

PROFORMA FOR ANNUAL REPORT 2019 (January-December 2019)

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, Ganjam At : Benakunda P.O: Dihapadhala Via: Tanarada Dist: Ganjam Pin : 761 140 Orissa	9437104867		kvkganjam1.ouat@gmail.com

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

Address	Telephone		E mail
	Office	FAX	
Vice-Chancellor, OUAT, Bhubaneswar- 751003 Orissa University of Agriculture & Technology	0674- 2392677		vcouat@gmail.com

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Swagatika Sahoo		7008357580	Swagatika_sahu@rediffmail.com

1.4. Year of sanction of KVK: 1985

1.5. Staff Position (as on 1st January, 2019)

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. Swagatika Sahoo	Senior Scientist & Head	Fishery Science	22320-39100 + AGP 8000 22320	17.05.2018	Permanent	
2	Subject Matter Specialist	Sri Prasanta Kumar Panda	Scientist	Plant Protection	15600-39100 + AGP 6000 25780	05.01.2007	Permanent	
3	Subject Matter Specialist	Sri Bishnupada Giri	Scientist	Horticulture	15600-39100 + AGP 6000 24850	17.09.2006	Permanent	
4	Subject Matter Specialist	Dr. Santosh Kumar Samantaray	Scientist	Agricultural Extension	15600-39100 + AGP 6000 21390	06-09-2012	Permanent	
5	Subject Matter Specialist	Smt. Anita Patro	Scientist	Home Science	15600-39100 + AGP 6000 22220	18.12.2009	Permanent	
6	Subject Matter Specialist	Dr.Sidhharth Ranabijuli	Scientist	Animal Science	15600-39100 + AGP 6000 20590	11.05.2012	Permanent	
7	Subject Matter Specialist	Sri Satyabrata Mangaraj	Scientist	Agronomy	15600-39100 + AGP 6000 15600	13.08.2018	Permanent	
8	Programme Assistant	Ms Shine Sree Dash	Programme Assistant	Forestry	9300-34800 + GP 4200 9300	30.08.2018	Permanent	
9	Computer Programmer	Sri Sitikantha Mishra	Programme Assistant	Computer Science	9300-34800 + GP 4200 16280	18.01.2006	Permanent	

10	Farm Manager	Vacant	-	-	-	-	-	
11	Accountant / Superintendent	Vacant	-	-	-	-	-	
12	Stenographer	Miss Priyadarshini Ghadei	Steno-cum-computer operator	-	5200-20200 +GP 2400 5920	22.07.2015	Permanent	
13.	Driver	Sri Saroj Kumar Biswal	Driver-cum-mechanic	-	5200-20200 + GP 1900 7970	25.07.2007	Permanent	
14.	Driver	Sri Gobinda Gouda	Driver-cum-mechanic	-	5200-20200 + GP 1900 7400	21.08.2008	Permanent	
15.	Supporting staff	Sri Krushna Chandra Pradhan	Peon-cum-watchman	-	4750 –14680+ GP1700 6290	28.07.2008	Permanent	
16.	Supporting staff	Sri Prakash Chandra Gouda	Peon-cum-watchman	-	4750 –14680+ GP1700 6500	20.12.2007	Permanent	

1.6. Total land with KVK (in ha) :

S. No.	Item	Area (ha)
1	Under Buildings	1.5
2.	Under Demonstration Units	0.05
3.	Under Crops	10.0
4.	Orchard/Agro-forestry	2.00
5.	Others with details	6.45
	Total	20.00

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					Dilapidated	352.28		
2.	Farmers Hostel					Completed	139.91		
3.	Staff Quarters (6)					Dilapidated	1200		
4.	Piggery unit								
5	Fencing					Completed	2601m		
6	Rain Water harvesting structure								
7	Threshing floor					Completed	222.96		
8	Farm godown					Completed	37.4		
9.	Dairy unit								
10.	Poultry unit					Completed	27		
11.	Goatary unit								
12.	Mushroom Lab					Completed	33		
13.	Mushroom production unit								

14.	Shade house						180		
15.	Soil test Lab					Completed	23.4		
16	pond					Completed	613.16		

* 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
Tata Sumo	3.4.2003	431000/-	317035	Condemned
Hero Honda	31.3.2007	41899/-	27526	Working

C) Equipment & AV aids

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
a. Lab equipment				
Mrida Parikshyak	2016	85000	running	ATARI
Mrida Parikshyak	2017	85000	running	ATARI
b. Farm machinery				
c.AV Aids				
Computer and accessories	2009-10	Central	Working	ATARI

		purchased		
Printer	2008-09, 2010-11		Working	ATARI
Xerox machine	2016-17	49000	Working	ATARI
Fax machine	2007-08		Not working	ATARI
Colour printer	2017-18	6500	Working	ATARI
Digital camera	2015-16	21000	Working	ATARI
LCD projector	2016-17	35000	Working	ATARI

D) Farm implements

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
Power tiller	1995		Damaged	
Threshing machine	2016-17		working	
Weighing machine	2016-17		Good condition	
Silent genset	2010		Good condition	
Storage bin	2011-12		Good condition	ATARI
Diesel pump set	2016-17	40000	Good condition	
Paddy power weeder	2010-11		Good condition	
Rice transplanter Rice	2007-08		Damaged	
Thresher cum winnower-power operated	2016	40000	Running	ATARI

1.8. Details SAC meeting* conducted in the year

Sl.No.	Date	Number of Participants	Salient Recommendations	Action taken	If not conducted, state reason
1.	22.11.2019	30	BPH tolerant paddy var. may be tested	Will be conducted in current year action plan	
			YMV tolerant greengram variety may be popularised	Will be conducted in current year action plan	
			Post emergence weedicide in Maize may be popularized	Will be conducted in current year action plan	
			Thrust should be given to increase productivity of Fingermillet	Will be conducted in current year action plan	
			New sp. of fish- Amur carp may be evaluated	Will be conducted in current year action plan	
			Wilt tolerant var. of tomato may be popularized	Will be conducted in current year action plan	
			Wilt management in Brinjal may be popularized	Will be conducted in current year action plan	
			Stress should be given for better remunerative price to farmer	Will be conducted in current year action plan	
			Trials on YMV management in Okra may be conducted	Will be conducted in current year action plan	
			BPH tolerant paddy var. may be tested	Will be conducted in current year action plan	

* 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 (2019)

Sl. no.	Item	Information
1	Major Farming system/enterprise	Rice-Greengram, Rice-Blackgram, Rice-Vegetable, Vegetable-Vegetable, Rice-Fallow
2	Agro-climatic Zone	East and South Eastern Coastal Plain Zone, North Eastern Ghat Zone
3	Agro ecological situation	Rainfed Red and Laterite, Black, medium rainfall and irrigated, Alluvial, low rainfall and irrigated
4	Soil type	Alluvial, Red, Laterite
5	Productivity of major 2-3 crops under cereals, pulses, oilseeds, vegetables, fruits and others	Given below in table
6	Mean yearly temperature, rainfall, humidity of the district	Rainfall-1276 mm
7	Production of major livestock products like milk, egg, meat etc.	

Note: Please give recent data only

Area, Productivity & production of Major crops of Ganjam district

Sl.No	Name of the crop	Kharif			Rabi		
		A (000ha)	Y (kg/ha.)	P (000MTS)	A (000ha.)	Y (kg/ha)	P (000MTS)
01	Paddy	251.32	2800	703.396			
02	Green gram	3.58	455	1.63	155.84	521	81.19
03	Ragi	45.0	895	40.28	0.94	1003	2.44
04	Black gram	16.38	466	7.63	32.80	468	15.35

05	Groundnut	11.40	1250	14.25	18.68	1928	36.02
06	Sesamum	11.63	414	4.81	14.57	420	6.12
07	Pigeonpea	13.6	934	12.7			
08	Maize	10.95	2282	27.66	0.93		
09	Horsegram				11.92	378	4.51
10	Sunflower				0.49	1115	0.55

Area, Productivity& production of Major Horticulture crops of Ganjam district

Sl.No.	Name of the crop	Area (In '000 ha)	Productivity (in Kg./ha)	Production (in '000 MT)
01	Brinjal	5.02	25750	129.16
02	Cabbage	1.51	27920	42.05
03	Cauliflower	2.41	14760	35.56
04	Okra	3.46	8760	30.33
05	Pea	0.34	9060	3.07
06	Chilli	5.42	1360	7.37
07	Tomato	4.42	12870	56.87

08	Onion	0.59	8650	5.11
09	Potato	0.36	15120	5.49
10	Sweet Potato	7.52	9780	73.55
11	Radish	0.54	11750	6.38

2.b. Details of operational area / villages (2019)

Village Name	Year of adoption	Block Name	Distance from KVK (Km)	Population	Number of farmers (having land in the village)
Padampur	2017-18	Sorada	48	1891	450
Phulasarapalli	2017-18	Aska	40	922	260
Lepa	2015-16	Jagannathprasad	30	332	75
A.barida	2016-17	Kabi suryanagar	54	6954	1670
Patulisahi	2017-18	Belaguntha	15	497	90

2. c. Details of village adoption programme:

Name of the villages adopted by PC and SMS (2018-19) for its development and action plan

Name of village	Block	Action taken for development
Padampur	Sorada	OFT, FLD, Training, field day, diagnostic field visit
Phulasarapalli	Aska	OFT ,FLD, Training, field day, diagnostic field visit
Lepa	Jagannathprasad	OFT ,FLD, Training, field day, diagnostic field

		visit
A.barida	Kabi suryanagar	OFT ,FLD, Training, field day, diagnostic field visit
Patulisahi	Belaguntha	OFT ,FLD, Training, field day, diagnostic field visit

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	Bhanjanagar	Sorada	Padampur	Rice, Maize, Pigeonpea , Greengram, Blackgram, Sesamum, Ground nut, Vegetable	• Severe weed incidence in paddy • Blast disease in paddy • Low yield in arhar • Use of traditional varieties of green gram • Improper nutrient management green gram	➤ Varietal substitution ➤ weed management ➤ Pest & diseases management ➤ Integrated nutrient management ➤ Targeting rice fallow
2		Aska	Phulasara palli	Rice, Sugarcane, Blackgram, Greengram, Mustard, Sesamum	• Severe weed incidence in paddy • Low yield in mustard • Use of traditional varieties of green gram • Improper nutrient management green gram	➤ weed management ➤ Pest & diseases management ➤ Integrated nutrient management ➤ Targeting rice fallow ➤ Varietal substitution
					gram	

3		Jagannathprasad	Lepa	Rice, Maize, Pigeonpea, Greengram, Blackgram, Sesamum, Groundnut, Vegetable	• Severe weed incidence in paddy • Low yield in arhar • Use of traditional varieties of green gram • Improper nutrient management green gram	➤ weed management ➤ Pest & diseases management ➤ Integrated nutrient management ➤ Targeting rice fallow ➤ Varietal substitution
4		Kabisuryanagar	A.barida	Rice, Blackgram, Green gram, Groundnut	• Severe weed incidence in paddy • Use of traditional varieties of green gram • Improper nutrient management in green gram	➤ weed management in rice ➤ Pest & diseases management ➤ Integrated nutrient management ➤ Targeting rice fallow ➤ Varietal substitution
5		Belaguntha	Patulisahi	Rice, Greengram, Blackgram, Sesamum, Vegetable	• Use of traditional varieties of green gram • YMV infection in green gram • Severe weed incidence in paddy	➤ weed management in rice ➤ Pest & diseases management ➤ Integrated nutrient management ➤ Targeting rice fallow ➤ Varietal substitution

2.1 Priority thrust areas

S. No	Thrust area
1.	Floriculture
2.	INM in Fruits & Vegetable
3.	Honey bee rearing
4.	HYV &wilt tolerant varieties
5.	Integrated fish farming
6.	Processing and value addition
7.	Crop diversification
8.	Vaccination ,feed management in Cattle & Goat
9.	Low cost production technique
10.	Backyard poultry
11.	Mushroom cultivation
12.	Kid mortality & disease management
13.	Feeding management of cattle
14.	Marketing awareness
15.	Pest Disease & weed management

3. TECHNICAL ACHIEVEMENTS

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

OFT				FLD			
No. of technologies tested:				No. of technologies demonstrated:			
Number of OFTs		Number of farmers		Number of FLDs		Number of farmers	
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement

	nt	et																					
			SC		ST		Others		Total						SC		ST		Others		Total		
			M	F	M	F	M	F	M	F	T				M	F	M	F	M	F	M	F	T
15	12	85	1 6	5	3		37	24	5 6	2 9	8 5	26	26	218	40	5	10	8	1 0 3	52	1 5 3	6 5	2 1 8

Training												Extension activities											
Number of Courses		Number of Participants										Number of activities		Number of participants									
Target	Achievem ent	Target	Achievement									Target	Achieveme nt	Target	Achievement								
			SC		ST		Others		Total						SC		ST		Others		Total		
			M	F	M	F	M	F	M	F	T				M	F	M	F	M	F	M	F	T
106	100	2270	2 5 8	12 5	11 0	8 0	79 7	39 8	1 1 6 5	6 0 3 8	1 7 6 8	300	286	6000	7 9 4	3 3 4	9 8	1 4	31 58	13 02	4 0 5 0	1 6 5 0	5 7 0 0

Impact of capacity building											Impact of Extension activities										
Number of Participants trained		Number of Trainees got employment (self/ wage/ entrepreneur/ engaged as skilled manpower)									Number of Participants attended		Number of participants got employment (self/ wage/ entrepreneur/ engaged as skilled manpower)								
Target	Achievemen t	SC		ST		Others		Total			Target	Achievement	SC		ST		Others		Total		
		M	F	M	F	M	F	M	F	T			M	F	M	F	M	F	M	F	T

Seed production (q)	Planting material (in Lakh)
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Target	Achievement	Target	Achievement

Livestock strains and fish fingerlings produced (in lakh)*		Soil, water, plant, manures samples tested (in lakh)	
Target	Achievement	Target	Achievement
		300	267

* Give no. only in case of fish fingerlings

Publication by KVKs							
Item	Number	No. circulated	No. of Research papers in NAAS rated Journals	Highest NAAS rating of any publication	Average NAAS rating of the publications	Details of awarded publication, if any	Details of Award given to the publication
Research paper							
Seminar/conference/ symposia papers							
Books							
Bulletins							
News letter							
Popular Articles							
Book Chapter							
Extension Pamphlets/ literature							
Technical reports							
Electronic Publication (CD/DVD etc)							
TOTAL							

1 Achievements on technologies assessed and refined

OFT-1

1.	Title of On farm Trial	Assessment of chemicals for control of pod borer in Sesamum
2.	Problem diagnosed	Damaged pod, low yield
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	TO ₁ – spraying of Profenophos @ 1lt./ha TO ₂ – spraying of Spinosad @ 165ml/ha
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Source : SLREC Proceeding, 2017
5.	Production system and thematic area	Integrated Pest Management
6.	Performance of the Technology with performance indicators	Damaged pod %, Larva per plant Yield, Net profit, BCR
7.	Final recommendation for micro level situation	
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	Field visit, Interaction, Group discussion, problem identified & prioritization

Thematic area: Integrated Pest Management

Problem definition: Damaged pod, low yield

TO₁ – spraying of Profenophos @ 1lt./ha

TO₂ – spraying of Spinosad @ 165ml/ha

Table: Results

Technology	No. of	Yield component	Disease/	Yield	Cost of	Gross return	Net return	BC
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option	trials	Damaged pod %	Larva per plant	Test wt. (100 grain wt.)	insect pest incidence (%)	(q/ha)	cultivation (Rs./ha)	(Rs/ha)	(Rs./ha)	ratio
FP	7	18.6	6.1	-	-	6.8	30000	47600	17600	1.6
TO ₁	7	7.2	2.4	-	-	7.6	32000	53200	21200	1.66
TO ₂	7	3.1	0.8	-	-	8.2	34000	57400	23400	1.68

OFT-2

1.	Title of On farm Trial	Assessment of BPH tolerant varieties of rice (Rainfed/medium land- rice-Greengram)
2.	Problem diagnosed	Chaffy grain, mortality of plant, low yield
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	TO ₁ – Hasant TO ₂ – Pooja
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Source : OUAT, 2017
5.	Production system and thematic area	Integrated Pest Management
6.	Performance of the Technology with performance indicators	No.of BPH/hill, Chaffy grain% Yield, Net profit, BCR
7.	Final recommendation for micro level situation	Hasanta var. of Rice is tolerant to BPH & suitable to Rainfed medium land in Kharif season.
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	Field visit, Interaction, Group discussion, problem identified & prioritization

Thematic area: Varietal evaluation

Problem definition: Chaffy grain, mortality of plant, low yield

Technology assessed: TO₁ – Hasant , TO₂ – Pooja

Table: Results

Technology option	No. of trials	Yield component			Disease/ insect pest incidence (%)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		No. of BPH/hill	Chaffy grain%	Test wt. (100 grain wt.)						
FP	7	16.4	38	-	-	37.4	34000	63580	29580	1.87
TO ₁	7	-	6	-	-	44.2	35000	75140	39860	2.15
TO ₂	7	12.3	12	-	-	41.6	34000	70720	35280	2.08

OFT-3

Table: Results

Technology option	No. of trials	Yield component			Disease/ insect pest incidence (%)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Damaged pod %	Larva per plant	Test wt. (100 grain wt.)						
FP	7	18.6	6.1	-	-	6.8	30000	47600	17600	1.6
TO ₁	7	7.2	2.4	-	-	7.6	32000	53200	21200	1.66
TO ₂	7	3.1	0.8	-	-	8.2	34000	57400	23400	1.68

1.	Title of On farm Trial	Assessment of IDM practices for collar rot management in YAM
2.	Problem diagnosed	Rotting of vines ,Small sized corm,Low yield
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	TO ₁ – Tuber treatment with Trichoderma@ 10gram+100gram cow dung slurry + 1 litre of water for 30 minutes. On appearance of disease soil drenching with Carbandazim + mancozeb @ 1kg/ha. TO ₂ – Tuber treatment with Carbandazim + Mancozeb @ 2ml/lt, band placement of Trichoderma 2.5 kg + 30 kg vermicompost/ha. On appearance of disease soil drenching with Carbandazim + Mancozeb @ 1kg/ha.
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Source : CTCRI, Annual report,2016-17
5.	Production system and thematic area	Integrated Disease Management
6.	Performance of the Technology with performance indicators	No. of rotted vines/plant No.of affected plants/100 m2

7.	Final recommendation for micro level situation	
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	Field visit, Interaction, Group discussion, problem identified & prioritization

Thematic area: Integrated disease management

Problem definition: **Rotting of vines ,Small sized corm, Low yield**

Technology assessed: TO₁ – Tuber treatment with Trichoderma@ 10gram+100gram cow dung slurry + 1 litre of water for 30 minutes. On appearance of disease soil drenching with Carbandazim + mancozeb @ 1kg/ha. TO₂ – Tuber treatment with Carbandazim + Mancozeb @ 2ml/lt, band placement of Trichoderma 2.5 kg + 30 kg vermicompost/ha. On appearance of disease soil drenching with Carbandazim + Mancozeb @ 1kg/ha.

Table: Results

Technology option	No. of trials	Yield component			Disease/ insect pest incidence (%)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		No. of rotted vines/plant	No.of affected plants/100 m ²	Test wt. (100 grain wt.)						
FP	7	0.9	19.2			194.2	85000	194200		2.28
TO ₁	7	0.5	9.4			214.8	90000	214800		2.39
TO ₂	7	0.3	7.2			221.6	91600	221600		2.42

OFT-4

1.	Title of On farm Trial	Assessment on performance of high yielding Ragi varieties
2.	Problem diagnosed	Low yield from exsisting ragi variety
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	TO1: Bhairabi, TO2: arjun TO3: Kalua, Assessed

4.	Source of Technology (ICAR/AICRP/SAU/other, please specify)	CPR, Berhampur, OUAT, 2009, 2015 and 2016
5.	Production system and thematic area	Rice – green gram and yield evaluation
6.	Performance of the Technology with performance indicators	
7.	Final recommendation for micro level situation	Arjun may be grown instead of local variety Budha mandia
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	

Thematic area:

Problem definition:

Technology assessed:

Table: Results

Technology option	No. of trials	Yield component			Disease/ insect pest incidence (%)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		No. of effective tillers/hill	No. of fingers per panicle	Test wt. (100 grain wt.)						
FP: Budha mandia	7	3.1	3.6	2.64	63.5	13.0	23000	35880	12880	1.56
TO1:Bhairabi		4.2	4.3	2.89	29.8	15.0	21500	41500	20000	1.93
TO2:Arjun		7.8	5.1	3.12	26.9	18.4	21500	51200	29700	2.38
TO3:Kalua		5.9	4.8	3.10	28.4	17.2	21500	47600	26100	2.21

OFT-5

1.	Title of On farm Trial	Assessment of performance of Brinjal varieties for bacterial wilt disease management
2.	Problem diagnosed	Unavailability of Suitable Wilt tolerant variety.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmers Practice (FP): Utkal Technology option-I (TO-I): Swarna Shyamli
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	ICAR –RCER ,Ranchi
5.	Production system and thematic area	Vegetable -vegetable and varietal evaluation
6.	Performance of the Technology with performance indicators	Wilt % , Fruit weight
7.	Final recommendation for micro level situation	Recommended
8.	Constraints identified and feedback for research	Presence of spine on fruits and leaves causes hindrance in intercultural operation and harvesting
9.	Process of farmers participation and their reaction	Field visit, Contact, Interaction , Recording keeping

Thematic area: varietal evaluation

Problem definition: Unavailability of Suitable wilt tolerant variety

Technology assessed: **Performance of Brinjal varieties for bacterial wilt disease management**

Table: Results

Technology option	No. of trials	Yield component		Wilt (%)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		No. of fruits/plant	Fruit wt. (g.)						
(FP): Utkal	7	35.4	378.57	27.42	329.14	178100	329140	151040	1.8
TO I: Swarna Shyamli	7	47.7	497.14	4.85	384.57	178100	384570	206470	2.15

OFT-6

1.	Title of On farm Trial	Assessment of herbicide for controlling weeds in okra
2.	Problem diagnosed	Poor growth, low yield & low income due to heavy weed infestation
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmers Practice (FP): Manual weeding Technology option-I (TO-I): Pre-emergence application of Pendimethalin @ 2lit/ha. Technology option-II (TO-II): Pre-emergence application of Pendimethalin + Post- emergence application of Quizalofop ethyle @ 1

		lit./ha.
4.	Source of Technology (ICAR/AICRP/SAU/other, please specify)	OUAT, 2015
5.	Production system and thematic area	Rice -vegetable and weed management
6.	Performance of the Technology with performance indicators	No. of weed/m ²
7.	Final recommendation for micro level situation	Recommended
8.	Constraints identified and feedback for research	Broad leaf weed are not controlled in post emergence application
9.	Process of farmers participation and their reaction	Field visit, Contact, Interaction , Recording keeping

Thematic area: weed management

Problem definition: Poor growth, low yield & low income due to heavy weed infestation

Technology assessed: Performance of Brinjal varieties for bacterial wilt disease management

Table: **Results**

Technology option	No. of trials	Yield component	No. of weeds/m ²	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		No. of fruits/plant						
FP	7	5.14	462.71	79.28	131688	198200	66512	1.5
TO I	7	7.28	93.71	90.42	126728	226050	99322	1.7
TO II	7	9.85	23.57	95.85	128728	239625	110897	1.86

OFT-7

1.	Title of On farm Trial	Assessment of different chemicals for controlling competitor moulds in paddy straw mushroom
2.	Problem diagnosed	Low yield of paddy straw mushroom due to moulds attack
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Technology option-I (TO-I): Pre- soaking of the paddy straw bundle with 0.02% of Bleaching powder Technology option-II (TO-II): Pre soaking of the paddy straw bundle with 1% Calcium carbonate
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Source :CTMRT,OUAT, Bhubaneswar,2014
5.	Production system and thematic area	Mushroom cultivation, Homestead
6.	Performance of the Technology with performance indicators	Pinehead appearance(days), Production(kg/bed), % of infected bed, Biological efficiency(%), % change in production
7.	Final recommendation for micro level situation	Presoaking of the straw with calcium carbonate for a period of six hour proved to be useful in suppression of contaminating moulds
8.	Constraints identified and feedback for research	Mould resistant may be developed
9.	Process of farmers participation and their reaction	Diagnostic field visit, Method demonstration training

Thematic area: Mushroom cultivation

Problem definition: Low yield of paddy straw mushroom due to moulds attack

Technology assessed: TO₁- Pre- soaking of the paddy straw bundle with 0.02% of Bleaching powder

TO₂- Application of lime @ 1% during soaking of straw

Table:

Technology option	No. of trials	Yield component			Biological efficiency (%)	Yield (Kg/bed)	Cost of cultivation (Rs./bed)	Gross return (Rs./bed)	Net return (Rs./bed)	BC ratio
		Days of emergence of pin head	% of infected bed	No. of fruit bodies						
FP	07	8	26	32	10	1.1	70	132	62	1.8
TO ₁	07	8	11	33	12	1.3	71	156	85	2.1
TO ₂	07	9	5	36	13.5	1.4	71	168	97	2.3

OFT-8

1.	Title of On farm Trial	Assessment of drudgery in hanging grain cleaner
2.	Problem diagnosed	High drudgery involved in manual cleaning of Rice
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	FP - Cleaning of rice by using bamboo structure (Kulla) TO ₁ - Cleaning of rice by using metallic sieve TO ₂ - Cleaning of rice by using hanging type grain cleaner
4.	Source of Technology (ICAR/AICRP/SAU/other, please specify)	Source :CIAE, Bhopal, 2014
5.	Production system and thematic area	Drudgery reduction, Homestead
6.	Performance of the Technology with performance indicators	Cleaning output (kg/hr), Energy expenditure (KJ/minute), Avg. WHR/min, Saving of cardiac cost (%), Reduction of drudgery (%), Increasing efficiency (%)

7.	Final recommendation for micro level situation	The productivity of worker increase as compare to traditional implements
8.	Constraints identified and feedback for research	Implement should be light weight
9.	Process of farmers participation and their reaction	Diagnostic field visit, Method demonstration training

Thematic area: Drudgery reduction

Problem definition: High drudgery involved in manual cleaning of Rice

Technology assessed: TO₁ - Cleaning of rice by using metallic sieve

TO₂ - Cleaning of rice by using hanging type grain cleaner

Table: Results

Technology option	No. of trials	Yield component			cardiac cost of work	Avg. of percentage reduction in drudgery	Avg. of percentage increasing efficiency
		Cleaning output (kg/hrs)	Energy expenditure (KJ/min)	Avg. WHR/min			
FP	07	59	8.07	105	29.72	17.94%	60.66%
TO ₁	07	86	7.57	102	26.52		
TO ₂	07	122	6.64	96	20.59		

OFT-9

1.	Title of On farm Trial	Assessment of yield performance of different varieties of oyster mushroom
2.	Problem diagnosed	Low yield of oyster mushroom due to low temperature
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Technology option-I (TO-I): Cultivation of oyster mushroom <i>var. Pluerotus ostreatus</i> Technology option-II (TO-II): Cultivation of oyster mushroom <i>var. Hypsizygus ulmarious</i>
	Source of Technology (ICAR/AICRP/SAU/other, please specify)	Source :CTMRT,OUAT, Bhubaneswar,2012

5.	Production system and thematic area	Small scale income generation, Homestead
6.	Performance of the Technology with performance indicators	Pinehead appearance(days), Production(kg/bed), % of infected bed, Biological efficiency(%), % change in production
7.	Final recommendation for micro level situation	Cultivation of oyster mushroom <i>var. Hypsizygus ulmarious</i> has high productivity
8.	Constraints identified and feedback for research	Cold resistant may be developed
9.	Process of farmers participation and their reaction	Diagnostic field visit, Method demonstration training

Thematic area: Mushroom cultivation

Problem definition: Low yield of oyster mushroom due to low temperature

Technology assessed: TO₁ – Cultivation of Oyster Mushroom *var. Plurotus ostreatus*
TO₂ – Cultivation of Oyster mushroom *var. Hypsizygus ulmarious*

Table:

Technology option	No. of trials	Yield component			Biological efficiency (%)	Yield (Kg/bed)	Cost of cultivation (Rs./bed)	Gross return (Rs/bed)	Net return (Rs./bed)	BC ratio
		Days of emergence of pin head		No. of fruit bodies						
FP	07	18		32	85	1.85	35	111	76	3.1
TO ₁	07	18		33	80	1.8	35	108	73	3.0
TO ₂	07	20		36	95	1.9	35	114	79	3.2

OFT-10

1.	Title of On farm Trial	Comparative assessment of multi-enzyme mixture and probiotics on growth of chickens in semi intensive system of rearing
2.	Problem diagnosed	High feed consumption in chicken farming. High cost of feeding of poultry rearing. Low FCR due to under utilization of fiber in feed. High incidence of diarrhoea and diseases

3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmers Practice (FP): no supplement feeding TO1: Feeding of commercial broiler feed (added with probiotic mixture @ 0.05%) @50% of daily requirement and free range feeding for improved gut health and nutrient utilization. TO2: Feeding of commercial broiler feed (added with multi-enzyme mixture @ 0.05%) @50% of daily requirement and free range feeding and free range feeding improved nutrient utilization.
4.	Source of Technology (ICAR/AICRP/SAU/other, please specify)	CARI 2017-18
5.	Production system and thematic area	Backyard poultry
6.	Performance of the Technology with performance indicators	Body weight at 1.5, 2, 2.5, 3 month , morbidity, mortality, diarrhoea
7.	Final recommendation for micro level situation	Probiotics can aid in digestion and disease resistance leading to high survivability and production performance. Enzymatic treatment can aid in the production parameters. Probiotics in backyard system can be very useful.
8.	Constraints identified and feedback for research	Detailed study on performance indicator effects of probiotics and enzymes can be made
9.	Process of farmers participation and their reaction	Rearing and feeding of birds

Thematic area:

Problem definition: High feed consumption in chicken farming. High cost of feeding of poultry rearing. Low FCR due to under utilization of fiber in feed. High incidence of diarrhoea and diseases

Technology assessed:

Farmers Practice (FP): no supplement feeding

TO1: Feeding of commercial broiler feed (added with probiotic mixture @ 0.05%) @50% of daily requirement and free range feeding for improved gut health and nutrient utilization.

TO2: Feeding of commercial broiler feed (added with multi-enzyme mixture @ 0.05%) @50% of daily requirement and free range feeding and free range feeding improved nutrient utilization.

Table:

Technology option	No. of trials	Yield component				Incidence diarrhoea (%)	Yield(Body wt/kg)	Cost of cultivation (Rs/100birds)	Gross re(Rs/100birds)turn	Net return(Rs /100birds)	BC ratio
		Average body weight (7 th week)	Average body weight (12 th week)	Adult body weight (20 th week)	Mortality (%)						
FP	100	0.85kg	0.98kg	1.26kg	30	50	1.26	6000	10584	5584	1.76
TO ₁	100	1.1kg	1.70	2.1	4	8	2.1	7600	24192	16592	3.18
TO ₂	100	1.25kg	1.65	2.0	6	11	2.0	7600	22560	14960	2.96

OFT-11

1.	Title of On farm Trial	Assessment of different concentrate mixture for nutritional management in CB heifer
2.	Problem diagnosed	Improper nutrition of dairy heifer animals, late puberty, anestrus
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Farmers Practice (FP): Feeding of straw and wheat bran TO1: straw + Concentrate mixture 1 (Maize-50%, Wheat bran -13%, mustard oil cake- 35%, mineral mix -1%, salt -1%) TO2: straw + Concentrate mixture 2 (Maize- 0, Wheat bran – 80%, mustard oil cake- 18%, mineral mix -1%, salt -1%)
4.	Source of Technology	IGFRI, 2017
5.	Production system and thematic area	Semi-intensive dairy farming
6.	Performance of the Technology with performance indicators	Body weight at puberty, age at first heat, conception rate
7.	Final recommendation for micro level situation	Continuing
8.	Constraints identified and feedback for research	-
9.	Process of farmers participation and their reaction	Management

Thematic area:

Problem definition: Improper nutrition of dairy heifer animals, late puberty, anestrus

Technology assessed:

Farmers Practice (FP): Feeding of straw and wheat bran

TO1: straw + Concentrate mixture 1 (Maize-50%, Wheat bran -13%, mustard oil cake- 35%, mineral mix -1%, salt -1%)

TO2: straw + Concentrate mixture 2 (Maize- 0, Wheat bran – 80%, mustard oil cake- 18%, mineral mix -1%, salt -1%)

Table:

Technology option	No. of trials	Yield component		Yield	Cost of cultivation	Gross return (	Net return	BC ratio
					(		(	
Continuing								

OFT-12

1.	Title of On farm Trial	Assessment of Amur carp for increasing fish production in polyculture system
2.	Problem diagnosed	Slow growth rate & stocking rate of Mrigal (ab 30%) greatly hampers the average yield from unit area of culture.
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	TO1: Stocking ratio Catla: Rohu : Mrigal :Amur carp :: 30:40:15:15 TO2: Stocking ratio Catla: Rohu :Amur carp :: 30:40:30
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar-2013

5.	Production system and thematic area	Composite fish culture, Varietal evaluation
6.	Performance of the Technology with performance indicators	Growth Parameter: Avg. Body Wt. & Length, Survivability%, SGR (%); Water quality Parameter: Plankton, pH, DO ₂ , Alkalinity, Hardness
7.	Final recommendation for micro level situation	Higher growth rate of amur carp is suitable to partial replace of mrigal in composite fish culture. Though full replacement may done with mrigal FCR is high.
8.	Constraints identified and feedback for research	-
9.	Process of farmers participation and their reaction	Amur carp is suitable in composite fish culture for partial replace of mrigal. Taste similar to rohu, mrigal and fetch high market price.

Thematic area: Varietal evaluation

Problem definition: Stocking ratio Catla: Rohu :mrigal :: 30:40:30

Technology assessed: TO1: Stocking ratio Catla: Rohu : Mrigal :Amur carp :: 30:40:15:15

TO2: Stocking ratio Catla: Rohu :Amur carp :: 30:40:30

Table:

Technology option	No. of trials	Yield component			Survivability	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Avg body wt (kg)	Avg length (cm)	FCR						
FP	5	C-1.3, R-0.8, M-0.62	-	1.45	80	42.0	257000	504000	247000	1.96
TO1	5	C-1.25, R-0.92, M-0.78, A-1.0	-	1.3	84	46.0	263000	552000	289000	2.10

TO2	5	C-1.3, R-0.94, A-1.2	-	1.35	90	52.0	294000	624000	330000	2.12
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Results:

OFT-13

1.	Title of On farm Trial	Assessment of different planting time for better market price of Tomato
2.	Problem diagnosed	Distress sale of Tomato in rabi season
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	TO1: Planting of seedling 15 days before onset of normal planting period TO2: Planting of seedling 15 days after completion of normal planting period
4.	Source of Technology (ICAR/AICRP/SAU/other, please specify)	IIHR
5.	Production system and thematic area	Integrated Crop Management
6.	Performance of the Technology with performance indicators	Cost of intervention. Additional income over additional investment Yield (q/ha), B:C ratio
7.	Final recommendation for micro level situation	Advancing the planting time will lead to better market rice
8.	Constraints identified and feedback for research	i. Advancing and delaying the planting time by 15days is quite less to observe any significant difference in yield. So it may be increased to 30 days. ii. Suitable varieties may be developed for kharif season (July-August) to fetch better market price
9.	Process of farmers participation and their reaction	Farmers voluntarily and whole heartedly participated since selection to completion of the trial. As per their suggestion the advancing and delaying duration should be increased to 1 month to get significant different in yield.

Thematic area: Marketing

Problem definition: Farmers generally plant the seedling in the month of October

Technology assessed: TO1: Planting of seedling 15 days before onset of normal planting period

TO2: Planting of seedling 15 days after completion of normal planting period

Thematic area: Marketing

Table:

Technology option	No. of trials	Yield component			Disease (wilt) %	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Plant height	No. of fruits/plant	Fruit wt.						
FP	7	64.6	34.5	56	5.2	438	1,48,000	5,25,600		3.5
TO1	7	59.2	28.9	49	7.4	418	1,48,000	6,27,000		4.28
TO2	7	52.4	32.7	54	4.8	434	1,48,000	4,34,000		2.9

Results:

3.2 Achievements of Frontline Demonstrations

A. Details of FLDs conducted during the year

Cereals

Sl. No.	Crop	Thematic area	Technology Demonstrated with detailed treatments	Area (ha)		No. of farmers/ demonstration										Reasons for shortfall in achievement
				Proposed	Actual	SC		ST		Others		Total				
						M	F	M	F	M	F	M	F	T		
1.	Rice	Integrated weed management	Post emergence application of Bispyribac-Na applied within 30 DAT	2 ha	2 ha	2		2		6		10				
2.	Ragi	Integrated nutrient management	Application of lime @0.25 LR (applied 15 days before sowing) along with 50% N-P2O5-K2O (30-20-20 Kg/ha-1 or FYM (to supply 30 kg N/ha)with 50% - P2O5-K2O	2	2	3 1		2		4		10				
3.	Cowpea	Inter cropping	Maize+ cowpea row	2	2	3				7		10				

		system	ratio of 1:1 along with application of STBFR (120-75-75)kg N-P2O5-K2O/ha + FYM 10 t/ha + biofertiliser consortia 2 kg/ha=+ zinc 5 kg/ha						
4.	Chilli	INM	Soil application of Azospirillum & PSB each @ 5kg/ha incubated with FYM + 75 % of RDF (120-60-80 :: NPK kg/ha)	1	1		10	10	
5	Brinjal	INM	Application of N-125 kg., P2O5 – 50 kg., K2O – 50 kg. per ha., 5 kg. of Azospirillum & PSB each and foliar application of Boron @ 2 gm./ liter of water	1	1		10	10	
6	Tomato	Varietal evaluation	Triple disease resistant to ToLCV, BW & Early blight,. Seed rate				5	5	
7	Bitter gourd	ICM	Foliar application of Ethrel @ 200 ppm at 2 to 4 leaf stage & amino acids during flowering stage	1	1		10	10	
8	Ragi(Blast disease)	Integrated Disease Management	Seed treatment with Tricyclazole @ 1 gm/kg of seed and foliar spraying of Tricyclazole @	2.0	2.0	3	-	-	-

			300gm/ha twice at 15 days interval starting from the initiation of disease								
9	Brinjal(Wilt disease management)	Integrated Disease Management	Seed treatment with Metalaxyl+Mancozeb 72% WP @ 2gm/kg +soil application of Carbofuran @ 1kg /ha+ soil drenching of Carbendazim 0.15%+ Streptocycline 0.015% at 30 and 45 days after transplanting	2.0	2.0	2	-	-	-	8	
10	Okra(YMV management)	Integrated Pest Management	Seed treatment with Imidacloprid 600 FS @ 5 gm / Kg, Installation of Yellow Sticky Trap @ 50 / ha and spraying Acetamiprid 20 SP @ 0.3 gm /lt. at 30 and 45 DAS	2.0	2.0	3	-	-	-	7	
11	Mango (Fruit fly management)	Integrated Pest Management	Installation of methyl eugenol trap @ 20/ha and application of poison bait (Dichlorovos 20ml + jaggery 1Kg + 10lt. of water for 01 ha	2.0	2.0	2	-	-	-	8	

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 ₂ O ₅	K ₂ O					
Rice	Kharif	Rainfed	Sandy loam	185.2	16.5	168.4	Black gram	23.06.19 to 31.06.19	15.11.19 to 22.11.19		
Ragi	Kharif	Rainfed	Sandy loam	200.3	14.5	198.6	Green gram	01.06.19 to 07.06.19	03.09.19 to 10.09.19		
Maize +Cowpea	Rabi	Irrigated	Sandy loam	164.5	19.3	203.6	Maize	02.01.20 to 09.01.20	10.04.20 to 15.04.20		
Chilli	Kharif	Irrigated	Sandy loam	168.1	12.3	129.6	Okra	5.8.19 to 12.8.19	10.11.19 onwards		
Brinjal	Kharif	Irrigated	Sandy loam	187.4	10.8	113.4	Okra	7.8.19 to 14.8.19	1.11.19 onwards		
Tomato	Rabi	Irrigated	Loam	178.5	9.3	116.7	Cowpea	20.9.19	31.12.19 onwards		
Bitter gourd	Rabi	Irrigated	Loam	162.5	11.3	134.9	Paddy	23.12.19 to 31.12.19	1.03.20 onwards		
Ragi	Kharif	Rainfed	Sandy loam	163.2	26.1	162.4	Greengram	02.07.2019 to 06.07.2019	18.10.2019 to 23.10.201	1162	39

									9		
Brinjal	Rabi	Irrigated	Sandy clay loam	218.4	32.4	206.8	Rice	05.11.2019 to 10.11.2019	28.03.2019-30.03.2019		
Okra	Rabi	Irrigated	Sandy clay	194.6	34.5	214.6	Rice	08.12.2019 to 13.12.2019	12.03.2019 to 14.03.2019		
Mango	Kharif	Rainfed	Sandy loam	147.4	22.6	156.2	-	07-10 years plants			

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

Frontline demonstrations on Other 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)			
					Dem o	Check		Gross Cost	Gross Return	Net Return	** BC R	Gross Cost	Gross Return	Net Return	** BC R

Rice	Integrated weed management	Post emergence application of BispyribacSodium @ 250 ml/ha applied within 25DAT	10	2	30.5	25		18600	48700	30100	2.61	22500	41000	18500	1.82
Ragi	Integrated nutrient management	Application of lime @0.25 LR (applied 15 days before sowing) along with 50% N-P2O5-K2O (30-20-20 Kg/ha-1 or FYM (to supply 30 kg N/ha)with 50% -P2O5-K2O	10	2	19.4	15		18700	48900	30200	2.61	21300	41300	20000	1.93

Cow pea	Intercro pping system	Maize+ cowpea row ratio of 1:1 along with application of STBFR (120-75- 75)kg N-P2O5- K2O/ha + FYM 10 t/ha + biofertiliser consortia 2 kg/ha+=+ zinc 5 kg/ha	10	1	38.0 + 32.0	42.0	67	3500 0	77600	42600	2.21	2600 0	5040 0	24400	1.94
Chilli	INM	Soil application of Azospirillum & PSB each @ 5kg/ha incubated with FYM + 75 % of RDF (120- 60-80 :: NPK kg/ha)	10	1	94.6	81.2	16.5	1429 00	28380 0	14090 0	1.98	1420 00	2436 00	10160 0	1.7
Brinj al	INM	Application of N-125 kg., P ₂ O ₅ – 50 kg., K ₂ O – 50 kg. per ha., 5 kg. of Azospirillum & PSB each and foliar application of Boron @ 2 gm./ litre of water	10	1	341. 2	294.9	15.7	1725 00	34120 0	16870 0	1.97	1700 00	2949 00	12490 0	1.73
Toma to	Varietal evaluati ve	Triple disease resistant to ToLCV, BW & Early blight,.	10	1	429. 6	343.8	24.9	1480 00	42960 0	28160 0	2.9	1480 00	3438 00	19580 0	2.32
Bitter gourd	ICM	Foliar application of Ethrel @ 200 ppm at 2 to 4 leaf stage & amino acids during flowering stage	10	1	128. 4	108.9	17.9	1365 86	25680 0	12021 4	1.88	1351 86	2178 00	82614	1.61

Ragi	Integrated Disease Management	Management of Blast disease in Ragi	10	2	15.6	12.8	18.9	25000	46800	21800	1.87	23000	38400	15400	1.67
Brinjal	Integrated Disease Management	Management of wilt complex in Brinjal	10	2	232.8	204.2	14	96000	232800	136800	2.42	88000	204200	116200	2.32
Okra	Integrated Pest Management	Management of YMV in Okra	10	2	110.2	92.6	19	74000	154280	80280	2.08	70000	129640	59640	1.85
Mango (Rabi, 2018-19)	Integrated Pest Management	Management of Fruit fly	05	02	51.2	42.1	21.6	33000	81920	48920	2.48	30000	67360	37360	2.24

* 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

[illegible]

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

** BCR= GROSS RETURN/GROSS COST

Other crops

[illegible]

Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	**BCR	Gross Cost	Gross Return	Net Return	**BCR

Dairy	Fodder	Demonstration on Hybrid Napier (CO-4) fodder production in dairy farming	5	0.25 Ac	Milk yield 6lit/day	Milk yield 4lit/day	50	Fodder Yield 25 ton/ha Reduction in concentration = 4kg	Fodder Yield Nil Reduction in concentration = 0kg	6000/0.5ac	12960	6960	2.16	7200	8640	1440	1.2
Cow																	
Poultry		Demonstration on artificial brooding management in chicks	5	100	Chick mortality % 3	Chick mortality % 55	32	Live brooded chick 97	Live brooded chick 45	2800	5820	3020	2.07	=2000	2700	700	1.35

Poultry		Demonstration on low input poultry breed kadaknath in backyard rearing system	10	10	Breed: Kadaknath Body wt (6mnth) 1.2kg	Breed: indigenous Body wt (6mnth) 0.8kg	33	Mortality 12%	Mortality 22%	7150	26400	19250	3.69	7150	15600	8450	2.18
Sheep and goat	Feed management	Demonstration on concentrate feeding in pregnant goats (does) for reducing kid mortality (Breed: Ganjam)	11	50	Kid mortality (%) 22	Kid mortality (%) 4	18	Avg. Body wt of kids 1.5kg	Avg. Body wt of kids 2.4kg	43000	72000	29000	1.67	30500	33150	2650	1.08

Sheep and goat	Feed management	Demonstration on deworming and supplement feeding for body weight gain of kids	10	100	Body wt gain Kg/90 days 5.2	Body wt gain Kg/90 days 7.4	42	Mortality 30	Mortality 8	27620	102190	74570	3.7	27220	54720	27500	2.01
Rabbitry																	
Pigerry																	
Sheep and goat																	
Duckery																	
Others (pl.specify)																	
Total																	

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

** BCR= GROSS RETURN/GROSS COST

Fisheries

[illegible]

[illegible]

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

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

Other enterprises

[illegible]

Apiculture	Honey bee Rearing(Installation of Indian honey bee colony& management)	03	03	Cont.												
Others (pl.specify)Nutritional garden	Nutritional garden	10	10	Consumption of vegetables/day 2.0 kg	Consumption of vegetables/day 1.5 kg	33.3	Availability of vegetable/day 3.5 kg	Availability of vegetable/day 2.5 kg	2100	5400	3300	2.5	1900	3600	1700	1.8
Others (pl.specify)Ragi Powder	Value addition of Ragi	10	10	Keeping quality 2 month	Keeping quality 3 month				65	110	55	1.7	30	40	10	1.3
Others (Floriculture)	Marigold cultivation	10	10	Yield qt/ha 84.7	Yield qt/ha 71.3	18.7	Flowers/plant (no) 73	Flowers/plant(no) 54	85500	211750	126250	2.47	84500	178250	93750	2.1
Total																

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

** BCR= GROSS RETURN/GROSS COST

Women empowerment

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

Farm implements and machinery

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

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

** BCR= GROSS RETURN/GROSS COST

Demonstration details on crop hybrids

[illegible]

[illegible]

Technical Feedback on the demonstrated technologies

Sl. No	Crop	Feed Back
1	Chilli	Farmers appreciated the technology
2	Brinjal	Farmers appreciated the technology
3	Tomato	Thick skin and oval shape of tomato lack market preference
4	Bitter gourd	Number of fruits increase but size of fruits decrease
1	Ragi	Blast disease tolerant var. may be developed
2	Brinjal	Wilt tolerant var. may be developed
3	Okra	Appreciated the technology
4	Mango	Appreciated the technology

Extension and Training activities under FLD on Ragi

Sl. No	Activity	Date	No. of activities organized	Number of participants	Remarks
1.	Field days	11.09.2019	01	50	
2.	Farmers Training	14.08.2019	01	25	
3.	Media coverage				
4.	Training for extension functionaries	13.02.2020	01	15	

Extension and Training activities under FLD on Brinjal

Sl. No	Activity	Date	No. of activities organized	Number of participants	Remarks
1.	Field days	04.03.2019	01	50	
2.	Farmers Training	11.12.2019 & 31.12.2019	02	50	
3.	Media coverage				
4.	Training for extension functionaries				

Extension and Training activities under FLD on Okra

Sl. No	Activity	Date	No. of activities organized	Number of participants	Remarks
1.	Field days	10.02.2020	01	50	
2.	Farmers Training	26.07.2029	01	25	

3.	Media coverage				
4.	Training for extension functionaries				

Extension and Training activities under FLD on Mango

Sl. No .	Activity	Date	No. of activities organized	Number of participants	Remarks
1.	Field days	01	12.03.2020	50	
2.	Farmers Training				
3.	Media coverage				
4.	Training for extension functionaries				

Extension and Training activities under FLD on Honey bee rearing

Sl. No .	Activity	Date	No. of activities organized	Number of participants	Remarks
1.	Field days				
2.	Farmers Training	04.02.2020 & 05.02.2020	01	15	
3.	Media coverage				
4.	Training for extension functionaries				

Extension and Training activities under FLD on chilli

Sl. No .	Activity	Date	No. of activities organized	Number of participants	Remarks
1.	Field days				
2.	Farmers Training	22.07.19	1	25	
3.	Media coverage				
4.	Training for extension functionaries				

Extension and Training activities under FLD on brinjal

Sl. No .	Activity	Date	No. of activities organized	Number of participants	Remarks
1.	Field days				

2.	Farmers Training	05.07.19	1	25	
3.	Media coverage				
4.	Training for extension functionaries				

Extension and Training activities under FLD on tomato

Sl. No	Activity	Date	No. of activities organized	Number of participants	Remarks
1.	Field days				
2.	Farmers Training	03.08.19	1	25	
3.	Media coverage				
4.	Training for extension functionaries				

Extension and Training activities under FLD on bitter melon

Sl. No	Activity	Date	No. of activities organized	Number of participants	Remarks
1.	Field days				
2.	Farmers Training	29.01.20	1	25	
3.	Media coverage				
4.	Training for extension functionaries				

Performance of the demonstration under CFLD on Pulse and Oilseed Crops during Rabi 2019: Groundnut

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.	Avg.	D	S	P

1	Groundnut	TMV-2	22.8	19.28	19.36	35.0	Dharani ,	50	20.0	32.6	27.1	30.6			
													1.23	1.13	.47

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	Seed treatment ,Fertilizer-20:50:40:: NPK kg/ha,Thiamethoxam @ 150 gram/ha for sucking pests,Hexaconazole @ 1lt./ha. for Tikka disease	34333	68800	34467	2.00	43933	91600	47667	2.09

C. Socio-economic impact parameters

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/household)
1	Groundnut, Dharani	152800	250	30	60	240	Household purpose and for investment in	120

							farms	
--	--	--	--	--	--	--	-------	--

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
	Improved Seed HYV Dharani Seed treatment, Fertilizer- 20:50:40:: NPK kg/ha, Thiamethoxam @ 150 gram/ha for sucking pests, Hexaconazole @ 1lt./ha. for Tikka disease	Groundnut is a major oilseed crop of the district and is cultivated in ha. This variety is very much suitable to the existing farming system	-Farmers preferred the bold and color of the seed -They are quite satisfied with the shelling percentage -They preferred the variety due its oil content	All inputs are affordable	No	yes	Plant protection chemicals must be available on subsidized rate at block level so that cost of production can be minimized.

E. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
No. of pods are more	32.2	23.1	Pods are bigger in size as compared to existing var. and no. of pods are more
Tikka disease incidence %	1.4	13.3	Satisfied with the variety as pesticide cost is reduced

F. Extension activities under FLD conducted:

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
1	Group meeting	23.12.19 (A.barida) 26.12.19 (Phulasarapalli), 27.12.19 (Patulisahi)	27,34,12 Total: 50
2	Method demonstration	24.12.19 (A.barida) 27.12.19 (Phulasarapalli), 28.12.19 (Patulisahi)	27,34,12 Total: 50
3	Diagnostic field visit	7.1.2020 (A.barida) 10.1.2020 (Phulasarapalli), 13.1.2020 (Patulisahi)	27,34,12 Total: 50

G. Sequential good quality photographs (as per crop stages i.e. growth & development)**H. Farmers' training photographs****I. Quality Action Photographs of field visits/field days and technology demonstrated.****J. Details of budget utilization**

Crop (provide crop wise information)	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
	i) Critical input			
	ii) TA/DA/POL etc. for monitoring			
	iii) Extension Activities (Field day)			
	iv) Publication of literature			
	Total			

Performance of the demonstration under CFLD on Pulse and Oilseed Crops during Rabi 2019: Greengram**A. Technical Parameters:**

Sl. No.	Crop demonstrated	Existing (Farm)	Existing yield	Yield gap (Kg/ha) w.r.to			Name of Variety +	Number of	Area in	Yield obtained (q/ha)	Yield gap minimiz
				Distr	Sta	Poten					

o.		er's) variety name	(q/ha)	ict yield (D)	te yel d (S)	tial yield (P)	Technol ogy demonst rated	farm ers	ha				ed (%)		
										Ma x.	Mi n.	Av.	D	S	P
1	Greengram	PDM-139	5.3	5.2	4.8	10.0	IPM 02-14	25	10.0	7.6	6.1	6.8	16	20	33

B. Economic parameters

Sl. No.	Variety demonstrate d & Technology demonstrate d	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	Seed Var. IPM 02-14 treated with Rhizobium @ 20 gm/ 1 Kg of seed before one hour of sowing. Application of post emergence herbicide – Imazethapyr @ 750 ml/ha at 21 DAS Application of Water soluble fertilizer (N:P:K - 19:19:19) @ 10 gm./ lt. Spraying of Thiamethoxam @ 150 gm/ ha. along with Water soluble fertilizer (N:P:K -	14150	26500	12350	1.87	17100	33750	16650	1.97

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/household)
1	Greengram, IPM 02-14							

A) Farmers and farm women (on campus)

[illegible]

[illegible]

[illegible]

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST			M	F	T
		M	F	T	M	F	T	M	F	T			
products													
Others, if any (Goat farming)	1												25
Total	2												50
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening													
Design and development of low/minimum cost diet													
Designing and development for high nutrient efficiency diet													
Minimization of nutrient loss in processing													
Processing & cooking													
Gender mainstreaming through SHGs													
Storage loss minimization techniques													
Value addition													
Women empowerment													
Location specific drudgery reduction technologies	1		22	22		3	3					25	25
Rural Crafts													
Women and child care													
Others													
Total													
VI. Agril. Engineering													
Farm machinery & its maintenance													
Installation and maintenance of micro irrigation systems													
Use of Plastics in farming practices													
Production of small tools and implements													
Repair and maintenance of farm machinery and implements													
Small scale processing and value addition													
Post Harvest Technology													
Others													
Total													
VII. Plant Protection													
Integrated Pest Management	1	14	3	17	5	3	8	0	0	0	19	6	25
Integrated Disease Management	1	16	2	18	5	2	7	0	0	0	21	4	25

[illegible]

[illegible]

C) Extension Personnel (on campus)

[illegible]

D) Farmers and farm women (off campus)

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible][illegible]

F) Extension Personnel (Off Campus)

[illegible]

[illegible]

G) Consolidated table (ON and OFF Campus)

i. Farmers & Farm Women

[illegible]

[illegible]

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST			M	F	T
		M	F	T	M	F	T	M	F	T			
Production and Management technology													
Processing and value addition													
Others													
Total (f)													
g) Medicinal and Aromatic Plants													
Nursery management													
Production and management technology													
Post harvest technology and value addition													
Others													
Total (g)													
Total(a-g)													
III. Soil Health and Fertility Management													
Soil fertility management													
Integrated water management													
Integrated Nutrient Management													
Production and use of organic inputs													
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency													
Balance Use of fertilizer													
Soil & water testing													
others													
Total													
IV. Livestock Production and Management													
Dairy Management	2												50
Poultry Management	1												25
Piggery Management													
Rabbit Management													
Disease Management	1												25
Feed management	1												25
Production of quality animal products	1												25
Others, if any (Goat farming)	1												25
Others													
Total													
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition	1		2	2					23	23		25	25

[illegible]

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

ii. RURAL YOUTH (On and Off Campus)

[illegible]

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Fry and fingerling rearing													
Others													
Total													

iii. Extension Personnel (On and Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops													
Integrated Pest Management													
Integrated Nutrient management													
Rejuvenation of old orchards													
Protected cultivation technology													
Production and use of organic inputs													
Care and maintenance of farm machinery and implements													
Gender mainstreaming through SHGs													
Formation and Management of SHGs													
Women and Child care													
Low cost and nutrient efficient diet designing													
Group Dynamics and farmers organization													
Information networking among farmers													
Capacity building for ICT application													
Management in farm animals	1												15
Livestock feed and fodder production													
Household food security													
Other	1												15
Total													

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

Discipline	Clientele	Title of the	Duration	Venue	Number of	Number of SC/ST
------------	-----------	--------------	----------	-------	-----------	-----------------

[illegible]

H) Vocational training programmes for Rural Youth

a) Details of training programmes for Rural Youth

[illegible]

*training title should specify the major technology /skill transferred

b) Details of participation

[illegible]

[illegible]

[illegible]

a) Details of Sponsored Training Programme

Sl.No	Title	Thematic area	Month	Duration (days)	Client	No. of courses	No. of participants	Sponsoring Agency
					PF/RV/EF			
1	Vermicompost producer	Soil health and fertility management	Feb-Mar	25 days		1	20	ASCI

b) Details of participation

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
Crop production and management													
Increasing production and productivity of crops													
Commercial production of vegetables													
Production and value addition													
Fruit Plants													
Ornamental plants													
Spices crops													
Soil health and fertility management	1	19	1	20							19	1	20

[illegible]

[illegible]

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

[illegible]

[illegible]

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

3.5 a. Production and supply of Technological products

Village seed

[illegible]

Production of planting materials by the KVKs

[illegible]

[illegible]

Production of Bio-Products

[illegible]

Production of livestock materials

[illegible]

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

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

i) Name of Seed Hub Centre:

Name of Nodal Officer :	
Address :	
e-mail :	
Phone No. : Mobile :	

ii) Quality Seed Production Reports

Season	Crop	Variety	Production (q)			
			Target	Area sown (ha)	Production	Category of Seed (F/S, C/S)
Kharif 2018						
Rabi 2018-19						
Summer/Spring 2019						
Kharif 2019						
Rabi 2019-2020						

iii) Financial Progress

Fund received (2016-17, 2017-18 and 2018-19)	Expenditure (Rs. in lakhs)		Unspent balance (Rs. in lakhs)	Remarks
	Infrastructure	Revolving fund		
2016-17				
2017-18				
2018-19				
2019-2020				

iv) Infrastructure Development

Item	Progress
Seed processing unit	
Seed storage structure	

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

Item	Title	Author's name	Number	Circulation
Research paper	Assessment of performance of ragi varieties	Satyabrata Mangaraj, Swagatika Sahu and Prasanta kumar Panda		
Seminar/conference/ symposia papers	Vermicompost producer	Satyabrata Mnagaraj		
Books				
Bulletins				
News letter				
Popular Articles				
Book Chapter	SRI method of Ragi cultivation	Satyabrata Mangaraj		
Extension Pamphlets/ literature				
Technical reports				
Electronic Publication (CD/DVD etc)				
TOTAL				

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

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

Sl. No.	Name of programme	Name of course	Name of KVK personnel and designation	Date and Duration	Organized by
1.	Training	Operational modalities on KVK	Satyabrata Mangaraj SMS (Agronomy)	27-29 Dec, 2019 3 days	OUAT
2.	Training of Trainers	Training of Trainers on vermicompost producer	Satyabrata Mangaraj SMS (Agronomy)	9-11 Dec, 2019 3 days	ASCI
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 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

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

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

Sl. No	Name of the Equipment	Qty.
1	Mrida Parikshyaka	02 nos

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			
267		267	1266	45	6330

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	Exhibition, Seminar, interaction	300	03		300	300

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. RAWF/ FET programme - is KVK involved? (Y/N)

No of student trained	No of days stayed

ARS trainees trained	No of days stayed

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

Date	Name of the person	Purpose of visit
07.05.2019	Sri R.Minj, Sub-collector, Bhanjanagar	Celebration of Akshya Tritiya
18.11.2019	Dr. K.S Das, principal Scientist, ATARI, Kolkata	Review
18.12.2019	Prof. P.K Roul, DEAN, Extension Education, OUAT	Review
19.01.2020	Dr. S.S Singh, Director, ATARI, Kolkata	Review

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)
Weed Management in Paddy	25	46	31000	39000
Integrated Nutrient Management in paddy	25	75	27000	38000
Integrated Pest Management in Paddy	25	58	43000	52000
Management of pests and disease in Mango	25	41	54000	61000
Integrated Pest Management in Brinjal	25	48	43000	52000
Carp seed production and rearing of fry & fingerlings	15	68	148600	165600
Nursery management in paddy	25	69	35000	39000
Management of pests in Maize	25	54	19000	23000
IPM of Tea mosquito bug in Cashewnut	25	56	13000	17000
Management of insect, pest in tomato	25	61	54000	61000
Management of Pest in Chilli	25	53	48000	64000
Safe use of pesticides and chemical	25	52		
Management pest and diseases in Pigeon pea.	25	54	19000	23000
Multiple stocking & multiple harvesting in pond culture	25	65	273000	362000
Production of fingerlings, stunted fingerlings & yearlings	25	64	235000	286000
Feeding management for carp culture (FLD-floating)	25	59	246000	330000
Composite fish culture	25	45	233000	290000
Fish diseases and their management	25	64	235000	286000
Pisciculture in village community tanks	25	59	226000	281000
Paddy straw mushroom cultivation	25	71	120	150
Ideal agricultural farm record keeping.	15	76		

Income generation through Poultry farming	15	41	12000	20000
Deworming and disease management in kids	10	59	8000	10500

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
Drought tolerant short duration Paddy var. Sahabhagidhan	142 ha.
Weedicide –Pretilachlor application in Paddy	321 ha.
Blast disease management by seed treatment & spraying of Tricyclazole	632ha.
Use of floating fish feed	34 ha
Application of Boron in Cauliflower	74 ha.

Give information in the same format as in case studies

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

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

4.4. Details of innovations recorded by the KVK

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

4.5. Details of entrepreneurship development

Entrepreneurship development	
Name of the enterprise	
Name & complete address of the entrepreneur	
Role of KVK with quantitative data support:	
Timeline of the entrepreneurship development	
Technical Components of the Enterprise	
Status of entrepreneur before and after	

the enterprise	
Present working condition of enterprise in terms of raw materials availability, labour availability, consumer preference, marketing the product etc. (Economic viability of the enterprise):	
Horizontal spread of enterprise	

4.6. Any other initiative taken by the KVK

5. LINKAGES

5.1. Functional linkage with different organizations

Name of organization	Nature of linkage
1. Pulse Research Station, Berhampur	- Provides the breeder and foundation seeds of the new varieties of the major crops of this district for multiplication and distribution to the farmers of this area. - Provides all possible technical guidance and helps in solving the problems related to pest and diseases of the crops of the area - Research results are being communicated to us for transfer of the same to the farming community. - Feed back collected from farmers on performance of research results are supplied to the RRS regularly for refinement.
2. State Department of Agriculture, Berhampur	- Selected trainees and extension personnel were trained in KVK on various subjects. - Facilitation of visits for adopted farmers to KVK field units. - Collaborative demonstrations were taken up. - Collaborative extension activities like field days, exhibitions and seminars were conducted. - BGREI monitoring
3. State Department of Horticulture, Bhanjanagar	- Provided seedlings of different horticultural crops to LLP, SC/ST beneficiaries. - Collaborative trainings, field days, demonstrations have been conducted. - Training of rural youth on grafting and raising vegetable nursery were conducted at their horticultural units.
4. State Department of Animal Husbandry and Veterinary Science	- Deputed specialist veterinary doctors to deliver guest lecturers. - Supply of poultry birds. - Collaborative programmes like health, infertility of dairy animals, exhibition, field days and demonstrations
5. Orissa State Seed Corporation, Berhampur	- Organising training programmes for resource rich and progressive farmers as well as extension workers for undertaking seed production programme. - Exchange of seeds for better quality crop husbandry. - Development of seed village under seed village scheme
6. State Department of Fisheries	Joint diagnostic survey, conducting training programmes and demonstrations.

	• Training to Block level officers.
7. ATMA	• Developing SREP plan • Reviewing Block Action Plan & guidance. • Training to FAC & BTT members. • Conducting strategic research. • Conducting Farmer Participatory Research.
8. CIMMYT	Hybrid Maize trial
8. CRRI, Cuttack	• Hyv, stress tolerant var. of Paddy
9. CTCRI, Regional Centre, Bhubaneswar	• Planting materials of tuber crops
10. CARI, Regional centre, Bhubaneswar	• Supply of Banaraja poultry bird and Khaki Campbell ducklings
11. NABARD	• Technical support to Farmers club .

5.2. List of special programmes undertaken during 2018-19 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

[illegible][illegible]

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.m)	Details of production			Amount (Rs.)		Remarks
				Variety/breed	Produce	Qty.	Cost of inputs	Gross income	
1.	Vermicompost	2011	50	E. foetida	vermi worm	12 kg	4700	14040	
2.	Crop cafeteria	2009	60	Bittergourd, Cabbage, Okra, Chilli, Tomato	Bulk	6.5 q	11000	13000	
3.	Polyhouse	2011	180	Vegetable seedlings	seedlings	45000 nos	27000	45000	
9	Mushroom unit	2010-11	100 beds	Paddy straw-V.volvacea Oyster mushroom – P.sajarcaju	Mushroom	40kg		2000	
10	Fingerlings					7000 nos			

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	18.07.19	15.12.19	4.5	Pooja	FS	147.7	270000	374640	
Paddy	21.07.19	17.12.19	2.5	Swarna sub-1	FS	72.8	150000	179260	
Pigeon pea	5.08.19	24.01.19	1.0	PRG-176	FS	1.28	12396	14412	
Dhanic ha	15.07.19	8.10.19	0.2	Local	TL	0.9	10600	5130	
Blackgram	9.01.20	8.04.19	0.5	Prasad	FS	0.3	3000	3330	

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

Sl.	Name of the	Qty. (Kg)	Amount (Rs.)	Remarks
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No.	Product		Cost of inputs	Gross income	
1.					

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.	Brooded Chick	Chhabro, Kadaknath		998	37513	60800	
2	Brooded Duckling	Khaki Campbell		140	7040	9000	

6.5. Utilization of hostel facilities

Accommodation available (No. of beds)

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
10.02.2020 to 05.03.2020	20	25	
29.02.2020 to 24.03.2020	20	25	
Total :	40	50	

(For whole of the year)

6.6. Utilization of staff quarters

Whether staff quarters has been completed:

No. of staff quarters:

Date of completion:

Occupancy details:

Months	Q I	QII	Q III	QIV	Q V	QVI

7. FINANCIAL PERFORMANCE

7.1. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
KVK	State Bank of India	Bhanjanagar	11349671187
KVK (RF)	State Bank of India	Bhanjanagar	30421978750

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

Item	Released by ICAR		Expenditure		Unspent balance as on – 31.03.2020
	Kharif	Rabi	Kharif	Rabi	
CFLD (Oilseed)		Rs.3,60,000		Rs.3,47,660	Rs.12,340/-

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

Item	Released by ICAR		Expenditure		Unspent balance as on 1 st April 2020
	Kharif	Rabi	Kharif	Rabi	
CFLD (Pulse)		Rs. 90,000		Rs. 88,800	Rs. 8,520/-

2019.5. Utilization of KVK funds during the year 2019-20 (Not audited)

Sl. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances			
2	Traveling allowances	1,10,000	1,10,000	1,10,000
3	Contingencies			
A		14,00,000	13,98,800	13,98,800
B				
C	HRD	30,000	30,000	30,000
D				
E				
F				
G				
H				
I				
J	Swachhta Expenditure			
TOTAL (A)		15,00,000	14,98,800	14,98,800
B. Non-Recurring Contingencies				
1	LIBRARY	10,000	10,000	10,000
2				
3				
4				
TOTAL (B)		10,000	10,000	10,000
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)		14,10,000	14,10,000	14,10,000

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

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance in hand as on 1 st April of each year (Kind + cash)
2015-16	12647	873425	7234291	139134
2016-17	139134	349150	487491	65000
2017-18	793	747078	743138	154000
2015-16	12647	873425	7234291	139134
2019-20	2267	923687	225000	

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
BPH management awareness	18	Kharif	Agril. Dept.		
Pulse demon.	02	Rabi			both
Training programme	14				both
Verifivation of planting material	01		Hort. Dept		
Animal health camp	04		Veterinary dept.		

8. Other information

8.1. Prevalent diseases in Crops

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

8.2. Prevalent diseases in Livestock/Fishery

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

9.1. Nehru Yuva Kendra (NYK) Training

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

9.2. PPV & FR Sensitization training Programme

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

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

Type of message	No. of messages	No. of farmers covered
Crop		52460
Livestock		
Fishery		
Weather		
Marketing		
Awareness		
Training information		
Other		
Total		

9.4. KVK Portal and Mobile App

Sl. No.	Particulars	Description
1.	No. of visitors visited the portal	3587
2.	No. of farmers registered in the portal	
3.	Mobile Apps developed by KVK	
4.	Name of the App	
5.	Language of the App	
6.	Meant for crop/ livestock/ fishery/ others	
7.	No. of times downloaded	

9.5. a. Observation of Swachh Bharat Programme

Date/ Duration of Observation	Activities undertaken

b. Details of Swachhta activities with expenditure

Activities	Number	Expenditure (in Rs.)
1. Digitization of office records/ e-office		
2. Basic maintenance		
3. Sanitation and SBM		
4. Cleaning and beautification of surrounding areas		
5. Vermicomposting/ Composting of biodegradable waste management & other activities on generate of wealth for waste		
6. Used water for agriculture/ horticulture application		
7. Swachhta Awareness at local level		
8. Swachhta Workshops		
9. Swachhta Pledge		
10. Display and Banner		
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)		
14. No of Staff members involved in the activities		
15. No of VIP/VVIPs involved in the activities		
16. Any other specific activity (in details)		
Total		

9.6. Observation of National Science day

Date of Observation	Activities undertaken

9.7. Programme with Seema Suraksha Bal/ BSF

Title of Programme	Date	No. of participants
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9.8. 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)

9.9. 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 Do or 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		

9.10. 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)

9.11. Details of Mahila Kisan Divas programme organized

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

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

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

9.13. Revenue generation

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

9.14. Resource Generation:

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

9.15. Performance of Automatic Weather Station in KVK

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

9.16. Contingent crop planning

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

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 2019-2020

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 2019-20 (Rs. In lakh):

c. Achievements of physical outcome under TSP during 2019-2020

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

d. Location and Beneficiary Details during 2019-2020

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

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

Natural Resource Management

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

Crop Management

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

Livestock and fisheries

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

Institutional interventions

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

Capacity building

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

Extension activities

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

Detailed report should be provided in the circulated Performa

13. Awards/Recognition received by the KVK

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

Award received by Farmers from the KVK district

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

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

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

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

16. Integrated Farming System (IFS)

Details of KVK Demo. Unit

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

17. Technologies for Doubling Farmers' Income

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

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

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

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

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

20. a) Information on **ASCI** Skill Development Training Programme, if undertaken during 2019

Name of the Job role	Name of the certified Trainer of KVK for the Job role	Date of start of training	Date of completion of training	No. of participants						Whether uploaded to SIP Portal (Y/N)	Fund utilized for the training (Rs.)
				SC		ST		Other			
				M	F	M	F	M	F		
Vermicompost producer	Sri Satyabrata Mangaraj	10.02.2020	05.03.2020					19	01	Y	1,80,000
Agriculture Extension Service Provider	Dr. Santosh Kumar Samanataray	29.02.2020	24.03.2020					16	04	Y	1,80,000

b) Information on Skill Development Training Programme (**Other than ASCI or less than 200 hrs.**, if any) if undertaken during 2019

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

21. Information on NARI Project (if applicable)

Name of Nodal Officer	No. of OFT on specified aspects	Title(s) of OFT	No. of FLD on specified aspects	No. of capacity development	Total no. of farm women/	Details of Issues related to gender
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				programme on specified aspects	girls involved in the project	mainstreaming addressed through the project

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

Krishi Kalyan Abhiyan- I and II

A. Training

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

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

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

C. Livestock and Fishery related activities

Name of	No. of	Activities performed				No. of farmers benefitted				No. of other
		No.	No.	Feed/	Any	SC	ST	Others	Total	

<i>progr amme</i>	<i>Pr ogr am me</i>	<i>of anim als vac ci nated</i>	<i>of anim als de wo rmed</i>	<i>nutri ent suppl emen ts provi ded (kg)</i>	<i>other (Distri bution of animal s/ birds/ fingerl ings) [No.]</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>T</i>	<i>officials (except KVK) attended the programm e</i>
KKA-I															
KKA-II															

D. Other activities

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

Krishi Kalyan Abhiyan- III

<i>No. of villages covered</i>	<i>No. of animal inseminated</i>	<i>No. of farmers benefited</i>				<i>Any other, if any (pl. specify)</i>
		<i>SC</i>	<i>ST</i>	<i>Others</i>	<i>Total</i>	

		<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	T	

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

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

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