

FPROFORMA 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	
KVK, Dhenkanal, RRTTS Campus, Mahisapat, Dhenkanal,pin-759013	06762286610		kvk dhenkanal.ouat@gmail.com, dhenkanalkvk@yahoo.com

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

Address	Telephone		E mail
	Office	FAX	
Orissa University of Agriculture and Technology, Bhubaneswar	0674- 2397818 /919	0674-2397424	registrarouat@gmail.com

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Bimalendu Mohanty		9078584428	bimalendum@rediffmail.com

1.4. Year of sanction of KVK: 2001

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. Bimalendu Mohanty	Sr. Scientist and Head	Agril. Engg.	15,600-39,100 30820	14.03.2005	Temporary	General
2	Subject Matter Specialist	Sasmita Pal	Scientist	Home Science	15,600-39,100 31780	19.08.2005	Temporary	General
3	Subject Matter Specialist	Debasis Panda	Scientist	Plant Protection	15,600-39,100 31780	07.01.2006	Temporary	General
4	Subject Matter Specialist	Manoranjan Mohanty	Scientist	Forestry	15,600-39,100 31780	14.02.2006	Temporary	General
5	Subject Matter Specialist	Dibya Sundar Kar	Scientist	Horticulture	15,600-39,100 25810	21.08.2006	Temporary	General
6	Subject Matter Specialist	Dr. Roshni Bala Nayak	Scientist	Animal Science	15,600-39,100 23610	07.07.2015	Temporary	General
7	Subject Matter Specialist	Vacant						
8	Programme Assistant	Jashobanta Sahoo	PA	Fishery	9300-34,800 19300	23.03.2006	Temporary	General
9	Computer Programmer	Gangadhar Moharana	PA	Computer	9300-34,800 19300	15.02.2006	Temporary	General
10	Farm Manager	Manoj Kumar Pradhan	Farm Manager	Seed Technology	9300-34,800 19300	04.10.2006	Temporary	General
11	Accountant / Superintendent	Vacant						
12	Stenographer	Gyana Ranjan Das	Jr. Steno-cum-Computer Operator		5,200-20,200 10890	08.01.2007	Temporary	General
13.	Driver	Nilamadhaha Sahoo	Driver-cum-Mechanic	-	5,200-20,200 9870	25.07.2007	Temporary	General
14.	Driver	Khetrabasi Mohanty,	Driver-cum-Mechanic	-	5,200-20,200 9870	23.07.2008	Temporary	General
15.	Supporting staff	Kumar Beja	Peon-cum-Watchman	-	4750-14680 8460	26.12.2007	Temporary	General
16.	Supporting staff	Ahalya Baral	Peon-cum-Watchman	-	4750-14680 7970	25.07.2008	Temporary	General

1.6. Total land with KVK (in ha) :

S. No.	Item	Area (ha)
1	Under Buildings	0.4
2.	Under Demonstration Units	0.6
3.	Under Crops	6
4.	Orchard/Agro-forestry	6
5.	Others with details	
6.	Farm tank	5
7.	Barrain land	2
	Total	20

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	Not yet started							
2.	Farmers Hostel					Totally completed	280	Under use	RRTTS building handed over to KVK and renovated under RKVY
3.	Staff Quarters (6)					Totally completed	390	Under use	ICAR
4.	Piggery unit	Not yet started							
5	Fencing					Totally completed	8790 running feet	Under use	RKVY
6	Rain Water harvesting structure	Not yet started							
7	Threshing floor	Not yet started							
8	Farm godown					Totally completed	30	Under use	RRTTS godown handed over to KVK
9.	Dairy unit	Not yet started							

10.	Poultry unit				Totally completed	36	Under use	RRTTS unit handed over to KVK
11.	Goatary unit	Not yet started						
12.	Mushroom Lab	Not yet started						
13.	Mushroom production unit				Totally completed	78	Under use	ICAR
14.	Shade house				Totally completed	110	Under use	ICAR
15.	Soil test Lab				Totally completed		Under use	Equipments – ICAR, Building – RRTTS
16	Training Hall				Totally completed	95	Under use	RKVY
17	Duckery unit				Totally completed	10	Under use	RKVY
18	Vermi compost unit (2 nos)				Totally completed	23 78	Under use	RKVY- 1 ICAR -1

* 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	2016-17	7,04,162	16500	Good condition

C) Equipment & AV aids

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
a. Lab equipment				
Digital Refractometer	2017-18	14,950	Good condition	ICAR
Drying cabinet	2017-18	19,897	Good condition	ICAR
Crown cap sealing machine	2017-18	2,950	Good condition	ICAR
Vacuum sealing machine	2017-18	1,980	Good condition	ICAR
Stainless steel knife, strainer, decanter, measuring cup set, glass jar etc.	2017-18	1,950	Good condition	ICAR
Food processor	2017-18	4,950	Good condition	ICAR
Wet grinder	2017-18	12,800	Good condition	ICAR

Mridaparikshak – 2 nos.	2016-17	1,80,600	Good condition	ICAR
Thermo hygrometer	2016-17	1800	Good condition	ICAR
Hand refractometer	2016-17	4850	Good condition	ICAR
Electronic automatic kelpus microprocessor based twenty place macro block digestion system	2004-05	121470	Good condition	ICAR
Electronic acid neutralizer scrubber	2004-05	51470	Good condition	ICAR
Electronic kelpus micro processor based automatic nitrogen distillation system	2004-05	156530	Good condition	ICAR
Electronic titration system for kelpus system	2004-05	52000	Good condition	ICAR
Flame photometer	2004-05	35200	Not functioning	ICAR
Spectrophotometer	2004-05	30100	Good condition	ICAR
Servo Stabilizers	2004-05	13500	Not functioning	ICAR
Hot plate	2004-05	2520	Good condition	ICAR
Micro processor based pH meter	2004-05	10200	Not functioning	ICAR
Onductivity meter	2004-05	10200	Good condition	ICAR
Refrigerator	2004-05	9200	Not functioning	ICAR
Ele. Top Pan Balance	2004-05	95000	Good condition	ICAR
Physical Balance	2004-05	4500	Not functioning	ICAR
Soil Augur	2004-05	2850	Good condition	ICAR
Bouyoucos Hydrometer	2004-05	6500	Good condition	ICAR
Mechanical Stirrer	2004-05	8200	Good condition	ICAR
Colony Counter	2004-05	4500	Good condition	ICAR
Plant Sample Grinder / Laboratory Mill	2004-05	8000	Good condition	ICAR
Hot Water Bath	2004-05	4000	Good condition	ICAR
Horizontal Shaker	2004-05	11000	Good condition	ICAR
Distilled Water Unit	2004-05	7200	Good condition	ICAR
Hot Air Oven	2004-05	10500	Good condition	ICAR
Laboratory Centrifuge	2004-05	9000	Good condition	ICAR
Sieves	2004-05	1123	Good condition	ICAR
Soil Augur / Sampling Tube (Screw/tube)	2004-05	1700	Good condition	ICAR
Soil Thermometer	2004-05	2712	Good condition	ICAR
Olympus (Microscope) Model ML-14	2004-05	17900	Good condition	ICAR
Olympus (Microscope) Model MS-13	2004-05	26890	Good condition	ICAR
Bod Incubator	2004-05	42000	Not functioning	ICAR
b. Farm machinery				
Tractor operated 9 row seed cum fertilizer drill	2016-17	55,000	Good condition	ICAR
Power weeder	2016-17	42,313	Good condition	ICAR
Tractor operated Rotavator	2016-17	96,900	To be repaired	ICAR

Tractor & accessories	2003-04	2,95,251	Good condition	ICAR
Trailer	2003-04	55,000	Bad condition	ICAR
11 tyne cultivator	2003-04	10,800	Bad condition	ICAR
Cage wheel	2003-04	6,500	Bad condition	ICAR
Terracer blade	2003-04	18,000	Good condition	ICAR
M.B. Plough	2003-04	21,000	Good condition	ICAR
3 bottom ridger	2003-04	10,149	Good condition	ICAR
HD Leveller	2003-04	9,500	Good condition	ICAR
c.AV Aids				
Pico Projector	2016-17	17,467	Good condition	ICAR
Digital camera	2015-16	17,800	Good condition	ICAR
LCD Projector (BENQ)	2015-16	55,620	Good condition	ICAR
Television set	2012-13	8,000	Good condition	ICAR
Digital camera (NIKON)	2009-10	15,000	Good condition	ICAR
LCD Projector (Epson)	2006-07	84,710	Good condition	ICAR
Digital camera (NIKON)	2005-06	13,600	Good condition	ICAR
Desktop Computer	2016-17	35,000	Good condition	ICAR
Laptop computer	2015-16	43,790	Good condition	ICAR
Laser Printer (RICOH)	2015-16	6,210	Good condition	ICAR
Laser Printer (HP)	2013-14	12,600	Good condition	ICAR
Digital copier with printer	2010-11	46,385	Good condition	ICAR
Desktop Computer	2009-10	29,700	Good condition	ICAR
Laptop computer	2006-07	48,600	Good condition	ICAR
Desktop Computer	2005-06	37,500	Good condition	ICAR

D) Farm implements

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
Tractor operated 9 row seed cum fertilizer drill	2016-17	55,000	Good condition	ICAR
Power weeder	2016-17	42,313	Good condition	ICAR
Tractor operated Rotavator	2016-17	96,900	To be repaired	ICAR
Tractor & accessories	2003-04	2,95,251	Good condition	ICAR
Trailer	2003-04	55,000	Bad condition	ICAR
11 tyne cultivator	2003-04	10,800	Bad condition	ICAR
Cage wheel	2003-04	6,500	Bad condition	ICAR
Terracer blade	2003-04	18,000	Good condition	ICAR
M.B. Plough	2003-04	21,000	Good condition	ICAR
3 bottom ridger	2003-04	10,149	Good condition	ICAR
HD Leveller	2003-04	9,500	Good condition	ICAR

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.	01.11.2019	40			

* 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	<u>Paddy-Groundnut, Paddy-Sesamum, Paddy-Greengram/Blackgram, Groundnut-Groundnut, Paddy-Vegetable /Mushroom and Poultry</u>				
2	Agro-climatic Zone	Mid Central Table Land				
3	Agro ecological situation	6 AES 1- RIVER VALLY ALLUVIUM AES 2 - LIGHT TEXTURED LATERITE AES 3 - RED LOAM SOIL AES 4 - MEDIUM TEXTURED SANDY LOAM AES 5 - BLACK SOIL AES 6 - CLAY & HEAVY CLAY SOIL				
4	Soil type	Red lateritic, sandy loam, alluvial				
5	Productivity of major 2-3 crops under cereals, pulses, oilseeds, vegetables, fruits and others	Vegetables	Fruits	Cereals	Pulses	Oilseeds
		Brinjal-16.9 q/ha	Mango-5.81q/ha	Rice-	Pigeonpea-	Groundnut-
		Tomato-14.26 q/ha	Cashew-0.812 q/ha		Blackgram-	Sesame-
		Cauliflower-15.24 q/ha	Watermelon-18.85q/ha			
6	Mean yearly temperature, rainfall, humidity of the district	<u>Rainfall-767mm, Temperature:Max-(33.45⁰C)-Min-(21.79⁰C)</u>				
7	Production of major livestock products like milk, egg, meat etc.	<u>Milk-69.42TMT,Egg-64.42Million,Meat-2138.22MT</u>				

Note: Please give recent data only

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

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	Dhenkanal	Sadar	Lambodarpur, Siaria, Tarava, Motori, Majhisahi, Nachipura, Arada, Bhaliabolakateni, kankadapal, Paikadahikar, Talabarkote,	Paddy, Mushroom,	Lack of availability of bundle straw	
2	Dhenkanal	Odapada	Paneilo, Mahadia Gobindaprasad, Tamanda, Kandabindha, Kalanga, Kamalang, Indipur, Sariapada	Paddy, Goatery	Lack of green fodder and Pasture land	
3	Dhenkanal	Kamakhyanagar	Jaka, Sogar, Jamujhara	Paddy, Blackgram, Greengram, Groundnut		
4	Dhenkanal	Gondia	Nabalinga, Dandeibereni,			
5	Dhenkanal	Bhuban	Bhuban			
6	Dhenkanal	Parjang	Patharkhumba,			
7	Dhenkanal	Kankadahad	Brahmania, Sahala, Kalashpur, Pakatmunda			
8	Dhenkanal	Hindol	Babandha, Kukupangi, Baghadharia, Jharbeda			

2. c. Details of village adoption programme:

Name of the villages adopted by PC and SMS (2019-20) for its development and action plan

Name of village	Block	Action taken for development
Parbatia	Sadar	Cluster Borewell for irrigation, Demonstration of Quail, Chabro chicks and mushroom for income generation. OFT on 3-row manual rice transplanter, FLD on management of mushroom beds during summer season, FLD on dual purpose backyard poultry and quail, Distribution of Bina, Sahabgadhan, DRR-42 and DRR-44 rice varieties under STRV trial, Distribution of Eucalyptus seedlings, Mango split preparation by pit method
Kanapala	Kamakhyanagar	FLD on dual purpose backyard poultry, Khaki Campbell ducks and quail and trainings

Balikiari	Hindol	FLD on nutrition garden for nutrition security of the family, backyard poultry, vegetable cultivation, plant protection measure and training
Brajabihari pur	Odapada	Training, FLD on enterprisers
Gurujangulei	Kankadahad	Training, CFLD, FLD

2.1 Priority thrust areas

S. No	Thrust area
1.	Promotion of improved varieties in oilseed and pulse crops.
2.	Focus on cultivation of oilseed and pulse crops in rice – fallow situation.
3.	Promotion of line sowing in oilseed & pulse crops
4.	Introduction and promotion of commercial fruit crops like guava, ber, custard apple, pomegranate etc.
5.	Drip irrigation system with mulching in horticultural crops
6.	Focus on stall feeding model in case of goatery
7.	Promotion of fodder cultivation and hydroponics
8.	Promotion of advanced fingerlings and yearlings production
9.	Value addition of existing fruits and vegetables.
10.	Promotion of training and pruning in fruit orchard
11.	Scientific management of minor forest produces
12.	Promotion of organic agriculture in the district
13.	Promotion of aromatic crops
14.	Promotion of aqua shops in the district.

3. TECHNICAL ACHIEVEMENTS

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

OFT												FLD																	
No. of technologies tested:												No. of technologies demonstrated:																	
Number of OFTs		Number of farmers										Number of FLDs		Number of farmers															
Target	Achievement	Target	Achievement									Target	Achievement	Target	Achievement														
			SC			ST			Others			Total						SC			ST			Others			Total		
			M	F	M	F	M	F	M	F	T				M	F	M	F	M	F	M	F	T						
10	9	42	4	1	3	1	28	18	3	2	5	19	20	165	0	0	0	0	1	4	1	4	1	4	2	8			
									5	0	5								4	7	7	4	7			9			

Training												Extension activities																	
Number of Courses		Number of Participants										Number of activities		Number of participants															
Target	Achievement	Target	Achievement									Target	Achievement	Target	Achievement														
			SC			ST			Others			Total						SC			ST			Others			Total		
			M	F	M	F	M	F	M	F	T				M	F	M	F	M	F	M	F	M	F	T				
63	56	1425	5	94	85	9	494	454	635	62	12	281	2389	91372											52044	1471	534		
			1			2				5	70	5															94		

Impact of capacity building												Impact of Extension activities											
Number of Participants trained		Number of Trainees got employment (self/ wage/ entrepreneur/ engaged as skilled manpower)										Number of Participants attended		Number of participants got employment (self/ wage/ entrepreneur/ engaged as skilled manpower)									
Target	Achievement	SC		ST		Others		Total		Target	Achievement	SC		ST		Others		Total					
		M	F	M	F	M	F	M	F	T			M	F	M	F	M	F	M	F	T		
25	421	5	15	10	1	318	56	333	88	421	46020	45958	11	7	12	1	45	28	4565	307	45958		
					7										5	62	5	1					

Seed production (q)		Planting material (in Lakh)	
Target	Achievement	Target	Achievement
180	147.6	0.30000	0.34805

Livestock strains and fish fingerlings produced (in lakh)*		Soil, water, plant, manures samples tested (in lakh)	
Target	Achievement	Target	Achievement
12.00	11.4117	400	381

* 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	1200	1200					
Bulletins							
News letter	500	500					
Popular Articles	11	11					
Book Chapter							
Extension Pamphlets/ literature	500	500					
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 drumstick varieties for higher yield
2.	Problem diagnosed	Opportunity of good market demand, good performance of Bhagya variety
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	FP: Local variety (Desi Sajana) TO1: Drumstick variety PKM 1. TO2: Drumstick variety Bhagya.
4.	Source of Technology (ICAR/AICRP/SAU/other, please specify)	UHS, Bagalkot Variety developed from UHS, Bagalkot uhsbagalkot.edu.in/downloads
5.	Production system and thematic area	Varietal Evaluation
6.	Performance of the Technology with performance indicators	TO ₁ - Fruits are fleshy and tasty coming to flowering within 5-6 months after sowing and comes to harvest in 7-8 months. The pods mature 65 days after flowering. The peak harvest is during March to August. Plant grows to a height of 4-6 m in a year and produce 6-12 primary branches. Pods are 75 cm long and weigh around 150 g with 70 % flesh. Average yield is 220 fruits per tree. Avg yield is 52 t/ha. Ratoon crop can be maintained for 3-4 years. TO ₂ - Plant Height 2.5 to 3.0 m, Flowering 130 to 140 days, Pod length 65 to 70 Cm, Average no. of seeds /pod 18.8. Pod weight 154.75 g, Yield 300 to 350 pods /year (I year), 800 to 1000 pods /year (Subsequent years), Yield- 42-50 t/ha, Leaves and Pod Rich in Vitamin C, iron
7.	Final recommendation for micro level situation	
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	

OFT-2

1.	Title of On farm Trial	Assessment of different Chilli varieties for higher yield
2.	Problem diagnosed	Low yield due to use of local variety
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	FP: Suryamukhi TO1: Kashi Early IIVR, Varanasi. TO2: Arka Haritha IHR, Bangalore.
4.	Source of Technology (ICAR/AICRP/SAU/other, please specify)	: IIVR, Varanasi https://www.iivr.org.in/content/hybrid-kashi-early IHR, Bangalore https://ihr.res.in/chilli-arka-harita
5.	Production system and thematic area	Varietal Evaluation
6.	Performance of the Technology with performance indicators	TO ₁ - Kashi Early :F1 hybrid has been developed by crossing PBC-473 x KA-2 at IIVR Varanasi. Plants of are tall (100-110 cm height) without nodal pigmentation on dull green stems and bear pendant fruits. Fruits are long (8-9 x 1.0-1.2 cm), attractive, dark green and turn bright red at physiological maturity, pungent with smooth surface. First picking of the green fruits starts at about 45 days after transplanting.Average yield : 250 q/ha Potential yield : 350 q/ha. TO ₂ - ArkaHaritha : F1 hybrid developed by using MS line.Plants tall (1m) & spreading (90cm.). Fruits medium long (10 cm) with width 1 cm. Fresh yield 310q/ ha and dry yield 60 q/ ha in 150-160 days. Fruits are dark green and turn red.Tolerant to powdery mildew and viruses
7.	Final recommendation for micro level situation	Arkaharit variety has better production potentials than farmers practice .&Tolerant to powdery mildew and viruses
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	

Thematic area:

Problem definition:

Technology assessed:

Technology option	No. of trials	Yield (q/ha)	% change in Yield	Parameter fruit lengtht. (cm)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
FP: Suryamukhi	7	217.9		6	121050	326850	205800	2.70
TO1: Kashi Early	7	250.4	14.91	7.5	130500	375600	245100	2.87
TO2: Arka Haritha	7	265.2	17.57	8.9	132000	397800	265800	3.0

Table:

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 spikelet per panicle	Test wt. (100 grain wt.)						
FP: Suryamukhi	7				217.9	121050	326850	205800	2.70	
TO1: Kashi Early	7				250.4	130500	375600	245100	2.87	
TO2: Arka Haritha	7				265.2	132000	397800	265800	3.0	

OFT-3

1.	Title of On farm Trial	Assessment of Integrated pest management against serpentine leaf miner in tomato
2.	Problem diagnosed	Low yield of tomato due to high infestation of serpentine leaf miner.

3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	FP: Spraying of chloropyriphos @2 ml / litres of water TO1: 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/lt & Cryomazine 50WP @ 2gm/ltr at 10 days interval . TO2: 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 Agriculture University, 2015
5.	Production system and thematic area	IPM
6.	Performance of the Technology with performance indicators	TO ₁ - Abamectin 1.8EC is a broad spectrum insecticide/miticide.it acts by blocking transmission of signals between nerve cells or between nerve and muscle cell.Shortly after ingestion, the insects or mites become irreversibly paralysed and die within 3-4 days.it controls leaf miners by killing larvae in existing mines. TO ₂ -Spinosad having noval mode of action , primarily targeting binding sites on nicotinic acetylcholine receptors of the insect nervous system
7.	Final recommendation for micro level situation	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/lt & Cryomazine 50WP @ 2gm/ltr at 10 days interval gives better result. It is recommended for serpentine leaf miner management.
8.	Constraints identified and feedback for research	Unavailibility of new generation insecticide .
9.	Process of farmers participation and their reaction	Active participation and happy with the performance of the insecticide applied with better result.

Thematic area:

Problem definition:

Technology assessed:

Table :

Technology option	No. of trials	Yield component (% leaf infestation)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
FP: Spraying of chloropyriphos @2 ml / litres of water	6	55	296	65000	355200	290200	5.46
TO1: 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 .	6	4.8	390	72500	468000	395500	6.45
TO2: 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.	6	8.5	362	70800	434400	363600	6.13

OFT-4

1.	Title of On farm Trial	Assessment of hydroponic fodder production for feeding in dairy farming
2.	Problem diagnosed	Less space available for green fodder
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Assessment
4.	Source of Technology (ICAR/AICRP/SAU/other, please specify)	TANUVAS 2015-16
5.	Production system and thematic area	Dairy production system
6.	Performance of the Technology with performance indicators	Milk yield, Milk fat % and BC ratio
7.	Final recommendation for micro level situation	It completely replaces concentrate feed if it is grown for longer period and on regular basis
8.	Constraints identified and feedback for research	Input cost is more
9.	Process of farmers participation and their reaction	Farmers actively participated by growing fodder in their backyard for small size units

Thematic area:

Problem definition: Less space available for green fodder and high cost of concentrate feed

Technology assessed: Assessment of hydroponic fodder production for feeding in dairy farming

Table:

Technology option	No. of trials	Yield component				Yield(lt/animal/day)	Cost of cultivation (Rs./ animal /day)	Gross return (Rs./animal /day)	Net return (Rs./animal /day)	BC ratio
		Milk yield(lt/animal/day)	% change	Milk quality (fat %)	% change					
FP	4	9.05	-	3.8	-	9.05	108	229	121	2.12
TO ₁		9.56	5.63	4.0	5.26	9.56	120	272	152	2.26
TO ₂		9.87	9.06	4.4	15.78	9.87	137	336	199	2.45

OFT-5

1.	Title of On farm Trial	Comparative assessment of poultry breeds in semi-intensive backyard system
2.	Problem diagnosed	Poor production and income from local non descript desi type chicken
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Assessment
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	AICRP on Poultry at OUAT, 2017-18
5.	Production system and thematic area	Homestead and poultry management
6.	Performance of the Technology with performance indicators	Body weight at 1 month, 2 month 4 month and at start of laying, egg production per annum
7.	Final recommendation for micro level situation	Kadaknath breed is suitable for raising under backyard condition as it has less mortality rate and its body weight is more than other birds at the same level of feeding
8.	Constraints identified and feedback for research	It is less appreciated by the farmers for its colour so more awareness programme is needed
9.	Process of farmers participation and their reaction	Farmers actively participated and they got convinced to raise breeds in backyard condition

Thematic area:

Problem definition: Poor production and income from local non descript desi type chicken

Technology assessed: Comparative assessment of poultry breeds in semi-intensive backyard system

Table:

Technology option	No. of trials	Yield component			Yield(Body weight at 6 months) in kg	Cost of cultivation (Rs./unit of 20 birds)	Gross return (Rs./unit of 20 birds)	Net return (Rs./unit of 20 birds)	BC ratio
		Mortality %	% change	No of eggs /bird/yr					
FP	7	50	-	50	0.7	1800	3750	1950	2.08
TO ₁		5	909	120	1.50	3325	14000	10675	4.21
TO ₂		15	70	90	2.8	3125	12600	9475	4.03
TO ₃		25	50	130	1.7	3085	11900	8815	3.85

OFT-6

1.	Title of On farm Trial	Assessment of crumpled paddy straw as an alternative substrate for mushroom cultivation
2.	Problem diagnosed	1.Non utilization of crumpled paddy straw after threshing with Axial flow thresher or combined harvester 2.Non availability of Bundle straw
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Assessment
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Farmer Innovation
5.	Production system and thematic area	Mushroom production system and Income generating activities
6.	Performance of the Technology with performance indicators	Yield, BC ratio, Farmers' feedback
7.	Final recommendation for micro level situation	Crumpled paddy straw is an alternative substrate for paddy straw mushroom cultivation. The cost of production per bed is less compared to bundle straw
8.	Constraints identified and feedback for research	Bed preparation is quite tedious and suitable frame is required to be designed
9.	Process of farmers participation and their reaction	Farm women actively participated in the trial and they were happy with the yield performance

Thematic area:

Problem definition: 1.Non utilization of crumpled paddy straw after threshing with Axial flow thresher or combined harvester

2. Non availability of Bundle straw

Technology assessed: Assessment of crumpled paddy straw as an alternative substrate for mushroom cultivation

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
		spawn run period (days)	cost of Substrate (Rs)	Pinhead initiation (days)						
FP	7	8	20	10	10	1	60	140	80	2.3
TO ₁		9	9	11	8.8	0.88	49	123.20	74.2	2.5
TO ₂		11	6	10	8	0.8	40	112	72	2.8

Results:

OFT-7

1.	Title of On farm Trial	Assessment of value added products of tomato for income generation
2.	Problem diagnosed	1. Distress sale of tomato 2. Non availability of storage unit
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Assessment
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	PHT, Centre, TNAU, 2015
5.	Production system and thematic area	Rice –Vegetable production system and value addition
6.	Performance of the Technology with performance indicators	Incremental income (Rs), Cost of preparation (Rs), Net income (Rs), BC ratio

7.	Final recommendation for micro level situation	
8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	Farm women actively participated and they shown their interest to prepare soup powder from tomato powder

Thematic area:

Problem definition: 1. Distress sale of tomato

2. Non availability of storage unit

Technology assessed: Assessment of value added products of tomato for income generation

Table:

Technology option	No. of trials	Yield component		Cost of cultivation (Rs)	Gross return (Rs)	Net return (Rs)	BC ratio
		Shelf life (days)	Sensory evaluation				
FP	7	4	-	100	125	25	1.2
TO ₁		Continuing	6	176	320	144	1.8
TO ₂		Continuing	7	276	900	624	3.2

OFT-8

1.	Title of On farm Trial	Assessment of organic and inorganic fertilizer on the growth performance of IMC
2.	Problem diagnosed	Poor plankton production and low yield
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	FP – Erratic use of organic manure (cow dung) TO ₁ : Application of organic manure (cow dung) @ 12000kg/ha, 1/5th as basal dose, a

		week prior to stocking and the rest monthly application in equal installment. TO2; Organic (Cow dung) @10,000kg/ha + Inorganic fertilizer (SSP) @200kg/h
4.	Source of Technology (ICAR/AICRP/SAU/other, please specify)	Int. J. of Agri&Biol.2009.pp:931-933
5.	Production system and thematic area	Production and management
6.	Performance of the Technology with performance indicators	Net return (Rs/ha), and B: C ratio
7.	Final recommendation for micro level situation	Organic (Cow dung) @10,000kg/ha + Inorganic fertilizer (SSP) @200kg/h
8.	Constraints identified and feedback for research	Erratic use of organic manure only
9.	Process of farmers participation and their reaction	Actively participated and they appreciated the technology

Thematic area:

Problem definition: Poor plankton production and low yield

Technology assessed: Assessment of organic and inorganic fertilizer on the growth performance of IMC

Table:

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 spikelet per panicle	Test wt. (100 grain wt.)						
FP – Erratic use of organic manure (cow dung)	05					22.3	159,200	312,200	153000	1.96
TO ₁ :						24.5	171,000	343,000	172000	2.00

Application of organic manure (cow dung)@ 12000kg/ha, 1/5th as basal dose, a week prior to stocking and the rest monthly application in equal installment										5
TO2; Organic (Cow dung) @10,000kg/ha + Inorganic fertilizer (SSP) @200kg/h						27.3	184,200	382200	198000	2.07

OFT-9

1.	Title of On farm Trial	Assessment of genetically improved strain of 'Jayanti rohu' in composite fish culture for yield enhancement
2.	Problem diagnosed	Poor growth rate of farm rohu reduces the fish yield
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	FP -Stocking of grow-out ponds with Catla : farmed rohu :mrigal fingerlings :: 3000:4000:3000 nos. per ha respectively TO1 -Stocking ratio C:JR:M = 3:4:3 TO2 -Stocking ratio C:JR:M = 4:4:2

4.	Source of Technology (ICAR/AICRP/SAU/other, please specify)	CIFA,Bhubaneswara,2005. www,cifa.nic.in
5.	Production system and thematic area	Production and management
6.	Performance of the Technology with performance indicators	Yield/ha,B:C ratio
7.	Final recommendation for micro level situation	Stocking ratio C:JR:M = 4:4:2
8.	Constraints identified and feedback for research	Low yield due to slow growth rate of normal rohu
9.	Process of farmers participation and their reaction	Actively participated and they are interested to stock jayanti rohu instead of farm rohu

Thematic area:

Problem definition: Poor growth rate of farm rohr reduce the yield

Technology assessed: **Assessment of genetically improved strain of ‘Jayanti rohu’ in composite fish culture for yield enhancement**

Table:

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 spikelet per panicle	Test wt. (100 grain wt.)						
FP -Stocking of grow-out ponds with Catla : farmed rohu :mrigal fingerlings :: 3000:4000:300	05					19.5	168,000	273000	105,000	1.62

0 nos. per ha respectively										
TO1 -Stocking ratio C:JR:M = 3:4:3	05					22.5	183,000	315,000	132,000	1.72
TO2 -Stocking ratio C:JR:M = 4:4:2	05					26.7	206,800	373,800	167,000	1.80

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		Total		
						M	F	M	F	M	F	M	F			
1.	Pigeonpea	IPM	.Spraying of Azadiractin 0.15% @ 15 lit/ha at 50% flowering followed by flubendiamide 48SC @ 200ml/ ha and Bt @ 1 kg/ha at 15 days interval.	1	1						10	0	10	0	10	
2.	Okra	IPM	Seed treatment with imidachloprid @5 gm /kg seeds, installation of yellow stick trap @ 50/ha and spraying of Acetamiprid @ 1gm/lit of water at 30 days and 45 DAS	1	1						10	0	10	0	10	
3.	Chilli	IPM	The rotational spray of acephate@1.5 gm/litre+neem oil @2 ml/l followed by spray of fipronil @1.0 ml/l + neem oil @ 2.0 ml/l followed by spray of imidachloprid @2.0g/ 15 litres of water +neem oil 2.0 ml/l followed by spray of cyazypyr @1.8 ml/lat	1	1						6	4	6	4	10	

			weekly interval till fruit formation											
4.	Mango	IPM	Four sprays of Metarrhizium anisopliae oil formulation @ 0.5 ml/l at weekly interval.	1	1					10	0	10	0	10

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil (Kg/ha)			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P ₂ O ₅	K ₂ O					
Pigeonpea	Kharif-2019	Rainfed	Clayey	298	12.9	175	No crops				
Okra	Kharif-2019	Rainfed	Red soil	284	11.8	180	No crops				
Chilli	Rabi 2019-20	Irrigated	Sandy loam	275	13.0	178	No crops				
Mango	Rabi 2019-20	Irrigated	Red soil	270	12.0	168	No crops				

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

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

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
Pigeonpea	IPM	.Spraying of Azadiractin 0.15% @ 15 lit/ha at 50% flowering followed by flubendiamide 48SC @ 200ml/ ha and Bt @ 1 kg/ha at 15 days interval.	10	1	10.2	8.1	25.92	35100	61200	26100	1.74	32280	48600	16320	1.50
	Total														

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

** BCR= GROSS RETURN/GROSS COST

Other crops

Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	Other parameters (% pod borer damage), % of YMV infestation, % leaf infestation, hoppers population / inflorescence.		*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
					Tomato	Varietal evaluation		Demonstration on triple resistant (early blight, bacterial wilt, leaf curl virus) tomato varieties	7	0.4	478.2	280.9	70.23	70	58	298875	717300
Brinjal	Varietal evaluation	Demonstration on improved wilt tolerant brinjal varieties	7	0.4	250	237	21.0	82	75	130200	375000	244800	2.88	130210	355500	225290	2.73
Mnago		Demonstration on hot water treatment on ripening quality and shelf life of mango	7	1				Cont.									
Okra	IPM	Seed treatment with imidachloprid @5 gm /kg seeds, installation of yellow stick trap @ 50/ha and spraying of Acetamiprid @ 1gm/lit of water at 30 days and 45 DAS	10	1	182	161	13.04	4.8	26.0	90700	273000	182300	3.0	82200	241500	159300	2.93

Oyster mushroom	Demonstration of low cost technology for drying of Oyster Mushroom	10	1	Storage Period (month) – 11.2	2.3		Dry wt. Gm/kg - 97	84	Rs 620	Rs 970	Rs350	1.56	Rs 605	Rs 630	Rs 25	1.04
Button mushroom																
Vermicompost																
Sericulture																
Apiculture																
Others (pl.specify)	Demonstration of 3-row manual row rice transplanter for drudgery reduction of farm women	8	1	Out put m ² /h - 105	Out put m ² /h - 64	64%	% reduction in drudgery- 41.14	NA	27800	48700	16900	1.53	31800	54520	26720	1.96
Others (pl.specify)	Demonstration of Akola mini dal mill for processing of pigeon pea for income generation of farm women	10	1	Field capacity (kg/day) – 4q	Field capacity (kg/day) – 14.5kg		Labour (MDs/q)-1	Labour (MDs/q)- 6.6								
Others (pl.specify)	Demonstration of nutritional garden for Improving Nutritional Security of farm family	10	10	Consumption of vegetables/day- 624gm	416gm		Availability of vegetable/head/day- 284gm	190gm	Rs 3600	Rs 6240	Rs 1160	1.7	Rs 3000	Rs 4160	Rs 2640	1.1
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

Technical Feedback on the demonstrated technologies

Sl. No	Crop	Feed Back

Extension and Training activities under FLD

Sl. No.	Activity	Date	No. of activities organized	Number of participants	Remarks
1.	Field days		17	510	
2.	Farmers Training		46	1150	
3.	Media coverage		12	645	
4.	Training for extension functionaries		5	75	

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

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	Pigeon pea	Local	8.6	-	36	740	Improved seeds (PRG 176), Seed treatment with (Carboxin + Thiram) @ 2gm/kg seed, Installation of Pheromone traps @ 20/ha, Release of trichogramma chilonis 50,000 eggs/ha and spraying of Emamectin benzoate @ 0.5 gm / lt.	60	30	12.5	7.8	11.2	36	25	-3
2	Groundnut	Local	15.4	352	396	960	Improved seeds (DHARANI), Seed treatment with metalaxyl + mancozeb @ 2gm/kg seed ,	304	140	23.8	19.7	22.3	17.8	15.1	-8

							Line sowing, spraying of emamectin benzoate ,lambda cyhalothrin,acet amiprid and metalaxyl + mancozeb for control of bihar hairy caterpillar , Leaf eating caterpillars, aphids and leaf spot and tricho cards for spodoptera.								
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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	Improved seeds(PRG 176), Seed treatment with (Carboxin + Thiram) @ 2gm/kg seed, Installation of Pheromone traps@ 20/ha, Release of trichogramma chilonis 50,000 eggs/ha and spraying of Emamectin benzoate @ 0.5 gm / lt.	30200	51600	21400	1.70	33418	67200	33782	2.01
2	Improved seeds (DHARANI), Seed treatment with metalaxyl + mancozeb @2gm/kg seed , Line sowing, spraying of emamectin benzoate ,lambda cyhalothrin,acetamiprid and metalaxyl + mancozeb for control of bihar hairy caterpillar , Leaf eating caterpillars, aphids and leaf spot and tricho cards for spodoptera.	41800	77000	35200	1.84	47200	111500	64300	2.36

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	PIGEONPEA (PRG-176)	33844	539	60	1200	300	Domestic Purpose	52
2	GROUNDNUT, (DHARANI)	678010	2110.2	50	27360	9120	Domestic	82

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	Improved seeds (PRG 176), Seed treatment with (Carboxin + Thiram) @ 2gm/kg seed, Installation of Pheromone traps@ 20/ha, Release of trichogramma chilonis 50,000 eggs/ha and spraying of Emamectin benzoate @ 0.5 gm / lt.	Long duration & bold seeded & Suitable to upland current fallows or Canal Bund	Bold Seeded	Farmers can used their seed in Future	No	Yes	
2	Improved seeds (DHARANI), Seed treatment with metalaxyl + mancozeb @2gm/kg seed , Line sowing, spraying of emamectin benzoate ,lambda cyhalothrin,acetamiprid and metalaxyl + mancozeb for control of bihar hairy caterpillar , Leaf eating caterpillars, aphids and leaf spot and tricho cards for spodoptera.	Medium Duration ,bold seed, Pods are 2 seeded & suitable for Rabi-Summer Season	Bold Seeded	Farmers can use their own seed in future & adopt the low cost technology like seed treatment & Sowing behind the Plough.	No	Yes	-

E. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
Variety (PRG-176)	Plant height 140-200cm , 160-180 nos of Pods/Plant & average yield of 11.2q/ha.	30.23 % increase yield over local check	High yielding , long duration resistant to diseases like fusarium wilt & sterility mosaic.
Variety (Dharani)	Leaf lets are dark green , 50 % Oil content,uniform	44.8 % increase yield over local check	Long Duration ,Good Yield performance, Suitable for

	maturity & average yield of 22.3q/ha.		Rabi-Summer , Tolerant to Leaf spot .
--	---------------------------------------	--	---------------------------------------

F. Extension activities under FLD conducted:

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
1.	Training programme on Improved package & practices of Pigeonpea cultivation	3.12.19 Tarava	25
2.	Field Day on PIGEONPEA Cultivation	15.2.2020 Tarava	30
3	Training Programme on Groundnut Cultivation	1.2.2020 , BHALIAPAT(GONDIA BLOCK)	30
4	Training Programme on Groundnut Cultivation	24.2.2020 SOGAR (K.NAGAR BLOCK)	30
5	Training Programme on Groundnut Cultivation	26.2.2020 TARAVAL (SADAR BLOCK)	30
6	Field Day on Groundnut Cultivation	21.03.2020 TARAVAL (SADAR BLOCK)	50

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

PIGEONPEA:



GROUNDNUT



Seed Distribution



Field Preparation



Field Preparation



Seed Treatment



Line Sowing



Line Sowing



Vegetative Stage



Vegetative Stage



Input Distribution



Infestation of Defoliators



Spraying of Insecticides



Harvesting

B. Farmers' training photographs

PIGEONPEA



Training



Training

GROUNDNUT



Training



Training

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

PIGEONPEA



GROUNDNUT**D. Details of budget utilization
PIGEONPEA**

Crop (provide crop wise information)	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
PIGEONPEA KHARIF- 2019	i) Critical input		193056	
	ii) TA/DA/POL etc. for monitoring		19700	
	iii) Extension Activities (Field day)		4125	
	iv) Publication of literature		3055	
	Total	268800	219936	48864

GROUNDNUT

Crop (provide crop wise information)	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
GROUNDNUT RABI-2019-20	i) Critical input		16,16,520	
	ii) TA/DA/POL etc. for monitoring		30,576	
	iii) Extension Activities (Field day)		10,500	
	iv) Publication of		22,040	

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				
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	4	34	26	60	3	1	4	24	12	36	61	39	100	

B) Rural Youth (on campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST			M	F	T
		M	F	T	M	F	T	M	F	T			
Nursery Management of Horticulture crops													
Training and pruning of orchards													
Protected cultivation of vegetable crops													
Commercial fruit production													
Integrated farming													
Seed production	1	15	0	15							15	0	15
Production of organic inputs													
Planting material production													
Vermiculture													
Mushroom Production													
Beekeeping													
Sericulture													
Repair and maintenance of farm machinery and implements													
Value addition													
Small scale processing													
Post Harvest Technology													
Tailoring and Stitching													
Rural Crafts													
Production of quality animal products													
Dairying													
Sheep and goat rearing													
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Composite fish culture													
Freshwater prawn culture													
Shrimp farming													
Pearl culture													
Cold water fisheries													
Fish harvest and processing technology													
Fry and fingerling rearing	1	12	0	12	0	0	0	3	0	3	15	0	15
Others (Bio Control)	2	26	0	26	4	0	4	0	0	0	30	0	30
Total	3	38	0	38	4	0	4	3	0	3	45	0	45

C) Extension Personnel (on campus)

Thematic Area	No. of Courses	No. of Participants			Grand Total
		Other	SC	ST	

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			
GRAND TOTAL													

E) RURAL YOUTH (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			
Nursery Management of Horticulture crops													
Training and pruning of orchards													
Protected cultivation of vegetable crops													
Commercial fruit production													
Integrated farming													
Seed production													
Production of organic inputs													
Planting material production													
Vermiculture													
Mushroom Production													
Beekeeping													
Sericulture													
Repair and maintenance of farm machinery and implements													
Value addition													
Small scale processing													
Post Harvest Technology													
Tailoring and Stitching													
Rural Crafts													
Production of quality animal products	2	11	18	29	0	1	1	0	0	0	11	19	30
Dairying													
Sheep and goat rearing													
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Composite fish culture													
Freshwater prawn culture													
Shrimp farming													
Pearl culture													
Cold water fisheries													
Fish harvest and processing technology													
Fry and fingerling rearing													
Others	2	0	27	27	0	3	3	0	0	0	0	30	30
Total	4	11	45	56	0	4	4	0	0	0	11	39	60

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				
Shrimp farming														
Pearl culture														
Cold water fisheries														
Fish harvest and processing technology														
Fry and fingerling rearing	1	12	0	12	0	0	0	3	0	3	15	0	15	
Others	2	0	27	27	0	3	3	0	0	0	0	30	30	
Total	5	23	45	68	0	4	4	3	0	3	26	49	75	

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	12	0	12	3	0	3	0	0	0	15	0	15	
Livestock feed and fodder production														
Household food security	1	9	0	9	3	1	4	1	1	2	13	2	15	
Other (Biocontrol of pests and diseases.)	3	41	0	41	4	0	4	0	0	0	45	0	45	
Total	5	62	0	62	10	1	11	1	1	2	73	2	75	

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

Discipline	Clientele	Title of the training programme	Duration in days	Venue (Off / On Campus)	Number of participants			Number of SC/ST		
					Male	Female	Total	Male	Female	Total
Horticulture	F&FW	Cultivation of high yielding Variety drumstick	1	Off	22	3	25	0	0	0

Horticulture	F&FW	Seedling raising technique in rainy season	1	Off	25	0	25	25	0	25
Horticulture	F&FW	Cultivation practice of aroma crop	1	Off	10	15	25	0	0	0
Horticulture	F&FW	Production Technology of hybrid chilly	1	Off	6	19	25	0	0	0
Horticulture	F&FW	Fertilizer management in chilly	1	Off	0	25	25	0	7	0
Horticulture	F&FW	Production technology of minor fruit	1	Off	16	9	25	0	0	0
Plant Protection	F&FW	Use of herbicides for controlling different kind of weeds in kharif groundnut.	1	Off	24	1	25	2	0	2
Plant Protection	F&FW	Application of different chemical seed treating chemicals for management of root rot in greengram.	1	Off	25	0	25	25	0	25
Plant Protection	F&FW	Application of different bio-seed treating chemicals for management of root rot in greengram.								
Plant Protection	F&FW	Use of IPM practices for vector management for YMV in greengram								
Plant Protection	F&FW	Use of herbicides for controlling different kind of weeds in rabi greengram.	1	Off	0	25	25	0	8	8
Plant Protection	F&FW	Use of IPM practices for management of pod borer complex in pigeonpea.	1	Off	10	15	25	10	15	25

Plant Protection	F&FW	Use of biological practices for management of inflorescence hopper in mango								
Plant Protection	F&FW	Use of IPM practices for vector management for YMV in okra	1	Off	7	18	25	0	2	2
Plant Protection	F&FW	Use of Botanicals and chemicals for management of thrips in chilli	1	Off	8	17	25	0	2	2
Plant Protection	F&FW	Use of new generation insecticides for management of serpentine leaf miner in kharif tomato	1	Off	6	19	25	1	0	1
Plant Protection	F&FW	Use of cultural practices for management of BPH in paddy	1	Off	23	2	25	2	0	2
Home Science	F&FW	Post harvest management of mango	1	Off	0	25	25	0	9	9
Home Science	F&FW	Mushroom cultivation from crumpled straw	1	Off	0	25	25	0	0	0
Home Science	F&FW	Off season vegetable cultivation in backyard	1	Off	0	25	25	0	25	25
Home Science	F&FW	Operational procedure of small tools and implements for drudgery reduction of farm women	1	Off	0	25	25	0	0	0
Home Science	F&FW	Promotion of micro enterprises for self employment	1	Off	0	25	25	0	25	25
Home	F&FW	Use of locally	1	Off	0	25	25	0	11	11

Science		made house hold food supplements to improved food security								
Home Science	F&FW	Storage of vegetable in zero engery cool chamber to minimize post harvest loss	1	Off	0	25	25	0	19	19
Home Science	F&FW	House hold nutritional security through back yard farming	1	Off	0	25	25	0	2	2
Home Science	F&FW	Operational procedure of akola mini dal mill for processing of pigeon pea	1	Off	0	25	25	0	2	2
Home Science	F&FW	Preparation of value added products from tomato	1	Off	0	25	25	0	0	0
Animal Science	F&FW	Hybrid napier (CO4) fodder production in dairy farming	1	Off	20	5	25	2	0	2
Animal Science	F&FW	Fodder cultivation strategies for cost effective milk production	1	Off	5	20	25	0	6	6
Animal Science	F&FW	Prevention and control measure for PPR disease in small ruminants	1	Off	3	22	25	3	22	25
Animal Science	F&FW	Genetive upgradation of non descript goats	1	Off	20	5	25	7	2	9
Animal Science	F&FW	Production performance of kadaknath, aseel and SPL-01 variety of chicken in semi intensive	1	Off	14	11	25	12	4	16

		system of poultry rearing								
Animal Science	F&FW	Artificial brooding management in chicks	1	Off	20	5	25	0	0	0
Animal Science	F&FW	Effect of pro biotic supplementation on quantity and quality of milk production	1	Off	20	5	25	2	0	2
Animal Science	F&FW	Hydroponic fodder production in dairy cows	1	Off	20	5	25	1	0	1
Animal Science	F&FW	Body weight gain and performance of sheep / goat basing on housing system	1	Off	25	0	25	1	0	1
Animal Science	F&FW	Prevention and control of different diseases of cattle having economic impact on dairy sector	1	Off	12	13	25	0	0	0
Fishery	F&FW	Pond preparation before stocking	2	On	45	5	50	10	0	10
Fishery	F&FW	Stocking of jayanti rohu in composite pisciculture	1	On	2	23	25	1	23	24
Fishery	F&FW	Post stocking management in grow out tank	1	On	13	12	25	13	12	25
Horticulture	RY	Seed production & seed extraction of chilly	1	On	15	0	15	0	0	0
Plant Protection	RY	Use of biological practices for management of sweet potato weevil in sweet potato	1	On	15	0	15	0	0	0
Plant Protection	RY	Use of bio	1	On	15	0	15	4	0	4

		intensive management for shoot fruit borer in brinjal								
Home Science	RY	Marketing strategy and value chain development	1	Off	0	15	15	0	3	3
Home Science	RY	Marketing strategies for SHGs	1	Off	0	15	15	0	0	0
Animal Science	RY	Low cost silage making for feeding cows during lean period	1	Off	10	5	15	0	0	0
Animal Science	RY	Urea molasses mineral block (UMMB) for improved milk production / yield in dairy cows	1	Off	1	14	15	0	1	1
Fishery	RY	Quality seed production technology of IMC	1	On	15	0	15	3	0	3
Horticulture	IS	Production technology of tubrose for income generation	1	On	15	0	15	0	0	0
Plant Protection	IS	Use of newer molecules for management of insects in vegetables	1	On	15	0	15	0	0	0
Home Science	IS	Women friendly tools and implements for drudgery reduction of farm women	1	Off	13	2	15	4	2	6
Animal Science	IS	Ethnoveterinary practice application in field conditions	1	On	15	0	15	3	0	3
Fishery	IS	Recent advance in fresh water aquaculture technology	1	On	15	0	15	0	0	0

Production of Inputs at site													
Methods of protective cultivation													
Other													
Total													
Post harvest technology and value addition													
Processing and value addition													
Other													
Total													
Farm machinery													
Farm machinery, tools and implements													
Other													
Total													
Livestock and fisheries													
Livestock production and management													
Animal Nutrition Management													
Animal Disease Management													
Fisheries Nutrition													
Fisheries Management													
Other													
Total													
Home Science													
Household nutritional security													
Economic empowerment of women													
Drudgery reduction of women													
Other													
Total													
Agricultural Extension													
Capacity Building and Group Dynamics													
Other													
Total													
Grant Total													

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	3	80	3	11	12	5	3	8	85	33	118

Cows													
Buffaloes													
Calves													
Others (Pl. specify)													
Small ruminants													
Sheep													
Goat													
Other, please specify													
Poultry													
Broilers													
Layers													
Duals (broiler and layer)													
Japanese Quail													
Turkey													
Emu													
Ducks													
Others (Pl. specify)													
Piggery													
Piglet													
Hog													
Others (Pl. specify)													
Fisheries													
Indian carp													
Exotic carp													
Mixed carp			445.9 kg	57967									
Fish fingerlings			35000 nos	35000									
Fish fry			11.06 lakh nos	242000									
Others (Pl. specify)													
Grand Total				334967									

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	Paddy	Pooja	180	6	156	F/S
Rabi 2018-19						
Summer/Spring 2019						
Kharif 2019	Paddy	Pooja	180	6	146.6	F/S
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		401604		
2017-18		126174		
2018-19 (400000)		547566		
2019-2020		437286		

iv) Infrastructure Development

Item	Progress
Seed processing unit	Seed Storage godown under construction
Seed storage structure	

3.6.

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

Item	Title	Author's name	Number	Circulation
Research paper				
Seminar/conference/ symposia papers				
Books				
Bulletins				
News letter				
Popular Articles				
Book Chapter				
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.	Orientation training programme on operational modalities for KVKs	Orientation training programme on operational modalities for KVKs	Dr. B. Mohanty, Sr. Scientist & Head	27.12.19 to 29.12.19	MANAGE
2.	Agro ecosystem analysis	Agro ecosystem analysis	Smt. S. Pal, Scientist (Home Science)	17.02.2020 to 21.02.2020	DEE, OUAT
3.	TOT programme under ASCI on Small poultry	TOT programme under ASCI on Small poultry farmer	Dr. R. B. Nayak, Scientist (Animal Science)	24.02.2020 to 24.03.2020	ASCI

	farmer				
4.	TOT programme under ASCI on Nursery Workers	TOT programme under ASCI on Nursery Workers	Sri D. S. Kar, Scientist (Horticulture)	24.02.2020 to 19.03.2020	ASCI
5.	Training of master trainers on safe use of pesticides and epest surveillance through mobile app	Training of master trainers on safe use of pesticides and epest surveillance through mobile app	Sri D. Panda, Scientist (Plant Protection)	07.08.2019 to 08.08.2019	Krishi Bhawan, BBSR
6.	Orientation workshop of SCATE paterners	Orientation workshop of SCATE paterners	Dr. B. Mohanty, Sr. Scientist & Head	22.10.2019	DDG, NRM
7.	Mitigating the challenges in house hold and public health pest management	Mitigating the challenges in house hold and public health pest management	Sri D. Panda, Scientist (Plant Protection)	18.01.2020	OUAT & Indian Pest control Association
8.	Rice research and development : Doubling farmers income	Rice research and development : Doubling farmers income	Sri D. Panda, Scientist (Plant Protection)	28.02.2020	NRRI

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	Sri Sudhakar Biswal
Address	At. Kharidali, Po. Babandha, Block –Hindol, Dist. Dhenkanal
Contact details (Phone, mobile, email Id)	9556816087
Landholding (in ha.)	6 ac
Name and description of the farm/ enterprise	He has started mushroom as an promising enterprise after completion of training under ASCI from the month of February 2018. Now he is raising 50 beds /day round the year.
Economic impact	He is getting a net profit of Rs. 2500/- per day .
Social impact	He is recognized as a successful mushroom entrepreneur in his locality.
Environmental impact	Earlier straw was burned in the field leading to air pollution. As straw is used as substrate for mushroom cultivation air pollution is reduced.
Horizontal/ Vertical spread	Seeing his success 8 farmers of his village are interested to start mushroom cultivation commercially.

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
1	Paddy straw cutter	Sri Ajaya Kumar Prusty, Village: Indipur, Block: Odapada, Ph.no.-	Average production of mushroom per day is 30 q for which it occupies 2 nd position in the state. Around 4,50,000 bundies of straw are to be cut and it is labour consuming and

		9938869605	cumbersome process which compelled him to think in the direction of inventing straw cutting machine. Mechanically operated straw cutting is operated by 2 nos of 0.5 HP motors to cut the bundles to desired side (2ft). This machine can cut 1500 bundles in one hour. One labour could be able to cut 500 bundles per day where as by using the machine 1500 bundles can be cut in one hour. Cost involved in developing the innovation: Rs.18000/-. By using this machine his able to save 0.35 rupees per bundle. Cost of production for 1 kg of mushroom decreases by Rs.4/-
2	Solar Plough	Sri Santosh Swain, At-Nuagaon, Po- Tarava, Block – Sadar, Dist. Dhenkanal	His father was facing labour problem during manual ploughing, weeding, ridge and furrow making. To satisfy the need of his father he thought of inventing solar driven plough for easing the said agricultural operations. This machine is operated by 0.5 HP DC motor, 50 watt solar panel and one gear box. This can replace ploughing, weeding, ridge and furrow making which helps in saving cost (Rs.4500) & labour (12 nos). Cost involved in developing the innovation: Rs.50000/-. He will be able to make a profit of Rs.40000/year.

- 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.	Mridaparikshak	2 nos.
2.	Thermo hygrometer	1no.
3.	Hand refractometer	1no.
4.	Electronic automatic kelplus microprocessor based twenty place macro block digestion system	1no.
5.	Electronic acid neutralizer scrubber	1no.
6.	Electronic kelplus micro processor based automatic nitrogen distillation system	1no.
7.	Electronic titration system for kelplus system	1no.
8.	Flame photometer	1no.

9.	Spectrophotometer	1no.
10.	Servo Stabilizers	1no.
11.	Hot plate	1no.
12.	Micro processor based pH meter	1no.
13.	Conductivity meter	1no.
14.	Refrigerator	1no.
15.	Ele. Top Pan Balance	1no.
16.	Physical Balance	1no.
17.	Soil Augur	1no.
18.	Bouyoucos Hydrometer	1no.
19.	Mechanical Stirrer	1no.
20.	Colony Counter	1no.
21.	Plant Sample Grinder / Laboratory Mill	1no.
22.	Hot Water Bath	1no.
23.	Horizontal Shaker	1no.
24.	Distilled Water Unit	1no.
25.	Hot Air Oven	1no.
26.	Laboratory Centrifuge	1no.
27.	Sieves	1no.
28.	Soil Augur / Sampling Tube (Screw/tube)	1no.
29.	Soil Thermometer	1no.
30.	Olympus (Microscope) Model ML-14	1no.
31.	Olympus (Microscope) Model MS-13	1no.
32.	Bod Incubator	1no.

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			
381		381	381	35	

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	World Soil Day	250	11		50	250

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

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

3.13. Technology week celebration

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

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

No of student trained	No of days stayed
12	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
24.04.2019	Prof. Soumendra Mohan Patnaik, Vice-Chancellor, OUAT	To supervise / review KVK activities
01.07.2019	Dr. Chinmaya Kishore Bakharn, Assoc. Prof. CAET, OUAT	To attend the training programme on post harvest management of mango
01.07.2019	Dr. Nihar Ranjan Sahoo, Assoc. Prof. CAET, OUAT	To attend the training programme on post harvest management of mango
21.08.2019	Shri Sadananda Nayak, OAS (SAG), MD, OAIC and OSCDC	Nodal officer's (for Dhenkanal dist.) visit to KVK
09.09.2019	Dr. R. K. Samant, Chairman of QRT	Review of KVK activities
09.09.2019	Dr. C. Satapathy, Member QRT	Review of KVK activities
09.09.2019	Dr. R. B. Sharma, Member QRT	Review of KVK activities
09.09.2019	Dr. Y. V. Singh, Member QRT	Review of KVK activities
09.09.2019	Dr. F. H. Rahman, Member Secretary, QRT	Review of KVK activities
01.11.2019	Dr. P. P. Pal, Principal Scientist, ICAR- ATARI, Kolkata	To participate in SAC meeting & monitor KVK activities
06.12.2019	Bhabesh Kumar Nayak, ADM, Dhenkanal	Courtesy visit to KVK demo units
29.02.2020	Smt. M. Lakra, Addl. Secy. Agril and FE	Visit as Nodal officer for Dhenkanal district

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)
Mushroom cultivation round the year		25		
Nursery raising	20	15		
Small poultry farmers	20	17		
Broiler farming		30		

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
Paddy straw mushroom cultivation	35 %
Mango and cashew cultivation	25%

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	Farm Mechanization
Name of the Innovation	(1) Straw cutter (2) Solar plough
Details of Innovator	(1) Sri Ajay Kumar Prusty, Vill. Indipur, Block – Odapada, Dist. Dhenkanal (2) Sri Santosh Swain, Vill. Mandapala, Block – Sadar, Dist. Dhenkanal
Back ground of innovation	(1) Average production of mushroom per day is 30 q for which it occupies 2 nd position in the state Around 4,50,000 bundles of straw are to be cut and it is labour consuming and cumbersome process which compelled him to think in the direction of inventing straw cutting machine. (2) His father was facing labour problem during manual ploughing, weeding, ridge and furrow making. To satisfy the need of his father he thought of inventing solar driven plough for easing the said agricultural operations
Technology details	(1) Mechanically operated straw cutting is operated by 2 nos of 0.5 HP motors to cut the bundles to desired size (2ft). This machine can cut 1500 bundles in one hour. One labour could be able to cut 500 bundles per day where as by using the machine 1500 bundles can be cut in one hour. (2) This machine is operated by 0.5 HP DC motor, 50 watt solar panel and one gear box. This can replace ploughing, weeding, ridge and furrow making which helps in saving cost (Rs.4500) & labour (12 nos).
Practical utility of innovation	(1) By using this machine he is able to save 0.35 rupees per bundle. Cost of production for 1 kg of mushroom decreases by Rs.4/- (2) Cost involved in developing the innovation: Rs.50000/-. He will be able to make a profit of Rs.40000/year.

4.5. Details of entrepreneurship development

Entrepreneurship development	
Name of the enterprise	Goatery
Name & complete address of the entrepreneur	Sri Akhaya Kumar Mishra, At. Hadagada, Po. Rainarsingh pur, Block. Kamakhyanagar, Dist. Dhenkanal
Role of KVK with quantitative data support:	<ul style="list-style-type: none"> • Technical support • Prepared DPR for MKUY scheme • Counselling
Timeline of the entrepreneurship development	2018 starting year
Technical Components of the Enterprise	Breed: 100+5 unit Black Bengal Black Bengal and local mixed
Status of entrepreneur before and after the	Before intervention : 40000 to 50000 / year

enterprise	After Intervention : 1 to 1.5 lakh / year
Present working condition of enterprise in terms of raw materials availability, labour availability, consumer preference, marketing the product etc. (Economic viability of the enterprise):	Labour: 2 Consumer – good Marketing – good
Horizontal spread of enterprise	2

4.6. Any other initiative taken by the KVK

5. LINKAGES

5.1. Functional linkage with different organizations

Name of organization	Nature of linkage
Deptt. of Agr, Govt. of Odisha	Implementation of KVK activities
Deptt. of Horticulture, Govt. of Odisha	Implementation of KVK activities
Deptt. of Animal Res. Dev., Govt. of Odisha	Implementation of KVK activities
Deptt. of Fishreies, Govt. of Odisha	Implementation of KVK activities
ICAR Institutes- NRRI, IIWM, CIFA, CTCRI, CHES, CARI, CIWA	For getting technologies
OSSC	For getting seed and selling seed produced from instructional farm
Deptt. of Social Welfare, Dhenkanal,	Implementation of KVK activities

5.2. List of special programmes undertaken during 2019-20 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.)
Massive Plantation programme	Awareness to control environment pollution	17.09.2019	ICAR	10000
Pashu Arogya Mela	Massive vaccination	11.09.2019	ICAR	14700
Fertilizer awareness programme	STB application	22.10.2019	ICAR	50000
Swachhata	Awareness for swachhata	02.10.2019	ICAR	30000

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.	Mushroom	2006-07	179	V.Volvacea,P.s ajarcaju	Mushroom	175 kg		11200	Public sale
2.	Polyhouse	2010-11	110	Arka rakshak, Early snow ball, Utkal Abha, Swarna Shyamli, Bhagya, Pusa KTS-1, Bhima Dark red	Vegetable seedlings	34805		152048	Public sale,FLD and OFT
3.	Poultry		36	Aseel, Kadaknath, Chabro, Pallishree, Quail	21 days old chicks	1699 no		110435	Public sale, FLD and OFT
4.	Pisciculture unit	2017-18	12 acre	IMC	Fish	445.9 kg		57967	Public sale
5.	IFS	2011-12	338	IMC	Fish fry and Fingerling	11.36 lakhs nos		277000	Public sale,FLD and OFT
	Total							608650	

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	02.08.2019	26.12.2019	6	Pooja	FS	147.6	361970	447375	

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.					

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	Kadaknath, Banaraja, Aseel, Chhabro	21days old chicks	1699 nos		110435	
2.	Fish	IMC	Fish	445.9 kg		57967	

3.	Fish	Fingerlings	Fingerlings	35000 nos		35000	
4	Fish	IMC	Fish fry	11.06 lakh		242000	

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)
January	148	75	
February	20	25	
March	20	30	
Total :	188	130	

(For whole of the year)

6.6. Utilization of staff quarters

Whether staff quarters has been completed: yes

No. of staff quarters: 6 nos

Date of completion:

Occupancy details: All quarters are occupied

Months	Q I	Q II	Q III	Q IV	Q V	Q VI

7. FINANCIAL PERFORMANCE

7.1. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
Contingency	SBI, ADB, Mahisapat	At/Po. Amalapada, Dhenkanal	10700059409
Revolving fund	SBI, ADB, Mahisapat	At/Po. Amalapada, Dhenkanal	30306531704

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

Item	Released by ICAR		Expenditure		Unspent balance as on -
	Kharif	Rabi	Kharif	Rabi	
Groundnut		1680000		1679636	364

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

Item	Released by ICAR		Expenditure		Unspent balance as on 1 st April 2013
	Kharif	Rabi	Kharif	Rabi	
Pigeonpea	268800		219936		48864

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	150000	150000	150000
3	HRD	30000	30000	30000
4	Contingencies			
4	Stationary, Telephone, Postage and other exp. on office running			374720

<i>B</i>	POLs, repair of vehicles, tractor and equipments			64080
<i>C</i>	Meals/refreshment of trainees			134080
<i>D</i>	Training Materials			195825
<i>E</i>	Front Line Demon. Except Oilseeds and pulses			164902
<i>F</i>	On-Farm Testing			164818
<i>G</i>	SCSP	300000	300000	299886
	Sub Total Recurring Contingency	1580000	1578800	1578311
<i>H</i>	Others			
<i>I</i>	Swachhta Expenditure	30000	29400	29400
<i>Ii</i>	Massive plantation programme	9800	9800	9442
<i>ii</i>	Pasu Arogya Mela	14700	14700	14700
<i>Iii</i>	Fertilizer awareness programme	50000	48800	44570
<i>Iv</i>	Awareness programme for pump operator	30000	30000	1207
<i>V</i>	ASCI (Nursery workers)	180000	178800	178800
<i>Vi</i>	ASCI (Small poultry farmer)	212000	212000	212000
<i>Vii</i>	Mission Shakti	1055000	1055000	973761
<i>Viii</i>	CFLD Pulses	270000	268800	219936
<i>ix</i>	CFLD Oilseeds	1680000	1680000	1678636
	TOTAL (A)	5111500	5106100	4940763
B. Non-Recurring Contingencies				
1	Library	10000	10000	10000
	TOTAL (B)			
C. REVOLVING FUND				
	GRAND TOTAL (A+B+C)	5121500	5116100	4950763

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	24658	480495	327060	148447
2016-17	148447	370030	401604	0+401707 (kind)
2017-18	0	164835	156131	0
2018-19	0	353175	587201	165974+472836 (kind)
2019-20	164774	1257939	933811	488822

- 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
RE interface	10	Round the year	10		10
Joint verification	5	Round the year	5		5
DPR preparation	5	Round the year	5		5

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)
Lumpy skin	Cattle	September	Morbidity – 90		

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	21	
Livestock	12	
Fishery	3	
Weather		
Marketing		
Awareness	7	
Training information		
Other	7	
Total	50	45652

9.4. *KVK* Portal and Mobile App

Sl. No.	Particulars	Description
1.	No. of visitors visited the portal	
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
12 days	5

b. Details of Swachhta activities with expenditure

Activities	Number	Expenditure (in Rs.)
1. Digitization of office records/ e-office		
2. Basic maintenance	11	10500
3. Sanitation and SBM	4	14500
4. Cleaning and beautification of surrounding areas	9	3400
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	5	1000
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)	2	
14. No of Staff members involved in the activities	13	
15. No of VIP/VVIPs involved in the activities		
16. Any other specific activity (in details)		
Total		29400

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

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 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.		

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)
1	Cleaning of office campus		11		
2	Cleaning of demo unit		9		
3	Cleaning of public places	2	29		
4	Cleaning of tourist place	2	13		

9.11. Details of Mahila Kisan Divas programme organized

Sl. No.	Activity	No. of villages Involved	No. of Participants	No. of VIPs	Name (s) of VIP(s)
1	Training	1	25	0	

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

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

No.			
1	Sri Sudhakar Biswal	At. Kharidali, Po. Kutunia, Block – Hindol, Phone No. 9556816087	Leading enterprise Mushroom
2	Sri Udit Bhanu Singh	At. Banamali Prasad, Po. Dhenkanal, Block – Sadar, Phone 7008933268	Leading enterprise IFS Model

9.13. Revenue generation

Sl.No.	Name of Head	Income(Rs.)	Sponsoring agency
1.	Revolving Fund	1501427	

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

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

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

Natural Resource Management

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
1							

17. Technologies for Doubling Farmers' Income

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

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

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

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

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

20. a) Information on ASCI Skill Development Training Programme, if undertaken during 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			
Nursery worker	D. S. Kar	24.02.20	19.03.20	2		2			16		Y	188000
Small poultry farmer	Dr. R. B. Nayak	24.02.20	24.03.20						17	3	Y	212000

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		
Nursery raising	Vegetable production	560 hrs							2		2		1000000
								5		5			
								0		0			

21. Information on NARI Project (if applicable)

Name of Nodal Officer	No. of OFT on specified aspects	Title(s) of OFT	No. of FLD on specified aspects	No. of capacity development programme on specified aspects	Total no. of farm women/ girls involved in the project	Details of Issues related to gender 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	
		Seed (q)	Planting material (lakh)	Input (kg)	Other (kg/No.)	SC		ST		Others		Total				
						M	F	M	F	M	F	M	F	T		
KKA-I																
KKA-II																

C. Livestock and Fishery related activities

Name of programme	No. of Programme	Activities performed				No. of farmers benefited									No. of other officials (except KVK) attended the programme	
		No. of animals vaccinated	No. of animals dewormed	Feed/nutrient supplements provided (kg)	Any other (Distribution of animals / birds / fingerlings) [No.]	SC		ST		Others		Total				
						M	F	M	F	M	F	M	F	T		
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

No. of	No. of animal	No. of farmers benefited	Any other, if any

<i>villages covered</i>	<i>inseminated</i>	<i>SC</i>		<i>ST</i>		<i>Others</i>		<i>Total</i>			<i>(pl. specify)</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>	

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)
