cultivation of Oyster Mushroom (2 bags /day for 2 mths)	• Cultivation of Paddy straw mushroom - strain OSM-11 with proper management practices	19000	15	
4	stocking density in Farm pond	Pond and feed management with proper staking density	20000	05	

## 20. 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(Jan-June,2020)	6	212	-	-	Need based KMAS advisory given from time to time
II(July-Dec,2020)	8	316			
Total	14	528			

## 21. Information on Visit of VIPs 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)

22.a) Information on **ASCI Skill Development Training Programme**, if undertaken during 2019-20 and 2020-21

Year	Name of the Job role	Name of the certified Trainer of KVK for the Job role	Date of start of training	Date of completion of training	No. of participants	Whether uploaded to SDMS Portal (Y/N)	Fund utilized for the training (Rs.)
2016-17							
2017-18							
2018-19							
2019-20	Vermicompost Producer	Dr. Pradipta Majhi	10.02.2020	05.03.2020	20	Yes	1,80,000
2019-20	Mushroom Grower	Mrs. Sasmita Purohita	10.02.2020	05.03.2020	20	Yes	1,80,000

b) Information on Skill Development Training Programme (**Other than ASCI or less than 200 hrs.**, if any) if undertaken during 2020-21

Area of training	Title of the training	Duration (in hrs.)	No. of participants									Fund the tra
			SC		ST		Other		Total			
			M	F	M	F	M	F	M	F	T	

23. 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 specified aspects	Total no. of farm women/ girls involved in the project	Details of Issues related to gender mainstreaming addressed through the project

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

**Krishi Kalyan Abhiyan- I and II**

**A. Training**

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

**Krishi Kalyan Abhiyan- III**

No. of villages covered	No. of animal inseminated	No. of farmers benefited									Any other, if any (pl. specify)
		SC		ST		Others		Total			
		M	F	M	F	M	F	M	F	T	

**25. Nutri-garden**

Sl.no.	Name of KVK	Established in KVK Campus	No. of nutri-garden established in the village	Major vegetables production
1	KVK,Jagatsinghpur	2019-20	10	Okra,Cauliflower,Cabbage,Brinjal,Chilli, Tomato,Spinach,Radish,Bittergourd,Beans,Redcabbage,Broccoli
2	KVK,Jagatsinghpur	2020-21	10	Okra,Cauliflower,Cabbage,Brinjal,Chilli, Tomato,Spinach,Radish,Bittergourd,Beans,Redcabbage,Broccoli

Please provide one or two good quality photographs



**26. Any other programme organized by KVK, not covered above**

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

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

28. SC S

**Table-I: Schedule Caste Output & Outcome Achievement/Indicators for 2020-21****(QUARTER-WISE)****Physical Output 2020-2021**

S.No.	Indicator/Activities	Unit of Indicator	Annual Targets	Quarterly Breakup	Targets Achieved	No. of Beneficiaries	Outcome
1	Farmers, farm women trained by KVKs	Number	64	Q-1-6 Q-2-20 Q-3-24 Q-4-14	Q-1-6 Q-2-20 Q-3-24 Q-4-0	Q-1-36 Q-2-120 Q-3-134 Q-4-0	Near about 32 % Adoption of new technologies by the farmers
2	Extension personnel trained by KVKs	Number	6	Q-1-0 Q-2-0 Q-3-0 Q-4-6	Q-1-0 Q-2-0 Q-3-0 Q-4-0	Q-1-0 Q-2-0 Q-3-0 Q-4-0	N/A (Trainings will be conducted in the 4 <sup>th</sup> quarter)
3	On-farm trials conducted by KVKs	Number	13	Q-1-0 Q-2-7 Q-3-6 Q-4-0	Q-1-0 Q-2-7 Q-3-6 Q-4-0	Q-1-0 Q-2-21 Q-3-18 Q-4-0	% Adoption 29
4	Frontline demonstrations conducted by KVKs	Number	27	Q-1-2 Q-2-9 Q-3-15 Q-4-1	Q-1-2 Q-2-9 Q-3-15 Q-4-1	Q-1-5 Q-2-25 Q-3-150 Q-4-30	% Adoption 38
5	Quantity of seeds produced	Quintal	280qt. to be produced	Q-1 Q-2 Q-3 Q-4-280qt.	Q-1 Q-2 Q-3 Q-4-280qt.	Q-1 Q-2 Q-3 Q-4 1200	Around 1200 farmers will be benefited by using quality seeds of rice
6	Planting materials Produced	Number	50,000	Q-1-0 Q-2-20000 Q-3-20000 Q-4-10000	Q-1-0 Q-2-20000 Q-3-20000 Q-4-0	Q-1-0 Q-2-28 Q-3-36 Q-4-0	Newly developed varieties are being cultivated by the Beneficiaries
7	Livestock strains and fingerlings produced	Number	N/A	Q-1 Q-2 Q-3 Q-4	Q-1 Q-2 Q-3 Q-4	Q-1 Q-2 Q-3 Q-4	N/A

8	<b>Soil &amp; water samples tested</b>	<b>Number</b>	400	Q-1-250 Q-2-0 Q-3-0 Q-4-150	Q-1-265 Q-2-0 Q-3-0 Q-4-0	Q-123 Q-2-0 Q-3-0 Q-4-0	28% farmers are using soil test based recommendation for growing of crops
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## ANNEXURE- I

## (Details of training programmes)

Discipline	Clientel e	Title of the training programme	Duratio n in days	Venue (Off / On Campus )	Number of participants			Number of SC/ST		
					Mal e	Femal e	Tota l	Mal e	Femal e	Tota l
Agronomy	Farmers & Farm women	Weed management in oilseed crops	01	OFF	22	08	30	4	1	5
Agronomy	Farmers & Farm women	Seed treatment in pulse and oilseed crops	01	OFF	17	13	30	6	0	6
Agronomy	Farmers & Farm women	Management of rice fallow area	01	OFF	20	10	30	3	1	4
Agronomy	Farmers & Farm women	Weed management in rice	01	OFF	15	15	30	8	03	11
Agronomy	Farmers & Farm women	Management of water submergence in rice	01	OFF	24	6	30	12	0	12
Agronomy	Farmers & Farm women	weed management in Sugarcane	01	OFF	30	0	30	4	0	4
Agronomy	Farmers & Farm women	Summer ploughing & its importance	01	OFF	24	6	30	4	4	8
Agronomy	Farmers & Farm women	Crop residue management	01	OFF	22	8	30	3	2	5
Agronomy	Farmers & Farm women	Importance of soil testing	01	OFF	17	13	30	3	2	5
Agronomy	Farmers & Farm women	Chemical weed management in Greengram	01	OFF	30	0	30	4	0	4
Agronomy	Farmers & Farm women	Line transplanting un rice	01	OFF	29	1	30	0	0	0
Agronomy	Farmers & Farm women	Green manuring in rice	01	OFF	27	3	30	7	1	8
Agronomy	Rural Youth	Pulse seed production	02	ON	20	0	20	6	0	6
Agronomy	Extensio n Personal	Integrated farming system for livelihood security	02	ON	16	4	20	3	1	4
Fishery	Farmers & Farm women	Pre-stocking management in fish culture pond	01	OFF	30	-	30	-	-	-



Fishery	Farmers & Farm women	Integrated fish farming1	01	OFF	15	15	30	-	-	-
Fishery	Farmers & Farm women	Nursery rearing method in fish culture pond	01	OFF	7	23	30	-	-	-
Fishery	Farmers & Farm women	Culture practice of Jayanti Rohu along with IMC	01	OFF	9	18	27	3	-	3
Fishery	Farmers & Farm women	Culture practice of Amur carp along with IMC	01	OFF	25	5	30	-	-	-
Fishery	Farmers & Farm women	Liming and manuring in fish culture pond and its importance	01	OFF	30	-	-	-	-	-
Fishery	Farmers & Farm women	Culture of Freshwater prawn along with mix carp	01	OFF	14	16	30	-	-	-
Fishery	Farmers & Farm women	Culture of catfishes in backyard pond	01	ON	30	-	30	-	-	-
Fishery	Farmers & Farm women	Yearling culture and its benefits in fish farming	01	ON	30	--	30	-	-	-
Fishery	RY	Breeding methods of ornamental fish and its culture practice	02	ON	9	11	20	-	-	-
Horticulture	F/FW	Production technology of Greater yam	1	Off	22	8	30	6	2	8
Horticulture	F/FW	Nutrient management in Yard long bean	1	Off	26	4	30	8	2	10
Horticulture	F/FW	Method of application of micro-nutrient in Bitter gourd	1	Off	30	0	30	8	0	8

Horticulture	F/FW	Okra hybrids with their characteristics .	1	Off	30	0	30	7	0	7
Horticulture	F/FW	Planting technique of Arecanut	1	On	28	2	30	12	1	13
Horticulture	F/FW	Nutrient management in bearing coconut.	1	Off	30	0	30	6	0	6
Horticulture	F/FW	Nutrient management in Chili	1	Off	26	4	30	7	1	8
Horticulture	F/FW	HYV of Onions with their characteristics .	1	Off	25	5	30	5	2	7
Horticulture	F/FW	Technique of Nursery raising in onion.	1	Off	26	4	30	7	2	9
Horticulture	F/FW	Method of Application of Arka Microbial Consortium in cabbage	1	Off	30	0	30	8	0	8
Horticulture	F/FW	Technique of raising vegetable seedlings using pro-trays.	1	Off	28	2	30	6	0	6
Horticulture	F/FW	Planting technique of Papaya & Drumstick.	1	On	30	0	30	8	0	8
Horticulture	RY	Vegetable seedling raising technique using pro-trays.	1	On	16	0	16	4	0	4
Horticulture	IS	Protected cultivation of High value vegetable crops.	1	On	14	3	17	2	1	3
Home Science	F/FW	Household food security by kitchen gardening and	01	OFC						

		nutrition gardening								
Home Science	F/FW	Design and development of low/minimum cost diet	01	OFC	-	30	30	-	21	21
Home Science	F/FW	Designing and development for high nutrient efficiency diet	01	OFC	0	30	30	0	05	05
Home Science	F/FW	Minimization of nutrient loss in processing	01	OFC	0	30	30	0	02	02
Home Science	F/FW	Value addition	01	OFC	0	30	30	0	3	3
Home Science	F/FW	Location specific drudgery reduction technologies	01	OFC	0	30	30	0	2	2
Home Science	F/FW	mushroom cultivation	02	OFC	0	60	60	0	0	0
Home Science	IS	Gender mainstreaming through SHG	01	ONC	-	20	20	-	04	04
Home Science	RY	Preparation of value added products from Oyster mushroom	01	ONC	08	12	20	-	02	02
Soil Science	F/FW	Use of secondary and micronutrients management in tomato crop	02	OFC	26	14	40	14	6	20
Soil Science	F/FW	Management of micronutrient deficiency in rice crop	01	OFC	29	01	30	0	0	0
Soil Science	F/FW	Technique of Soil Sample collection	01	OFC	08	10	18	12	0	12
Soil Science	F/FW	Method of compost preparation	01	OFC						
Soil Science	F/FW	Management of acid soil	01	OFC	28	0	28	2	0	2
Soil Science	F/FW	Use of micronutrient in cole crop	01	OFC	21	0	21	09	0	09
Soil Science	RY	Technique of vermicompost production	01	ONC	17	0	17	03	0	3
Animal Science	F/FW	Nutritional deficiency	01	OFC	9	21	30	03	08	11

		diseases of poultry birds								
Animal Science	F/FW	Management of Dairy cows in post-partum period	01	OFC	07	23	30	02	03	05
Animal Science	F/FW	Ration Balancing in Dairy Cows	01	OFC	23	07	30	0	0	0
Animal Science	F/FW	Management practices for rearing of female calves.	01	OFC	09	21	30	02	11	13
Animal Science	F/FW	Duck farming.	01	OFC	23	7	30	09	03	12
Animal Science	F/FW	Vaccination and disease management in poultry birds	01	OFC	12	18	30	05	07	12
Animal Science	F/FW	Balanced feeding of birds in backyard system of rearing	01	OFC	16	14	30	04	11	15
Animal Science	F/FW	Fodder cultivation: Hybrid napier, Maize, Guinea grass, cowpea, rice bean.	01	OFC	29	1	30	04	01	05
Animal Science	F/FW	Feeding and Housing management in goat farming.	01	OFC	11	19	30	04	05	09
Animal Science	F/FW	Vaccination and diseases management in goat farming.	01	OFC	13	17	30	09	02	11
Animal Science	IS	Antibiotic resistance in livestock and poultry	02	ONC	19	1	20	05	01	06

## ANNEXURE-II

**PROCEEDINGS OF THE 16<sup>th</sup> SAC MEETING, KVK, JAGATSINGHPUR**

The 16<sup>th</sup> SAC meeting of KVK, Jagatsinghpur was held on dated. 10.02.2021 at 10.30 am in KVK premises under the chairmanship of Prof. Lalit Mohan Garnayak, DEE, OUAT, Bhubaneswar. The members present in the meeting are annexed herewith. The welcome address was given by Dr. Biswa Ranjan Pattanaik, Senior Scientist & Head, KVK, Jagatsinghpur to all the members with bouquet of flowers. The Hon'ble Chairman of the committee inaugurated the meeting and Presidential address was given by Hon'ble Vice Chancellor, OUAT, Bhubaneswar on virtual mode.

After a small introductory remark, the chairman advised the Senior Scientist & Head to present the achievements and proceedings (Action taken report) of the last SAC as per the agenda.

**Agenda-1: Approval of the proceedings of last meeting.**

The Senior Scientist & Head of KVK, Jagatsinghpur presented the achievements of KVK for the year 2019-20. He also presented the proceedings of the 15<sup>th</sup> SAC held on 14.01.2020 in brief. The Chairman with the consent of all the members of the SAC approved the proceedings.

**Agenda-2: Action taken on the recommendations of the 15<sup>th</sup> SAC meeting**

The Senior Scientist & Head presented the following actions taken by the KVK as per the recommendations of the last SAC meeting.

SUGGESTIONS	ACTIONS TAKEN
Integrated approaches for pest and Nutrient management should have a combination of all management practices like Cultural methods, Chemical methods and Biological methods instead of a single method of approach.	<ul style="list-style-type: none"> <li>• OFT on management practices against neck blast in rice by covering 1 ha area conducted at village Bhansar, Bagoi and Japa with 13 farmers.</li> <li>• FLD taken on INM in Greengram at village Achyutdaspur &amp; kanimula with 10 nos. of farmers.</li> <li>• Demonstration of Integrated management of wilt complex of brinjal conducted at village Saharadia &amp; Bagoi with 10 Nos. of farmers.</li> </ul>
Awareness training on management practices to check kid mortality should be taken up.	<ul style="list-style-type: none"> <li>• Training programme conducted at village Bhansar with 30 participants</li> <li>• Awareness programme conducted in village Haldia, Garama, Tirtol, Saharadia, Bagoi, Narua, Mandasahi, Alanahat involving 225 goat farmers one goat producer group of Garam in collaboration with Line Deptt.</li> </ul>
Programme may be designed for improving growth rate of Kadaknath through feed supplementation.	<ul style="list-style-type: none"> <li>• FLD on Artificial brooding management in Kadaknath chicks at village Garama and saharadia involving 20 farmers and farm women</li> <li>• Training Programme conducted at village Garama with 30 participants</li> </ul>

	<ul style="list-style-type: none"> <li>• Feed supplementation and management advisory given to 300 nos. of farmers from 34 villages procuring chicks (5000 nos.) through KVK.</li> </ul>
Use of media for awareness creation activity on a wide scale throughout the district	<ul style="list-style-type: none"> <li>• AIR and TV programme conducted</li> <li>• Awareness creation activity through Reliance Foundation</li> <li>• Article published on Print Media</li> </ul>
Fodder cultivation should be promoted through training and demonstration programmes.	<ul style="list-style-type: none"> <li>• FLD on cultivation of Hybrid Napier CO-5 and fodder cow pea conducted at village Saharadiha involving 10 farmers</li> <li>• Training programme conducted at adopted villages.</li> <li>• Promoted Dairy farmers of villages Kanakpur, Jagannathpur, Ramchandrapur, Redhua, Nagapura through providing planting material and advisory on feed management in collaboration with line department.</li> </ul>
Vermicompost may be demonstrated in KVK adopted villages.	<ul style="list-style-type: none"> <li>• Demonstration on HDPE bags for Vermicompost production at village Saharadia, Achyutdaspur, Nimakana and Gamhapur</li> <li>• Awareness programme conducted at village Gamhapur, Saharadia, Achyutadaspur and Nimakana through method demonstration.</li> </ul>
During distribution of soil health card, the officials of line department may be included.	<ul style="list-style-type: none"> <li>• On 5<sup>th</sup> December, 2020 World Soil Day was organized jointly with Agriculture department.</li> </ul>
Farmers should be counseled on the right time and right dose of pesticides as prevention is better than cure.	<ul style="list-style-type: none"> <li>• KMAS is being sent every month</li> </ul>
Green manuring in rice may be taken up./ Management of Acidic & Saline soil	<ul style="list-style-type: none"> <li>• Demonstration on Green manuring of Dhaincha for salinity management in rice</li> </ul>
IMC production should be doubled	<ul style="list-style-type: none"> <li>• Demonstration of “Jayanti Rohu” in composite carp culture for more yield and Demonstration of Amur carp in composite pisciculture</li> </ul>
YVMV in green gram is a major problem in the district.	<ul style="list-style-type: none"> <li>• Demonstration of Integrated management of YVMV in green gram</li> </ul>
Discolouration, cracking and poor quality of curd in cauliflower.	<ul style="list-style-type: none"> <li>• Assessment of Sulphur and Boron application in Cauliflower</li> </ul>
Less oil content and poor quality pod in Groundnut	<ul style="list-style-type: none"> <li>• Demonstration on Secondary and micro nutrient (Sulphur and Boron) application in Groundnut</li> </ul>
Weeding in brinjal by farm women is a tedious process	<ul style="list-style-type: none"> <li>• Demonstration of Wheel Cycle Weeder in Brinjal for drudgery reduction of farmwomen</li> </ul>
Khaira disease of rice	<ul style="list-style-type: none"> <li>• Assessment of zinc deficiency in lowland rice</li> </ul>
Low yield of paddy straw mushroom	<ul style="list-style-type: none"> <li>• Assessment of humidity/moisture management in paddy straw mushroom in low temp.</li> </ul>

Farmers getting low price of milk due to low fat percentage	<ul style="list-style-type: none"> <li>Assessment of bypass fat feeding for increasing milk production in dairy cows conducted at Gamhapur, Bagoi, saharadia&amp;Mohammadabad and Garam Village</li> </ul>
Sheath Blight in rice is a problem	<ul style="list-style-type: none"> <li>Assessment of Integrated practices of management of Sheath Blight in rice</li> </ul>
Malnutrition in members of farm family	<ul style="list-style-type: none"> <li>Demonstration of nutritional garden for Improving Nutritional Security of farm family</li> </ul>
Stunted growth of chickens in backyard poultry	<ul style="list-style-type: none"> <li>Comparative assessment of multi-enzyme mixture and probiotics on growth of chickens in semi intensive system of rearing conducted at Saharadia, Bagoi, Gamhapur village</li> </ul>
Deficiency of micro-nutrients in vegetables	<ul style="list-style-type: none"> <li>Demonstration of application of Micro-nutrient mixture for increasing fruit yield in Okra</li> </ul>
Seedling raising in coco peat may be tried	<ul style="list-style-type: none"> <li>Assessment of different methods of portray nursery raising for quality seedling production in tomato</li> </ul>
Yard long bean is being widely cultivated. Suitable variety may be tried	<ul style="list-style-type: none"> <li>Demonstration of Yard Long Bean variety “Arka Mangala” for higher yield</li> </ul>
Popularize Salt tolerant Varieties like Luna Sampad in saline areas	<ul style="list-style-type: none"> <li>One varietal trial has been initiated at KVK farm for multiplication of seeds. Rice seeds of different salt tolerant varieties has been distributed during kharif season. Training programme conducted at Japa village</li> </ul>

### Agenda-3: Achievements made by KVK

The overall achievement made by KVK, Jagatsinghpur was presented by the Senior Scientist & Head, KVK for Kharif 2019 and Rabi 2019-20. The KVK has conducted 67 nos. of training programmes for practicing farmers/ farm women with 2010 trainees, 06 nos. for Rural youths with 120 trainees and 05 nos. of In-service trainings with 100 trainees. The KVK has also conducted 12 no. of OFTs, 26 no. of FLDs, 2 nos. of CFLD in farmer’s field during Kharif 2019 and Rabi 2019-20 and a total of 1794 nos. of extension activities.

Detail discussions were made by the members on the achievements made by KVK and appreciated.

### Agenda-4: Action Plan and Suggestions made by the members present

Action plan for the year-2020-21 has been prepared and programme for Kharif-2020 has been achieved. Programme for Rabi-2020-21 is going on. The Chairman requested the members for suggestion.

#### A. During the discussion, Hon’ble Vice-Chancellor, OUAT, Bhubaneswar emphasized on :

- Selecting Saline tolerant and flood tolerant rice varieties in areas affected by that problem.
- There is scope for allied agricultural sector like poultry, goatery and fingerlings production in Jagatsinghpur district.
- Processing, marketing and value addition.
- Feedback and output/outcome should be collected from farmers which will help in preparation of Action plan.
- Submergence rice varieties may not be suitable for all places. So the varieties may be tried in flash flood prone areas.

#### B. Dr. S. K. Mondal, Principal Scientist, ICAR-ATARI, Kolkata suggested the followings:-

- Secondary Agriculture is important for KVK, Jagatsinghpur in processing aspect.
- Technology intervention on value chain management is required.

- KVK should publish success story for entrepreneurship development.
- Regarding Biofloc technology, Kuji breed of sheep, eco-projector we can have these in our KVK and propose to line departments for popularizing.
- Awareness programme should be OFT, FLD and training related.
- SE and CD values of OFTs should be calculated to judge the best technology.
- SAC meeting should be completed in April-June.
- Network KVKs may involve scientists of a discipline with limited manpower on a sharing basis.
- Based on opportunity KVK should focus on one commodity and make that an identity for itself.
- Documentation of all work should be done.
- Market linkage should be emphasized.

**C. Dr. G.A.K. Kumar, Head, Social Science Division, NRRI, Cuttack suggested :**

- CR dhan-801 and 802 are suitable for drought and submergence upto 15 days which may be tried at farmers field.
- Use of mass media, Mass meeting for awareness creation activity on a wide scale throughout the district.
- Social media like whatsapp group and facebook may be used to make aware to farmers about new technologies.
- Upload the training programme videos in you-tube for more impact.
- Some groups from each village/block may be selected and commodity wise training may be given.
- Documentation of impact of KVK in the district in last 10-15 years.
- For deep water situation rice var. Varshadhan may be tried.

**D. The ADR, RRTTS, Central Zone, Bhubaneswar Dr. C. M. Khanda suggested**

- Feedback was impressive, linkage with line departments is good.
- Rice var. Hasant is resistant to BPH which may be promoted.
- Jagatsinghpur is rice based farming system. Rice-fish farming system may be popularized.
- Mechanization may be emphasized to reduce the cost of production.
- Block map of vulnerability to saline and problematic soil may be prepared.
- Success story may be documented. Impact pathway will help to document it.
- to use eco-projector at village level for video programme which will cost around Rs, 15000/- only.
- Use of ICT in agriculture is the need of the hour for mass media coverage.
- Apps like Rice-expert, IRRI app may be used to provide up-to-date information to farming community.

**E. The Chief District Agriculture Officer, Jagatsinghpur suggested that**

- suitable short duration greengram variety resistant to YVMV is required for the district.
- Rice based cropping system should be emphasized.
- Rice var. Sarala, Arzel are susceptible to helminthosporium leaf spot. So alternate varieties is required.
- For standing water condition, longer duration paddy variety is required to be demonstrated.
- There is no problem in marketing of paddy and greengram because it is being procured by NAFED and MARKFED.
- Farmers may be aware about proper use of herbicides
- INM practices may be emphasized.

**F. The Asst. Director of Horticulture, Jagatsinghpur suggested**

- to popularize dragon fruit in the district.
- Under MIDH & RKVY programmes, project on Mushroom spawn production, Polyhouse, Shade net house, Solar drier, cool chamber and Vermicompost may be demonstrated in KVK adopted villages for visitors.
- Farmers may be sensitized to avail subsidy from Horticulture department.



**G. Mr. S. K. Dash, District Fisheries Officer, Jagatsinghpur suggested that**

- Fisheries sector may be emphasized to attract rural youths towards Agriculture as marketing is not a constraint in this sector.
- Some work may be done towards most emerging sector that is Biofloc technology.
- More training to be given on Biofloc technology.
- One demonstration unit on Biofloc technology which may cost around Rs. 1.5 lakhs may be kept in KVK campus. OUAT may take initiative to get fund from state govt.
- Training on prawn culture and shrimp culture may be given to farmers.

**H. Mr. Jugal Kishore Panda, Programme Officer, AIR, Cuttack** thanked KVKs of the coastal districts for their active participation in different agriculture related programmes like Krushi Sansar, Krushi Soochana being broadcasted from AIR, Cuttack. He suggested the continuation of this association and stressed on on programmes like Vermicompost, Mushroom, Fishery, IPM, INM etc. Novel and less explored allied agricultural activities such as apiculture, bio-floc technology in fishery and integrated fish farming should be promoted.

**I. Dr. Padhi, VAS, Tirtol, O/O The CDVO, Jagatsinghpur suggested that**

- Kuji breed of sheep is available in Tirtol, conservation of which may be taken up. OUAT may take initiative regarding this.
- There was a buck breed Sirohi in KVK earlier. The same may be kept in KVK.
- Value addition of dairy products in training programmes could be useful to dairy farmers.
- District Poultry hatchery may produce Kadaknath chicks if it is included in the low input technology poultry breeds approved by DAHD, Govt. of India.
- Fodder cultivation should be promoted through training and demonstration programmes.

**J. Mrs. Priyansi Nayak, DPM, Odisha Livelihood Mission, Jagatsinghpur said that**

- OLM is working for women in agriculture and non-farm activities in convergence with all line departments.
- The producer groups/SHGs are interested in mushroom cultivation, poultry, goatery and fingerlings. We are getting support from KVK and line departments. We expect same support from KVK in future.
- We need buck to purchase for SHGs for which support of KVK is required.

**K. Mr. Akshya Kumar Nayak, Small farmer, Village-Mohammadabad suggested**

re-introduction of old well performing varieties of rice such as Moudamani. He suggested diversifying Agriculture and allied activities for income security. To attract rural youth to agriculture bank finance should be extended to them. Environmental and Social problems like Monkey and Bull menace in agriculture should be taken care of by govt. Mushroom and Apiculture activities should be promoted and up scaled for income generation.

**L. Mr. Nrusingha Charan Behera, Big farmer, Village-Saharadia** suggested that bank finance is a problem for farmers. There is need to aware farmers about use of Gypsum and paper mill sludge. More training and awareness programmes about soil test and soil health card may be conducted. For this support from line department is required.

**Agenda-5 : Concluding remarks by the Hon'ble Chairman**

The Hon'ble Chairman thanked all the members for sharing their valuable suggestions and suggested KVK the followings:

- Salinity of soil and water should be measured while testing salinity tolerant variety of rice.
- Home Scientist may contact to KVK, Nayagarh/Agril. Engineering dept. for low cost technologies for farm women.
- By-pass fat is a good technology and a document may be prepared in consultation with Animal Nutrition dept., College of Veterinary Science, OUAT, Bhubaneswar.
- Negative points may come up in feed back collected.

- Whether farmers are using OUAT released varieties of Sugarcane or not. OUAT varieties may be taken up.
- Virat(IPM 205-7) and Sikha(IPM 410-3) are two suitable varieties of greengram which may be tried in Jagatsinghpur district.
- Senior Scientist & Head, KVK, Jagatsinghpur may write a letter to the District Administration to set up Biofloc technology in KVK campus.
- Dragon fruit may be demonstrated in KVK farm and training may be imparted.
- Sirohi buck and Kuji sheep may be kept in KVK farm for demonstration purpose.
- Saline areas may be visited and salinity should be measured and a map may be prepared.
- Reliance Foundation may be informed ahead about the programme to be taken up.
- CR dhan 801 and CR dhan 802 may be taken up as these varieties are suitable for drought and submergence conditions.
- Apps like Rice-expert, IRRI app may be used to provide up-to-date information to farming community.
- Short videos on training programmes/ technology application may be uploaded in youtube.
- Processing of dairy products and fishery products should be emphasized.
- Impact analysis of KVK should be done and documented.
- Success stories of farmers should be documented.
- Rice var. Hasant may be promoted.

#### Agenda-6 : Constraints of KVK

- Vacant post of Computer Programmer
- Vacant post of Accountant / Superintendent
- Damaged Threshing floor
- Small size of Godown (390 sqft)
- Water stagnation due to improper drainage facility.
- Narrow and small training hall
- No concrete road from the Farmers Hostel to different demonstration units.

The meeting was concluded with vote of thanks by Dr. Pravat Kumar Padhi, Scientist(Animal Sc.) of KVK, Jagatsinghpur.

#### List of Participants:

Sl. No.	Name & Designation	Status
1	Prof. P. K. Agarwal, Hon'ble Vice-Chancellor, OUAT, Bhubaneswar	Chairman
2	Prof. Lalit Mohan Garnayak, DEE, OUAT, Bhubaneswar	Member
3	Dr. C. M. Khanda, ADR, RRTTS(Central Zone), Bhubaneswar	Member
4	Dr. G.A. K. Kumar, Head, Social Science Division, NRRI, Cuttack	Member
5	Dr. S. K. Mondal, Principal Scientist, ICAR-ATARI, Kolkata	Member
6	Mr. Rabinarayan Mohapatra, Chief District Agriculture Officer, Jagatsinghpur	Member
7	Mr. Mihir Samantaray, ADH, Jagatsinghpur	Member
8	Mr. Subrat Kumar Dash, District Fishery Officer, Jagatsinghpur	Member
9	Dr. Dayanidhi Bag, Asst. Director of Soil Conservation	Member
10	Mr. Soubhagya kumar Sahoo, Asst. Conservator of Forests,(Representative of DFO, Cuttack)	Member
11	Mr. Jugal Kishore Panda, IBPS, Asst. Director(Prog.), AIR, Cuttack	Member
12	Mrs. Priyansi Nayak, DPM, Odisha Livelihood Mission, Jagatsinghpur	Member

13	Srimati Pankajini, Co-ordinator, NGO-UTSHARGA	Member
14	Mr. Akshya Kumar Nayak, Big farmer, Village-Mohammadabad, Block-Tirol	Member
15	Mr. Nrusingha Charan Behera, Small farmer, Village-Saharadia, Block-Kujanga	Member
16	Mrs. Nibedita Das, Farm women, Village-Illaspur, Block-Tirol	Member
17	Mrs. Parinita Mohapatra, Village-Sankheswar, Block-Kujanga	Member
18	Mr. Prasant Kumar Panda, District Coordinator, Reliance Foundation	Invitee
19	Mrs. Premasi Nayak, DPM, OLM	Invitee
20	Mr. Prasant Kumar Jena, DM, APICOL & AEE, Jagatsinghpur	Invitee
21	Mr. Mihir Kumar Sahoo, ADO(I/C), Tirtol	Invitee
22	Mr. Ranjeet Kumar Dalai, APO(Representative of GM), Jagatsinghpur	Invitee
23	Mr. Debadatta Padhi, BVO, Tirtol	Invitee
24	Mr. Manas Kumar Das, Range Officer, Kujanga	Invitee
25	Mr. Jatish Mohanty, OTEC Biofloc, Kiranti, Kosti	Invitee
26	Dr. BiswaRanjan Pattanaik, Senior Scientist & Head, KVK, Jagatsinghpur	Member Secretary



Senior Scientist & Head,  
KVK, Jagatsinghpur

### **An Innovative approach for Production Technology of Oyster Mushroom culture**

Sri Gobinda Moharana son of Late Rama Chandra Moharana of village Alipingala of Jagatsinghpur district of Odisha is well known among the farming community of his native block of Jagatsinghpur for his inquisitive and innovative bend of mind in entrepreneurship. His present status and identity as a successful commercial mushroom grower dates back to October 2003 when he cultivated mushroom for the first time on trial basis. Initially, he started his unit with 10beds only. Out of which he could sell 8kgs in local market after mitigating his family needs. The success and profit from Oyster mushroom inspired his to increase his unit size to 12beds per day in 2004. With his own level of management he could then sell 13kgs of fresh mushroom in his local market and continued cultivating both oyster and paddy straw mushroom on commercial scale. In that year he could get a net profit of Rs.40,000/- by selling 13kgs of fresh daily.

Then after in the year 2005, looking at the burgeoning market demand owing to greater acceptability not only in his local market but also in the port city of Paradeep he expanded his business to get at least 25kgs of fresh mushroom per day and received net profit of Rs.1,30,000/- in that year. During those formative years of his entrepreneurial career he was cultivating paddy straw mushroom- *Volvariella volvacea* and oyster mushroom- *Pleurotus sajarcaju* and getting yield of 1.1kg and 1.4kg per bed respectively. However, during 2006 he faced yield loss due to severe contamination of oyster mushroom beds. Near about 40% of beds of oyster mushroom were contaminated and the yield from paddy straw mushroom also declined.

At that crucial juncture of his entrepreneurship he stepped on to the newly established Krishi Vigyan Kendra, Jagatsinghpur in July, 2007 for technical guidance on Unit Management, Spawn Production Technique, Preservation/Value Addition, Marketing, Financial Management, Disease Management, etc. He was also advised by the scientists to involve the rural youth and SHGs of his locality for getting better market-network. After getting advice from the scientists of KVK he disinfected his unit by spraying chemicals like Bavistin, Streptocycline, Formalin, and other measures.

#### **Background:**

In a cool winter day of December 2008, he all on a sudden went to attend a patient in Cuttack Medical College Hospital by leaving behind some Oyster mushroom beds as such without removing the polythene on that day. On his return after a week from the hospital he was astonished to observe the fruiting

behaviour of oyster mushroom in those remaining poly covered oyster beds. Larger size mushroom stalks in bunch had come out of the poly beds by rupturing the polythene through air holes.

With his inquisitive bend of mind and out of curiosity he left those beds as such without removing the polythene cover and observed the total yield per bed to compare it with those beds without polythene cover. He observed that the per bed yield total from the poly covered beds was significantly higher than the per bed yield total from the beds without polythene. Moreover, the contamination in poly attached bed was negligible compared to the poly detached beds.

By observing such an accidental innovation a thought struck to his mind to repeat the same for standardization of the process. After careful and meticulous observations for a few production cycles, he came to a conclusion that the beds with air holes of 1.0cm diameter on the polythene cover out yielded all other air hole size so also the beds without polythene. That apart, the labour cost involved in maintaining the desired moisture level of the opened bed reduced by 95% compared to the poly attached beds wherein the polythene covering acted as a protective barrier and maintained the internal bed moisture.

With such alluring innovative self research findings he has been cultivating oyster mushroom with 8-10 air holes of 1.0cm diameter on polythene without removing it during fruiting. Such an innovative idea has also been disseminated to other farmers of his locality through his consistent motivation and personal invitation to his farm for believing by seeing.

### **Result of Innovation:**

The salient findings of his innovative approach have gathered the some valuable researchable data which are as follows.

Table.1: Fruiting behaviour and acceptability of Oyster mushroom (*Pleurotus sajarcaju*) as influenced by the presence or absence of polythene covering in bed size of 45cmsX60cms.

Sl. No.	Characteristics	Removal of polythene bag after 22days	Without removal of polythene bag (with 10 Nos. of holes)
1	Size of bud	Small and medium ( $\leq 8.0$ cms)	Big and medium (8-12.0cms)
2	Type of buds	Single bud	Bunchy type
3	Taste quality	Good	Very good
4	Perishability	More	Less
5	Drying of buds from total Nos. of bed (%)	30	<2
6	Disease & pest attack (after sprouting)	Some extent	Nil
7	Duration of bud initiation (days)	23days	26days
8	Duration of maturity of buds	26-27days	30-32days
9	Consumer preference	Good	Very good
10	Cost of cultivation per bed (Rs.)	25-30	23-28
11	Avg. Yield per bed (kg/bed)	1.4	1.8
12	B:C ratio	1.81	2.52
13.	Watering upto 1 <sup>st</sup> harvesting	14-18 times	5-8 times
14.	Colour of buds	Whitish black	Blackish

### **Critical Observations:**

The critical observations as recorded in with non-removal of the polythene in oyster mushrooms by the farmer Sri Moharana as well as the scientists of the KVK, Jagatsinghpur are put underneath:

1. The buds come with multi stalk having broad base.
2. Buds remain healthy without any fungal or bacterial infections.
3. The weight of harvested buds is more compared to open-bed buds.
4. The buds remain fresh for longer period.
5. Reduced watering saves labour and time.
6. Increase in production cycle by 2-3days.
7. This technique is very fruit full in var. P.Sajarcaju compare to var. P.Florida, P astriatus etc.
8. Less drying & attack of contaminants from outside due to covering of polythene.
9. Matured mycelium are deep yellowish colour with radish fluid.

### **Conclusion:**

With the changing food habit of ever increasing Indian population and to cope up with the sky high rise in the cost of production of most of the agricultural commodities due to the limiting factors of production, it is high time to increase the productivity of all such commodities. In this context, the noble effort of Sri Gobinda Moharana has been very much rewarding not only for the farmers his locality but also for the entire nation. By seeing such results, the farmers of the near by districts like Cuttack, Puri, Kendrapada, etc. have been adopting this practice in recent years. The district administration and the agriculture department have rewarded him for his consistent efforts and innovativeness in *Krishak Sampark Mela*.

His self experiment with the Oyster mushroom didn't conclude here. Now, he is at the end of the pipeline for another innovation taking into account the increased exposed surface area of oyster mushroom beds before second flush by cutting half the beds after the first harvest. Similarly, he is also studying the correlation of the bed size of paddy straw mushroom with atmospheric temperature. His keen observation has showed that, larger beds in rainy season and smaller beds in summer increased the profit of paddy straw mushroom. Secondly, the farm income during transition period can be enhanced by dual cropping of paddy straw as well as oyster mushroom from the second week of September till second week of November. However, all such experiments are under joint scrutiny of Sri Moharana and the KVK and the result of which are to come very recently.



Fruiting in Oyster mushroom beds with polythene coverings in his own farm at Alipingala.



Engaged in his innovative observations

## Ensuring Livelihood Security of Rural Women

Despite the tremendous contribution of women to the agricultural sector, their work is considered just an extension of the household domains and remains non monetised. Womens economic independence is stressed upon as an essential component of empowerment. With this intention KVK,Jagatsinghpur approached some rural ladies in Nimakana village, Block-Tirtol, Dist Jagatsinghpur. Mamata pattanaik an ordinary women of this village belonging to marginal farm family but full of enthusiasm to earn some livelihood for smoothening his family bread and butter mechanism.

After attending few training programmes for farm women conducted by the KVK, Mamata was strongly motivated to take up some income generating activities.Considering the drudgery and lack of free time with the women , she was advised to take some home based activities like poultry,vegetable cultivation,mushroom cultivation etc. that can be easily handled by her with her available resources.Under frontline demonstration programme of KVK,she was provided 25nos. of chicks of Vanaraja breed in 2008,which she could easily managed at her courtyard.The freeranging birds did not incur much extra expenditure except starter feed for 3-4 weeks.One vaccination camp was also organised by the KVK to sensitise the poultry growers to combat the anticipated diseases.Mamata was also an participant to this programme.The birds were ready to be sold for meat purpose after four and half months. Some birds she had also kept for egg laying purpose which supplements her family nutrition. She had repeated the practice in every six .months interval regularly.In the year 2009-10Mamata earned net protit Rs.20,700 by selling 150nos poultry birds.

Besides rearing poultry birds she is also utilizing her backyard space for nutritional gardening. She has also adopted mushroom cultivation as a seasonal activity on her varandah.After consumig

at home the surplus amount of vegetables and mushroom were sold at her doorstep to the villagers as she had become renowned for her noticeable efforts.

### **Income and Expenditure Pattern of Mamata Pattnaik during the Year 2009-10**

Sl.no.	Enterprise	Expenditure	Gross Income	Net Income
1.	Poultry (150no.s chicks)	14,800	35,500	20,700
2.	Vegetables	1200	2100	900
3.	Mushroom	3600	7100	3,500
	Total	19,600	44,700	25,100

Mamata gained self confidence and progressed towards economic independence and able to motivate the other counterparts of her village to form one SHG named “Maa Budhi Jagulai SHG” she herself being the President. Most of the members of her group have adopted poultry bird rearing as a means of livelihood. They have planned to taking up village community pond for composite pisciculture.

Timely help and technical support by the KVK team not only paved her way to earn livelihood but also Mamata earned social recognition. She was able harness the support of her other counterparts in the village towards progress. Her eagerness to take support and benefits of the opportunity brought her prosperity and pride to her family.



**Mamata's friendly feeling towards her colour birds**