

ANNUAL PROGRESS REPORT 2020

(January 2020 to December 2020)



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कृषि विज्ञान केन्द्र
KRISHI VIGYAN KENDRA
BARGARH



ODISHA UNIVERSITY OF AGRICULTURE & TECHNOLOGY
Gambharipali, P.O.-Larambha, Dist-Bargarh, Odisha - 768102

Annual Progress Report 2020

Krishi Vigyan Kendra, Bargarh.

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(January 2020 to December 2020)

1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail
	Office	FAX	
Krishi Vigyan Kendra, At- Gambharipali, PO- Larambha, Dist. - Baragarh. Pin – 768102, Odisha	06682- 225238	06682-225238	kvkbaragarh.ouat@gmail.com baragarhkvk@yahoo.com

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

Address	Telephone		E mail
	Office	FAX	
Odisha University of Agriculture & Technology, Bhubaneswar, Odisha	0674- 2397362	0674-2397362	deanextensionouat@yahoo.com deanextension_ouat@rediffmail.com

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Sri Nrusingh Ch. Barik	-	9437414979	ncbarik57@yahoo.com

1.4. Year of sanction of KVK: 1992

1.5. Staff Position (as on 1st January, 2020)

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 (I/C)	Mr. Nrusingh Charan Barik	Scientist	Nematology	15600-39100 + AGP-6000 (21390)	22.07.2011	Temporary	OBC
2	Subject Matter Specialist	Mrs. Susrita Sahu	Scientist	Home Science	15600-39100 + AGP-6000 (22220)	06.06.2010	Temporary	OBC
3	Subject Matter Specialist	Mr. Sanat Kumar Meher	Scientist	Horticulture	15600-39100 + AGP-6000 (21390)	31.05.2015	Temporary	OBC
4	Subject Matter Specialist	Ms. Rukeiya Begum	Scientist	Plant Science	15600-39100 + AGP-6000 (17610)	29.05.2015	Temporary	Other
5	Subject Matter Specialist	Mr. Tarak Chandra Panda	Scientist	Agril. Engineering	15600-39100 + AGP-6000 (17610)	04.12.2015	Temporary	Other
6	Subject Matter Specialist	Mr. Alok Kumar Sahoo	Subject Matter Specialist	Agril. Extension	15600-39100 + AGP-5400 (15600)	31.01.2019	Temporary	OBC
7	Programme Assistant	Mr. Deepankar Jena	Programme Assistant	Seed Science	9300-34800 + GP4200 (11010)	06.02.2015	Temporary	Other
8	Computer Programmer	Mr. Sanat Kumar Meher	Programme Assistant	Computer	9300-34800 + GP-4200 (11940)	06.02.2016	Temporary	OBC
19	Farm Manager	Mrs. Prarthana Mohanty	Farm Manager	Horticulture	9300-34800 + GP-4200 (11470)	04.02.2019	Temporary	Other
9	Accountant / Superintendent	Vacant	-	-	-	-	-	-
11	Stenographer	Mr.Sumant Kumar Jally	Steno cum Comp. Operator	-	5200-20200 + GP-2400 (6430)	14.02.2014	Temporary	SC
12.	Driver	Mr. Anirudhha Chhanda	Driver cum Mechanic	-	5200-20200+ GP – 1900 (7400)	23.07.2008	Temporary	OBC
13.	Driver	Mr. Jagannath Sahoo	Driver cum Mechanic	-	5200-20200+ GP – 1900 (7400)	23.05.2018	Temporary	OBC
14.	Supporting staff	Mr. SafetlalDebata	Peon cum Watchman	-	4440-7440 +GP – 1700 (6290)	28.07.2008	Temporary	Other
15.	Supporting staff	Mr. OkilKhamari	Peon cum Watchman	-	4440-7440+ GP -1700 (6290)	28.07.2008	Temporary	OBC

1.6. Total land with KVK (in ha) :

S. No.	Item	Area (ha)
1	Under Buildings	1
2.	Under Demonstration Units	1
3.	Under Crops	9.5
4.	Orchard/Agro-forestry	5
5.	Others with details-pond	1
6.	Swampy land	1
7.	Residential area	1.5
	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					√	373.08		ICAR
2.	Farmers Hostel					√	324.15		ICAR
3.	Staff Quarters (6)							not	
4.	Piggery Unit							not	
5	Fencing					√	7217ft		RKVY
6	Rain Water Harvesting Structure							not	
7	Threshing Floor					√	637.22		ICAR
8	Farm Godown					√	92.4		ICAR
9.	Dairy Unit					√	12		ICAR
10.	Poultry Unit							not	
11.	GoataryUnit							not	
12.	Mushroom Lab					√	27		RKVY
13.	Mushroom Production Unit					√	80.4		ICAR
14.	Shade House					√	99		RKVY
15.	Soil Test Lab					√	43.8		ICAR
16	Vermi compost Unit					√	80.4		ICAR

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
17	Plant Health Diagnostics Laboratory					√	42		ICAR
18	Pond					√	4000		ICAR
19	Conference Hall					√	116.2		ICAR
20	Internal Farm Road					√	475 sq.ft		ICAR
21	Irrigation Channel					√			

* 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	2011	6,30,000	7251747	Good
Tractor	2009	4,20,000	3456.45 (Running Hours)	Good
Motor Cycle	2010	51,000	93,789	Good

C) Equipment & AV aids

Name of Equipment	Year of Purchase	Cost (Rs.)	Present Status	Source of Fund
a. Lab Equipment				
Digital Refractometer	2018	12669	Good	ICAR
Drying Cabinet (Solar)	2018	19898	Good	ICAR
A.C with Stabilizer	2018	67600	Good	ICAR
Crown Cap Sealing Machine (2nos)	2018	5900	Good	ICAR
VacuumSealingMachine	2018	1950	Good	ICAR
Food Processor	2018	4900	Good	ICAR
b. Farm Machinery				
Tractor	2009	420000	Good	ICAR
Power Tiller	2014	170000	Good	ICAR
Power Weeder	2017	85801	Good	ICAR
Power sprayer	2012	9400	Good	ICAR
Drum Seeder	2017	3000	Good	ICAR
Paddle Paddy Thresher	2017	6225	Good	ICAR
power pulse thresher	2018	84375	Good	ICAR (Seed Hub)

Name of Equipment	Year of Purchase	Cost (Rs.)	Present Status	Source of Fund
Seed processing unit with gravityseparator	2018	1099674	Good	ICAR (Seed Hub)
Destoner	2018	152287	Good	ICAR (Seed Hub)
MandwaWeeder	2017	1080	Good	ICAR
Parboiling Drum	2017	5060	Good	Watershed Mission
Seed treating Drum	2017	3445	Good	Watershed Mission
Knapsack Sprayer	2017	2200	Good	Watershed Mission
Battery Operated Sprayer	2017	4410	Good	ICAR
Power Mist Blower	-	-	Good	ICAR
Brush Cutter	2018	27585	Good	ICAR
Hand Winnower	2017	4250	Good	Watershed Mission
Solar Pump	2018	14950	Good	ICAR
Fire extinguisher (2 Nos.)	2019	9912	Good	ICAR
c. AV Aids				
Laptop	2018	50000	Good	ICAR
LCD Projector	2017	38500	Good	ICAR
LED TV	2018	38691	Good	ICAR
Projection Screen	2018	17900	Good	ICAR
Print Scan cum Copier	2018	14000	Good	ICAR
Solar Light	2018	20499	Good	ICAR
DSLR Digital Camera	2018	47806	Good	ICAR
Digital Camera	2017	14000	Good	ICAR

D) Farm implements

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
Cultivator	-	-	Good	ICAR
Rotavator	2013	114000	Good	ICAR
M.B. Plough	2013	30,000	Good	ICAR
Zero till Seed cum Fertilizer Drill	2013	47500	Good	ICAR
Land Leveler	2014	19500	Good	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	12.02.21	25	<ul style="list-style-type: none"> Management of sucking pest in Sesamum 	<ul style="list-style-type: none"> FLD and training will be conducted during the yr. 2021-22 	
			<ul style="list-style-type: none"> Promotion of sunhemp/dhanicjha as green manuring 	<ul style="list-style-type: none"> Training and awareness camp will be conducted 	
			<ul style="list-style-type: none"> Location specific varietal evaluation in Sesamum 	<ul style="list-style-type: none"> OFT will be conducted 	
			<ul style="list-style-type: none"> Popularization of Protein Rich Rice Variety 	<ul style="list-style-type: none"> FLD & Training will be conducted 	
			<ul style="list-style-type: none"> Popularization of Onion var. Bheema Red 	<ul style="list-style-type: none"> FLD will be carried out 	
			<ul style="list-style-type: none"> IDM management in cole crops. 	<ul style="list-style-type: none"> Training and FLD will be conducted. 	
			<ul style="list-style-type: none"> Evaluation of good variety of fingermillet. 	<ul style="list-style-type: none"> OFT will be conducted. 	
			<ul style="list-style-type: none"> IPM of Brinjal in Organic way 	<ul style="list-style-type: none"> FLD and training will be conducted 	
			<ul style="list-style-type: none"> Emphasis on value addition of Tomato 	<ul style="list-style-type: none"> OFT and training will be conducted 	
			<ul style="list-style-type: none"> Promotion of Kadaknath breed of poultry. 	<ul style="list-style-type: none"> Demonstration on Kadaknath breed of poultry in backyard will be conducted 	
			<ul style="list-style-type: none"> Evaluation the performance of suitable variety of brinjal. 	<ul style="list-style-type: none"> Assessment of Brinjal variety will be conducted 	
			<ul style="list-style-type: none"> Promotion of short duration variety of mustard 	<ul style="list-style-type: none"> CFLD and awareness camp will be conducted 	

* Salient recommendation of SAC in bullet form

Attached a copy of SAC proceedings along with list of participants (Annexur-1)

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2.a. District level data on agriculture, livestock and farming situation (2020-21)

Sl. no.	Item	Information
1	Major Farming system/enterprise	Paddy-Paddy, Paddy-Pulse, Paddy-oilseed, Paddy-vegetables-vegetables, Paddy-Fallow, Dairy, Poultry, Mushroom, NTFP
2	Agro-climatic Zone	West Central Table Land
3	Agro ecological situation	<ul style="list-style-type: none"> • Plain Land Irrigated • Plain Land Rainfed • Undulating Plain Drought-prone • Undulating Sub-mountainous Tract Rainfed
4	Soil type	Red & Yellow, Lateritic, Black soil
5	Productivity of major 2-3 crops under cereals, pulses, oilseeds, vegetables, fruits and others (q/ha.)	Paddy-45.3 (K), Paddy-62.9 (R), Greengram-3.0(K), Greengram-4.9(R), Groundnut-17.5 (K), Groundnut-23.85 (R), Wheat-14.1, Maize-33.0, Blackgram-2.75, Pigeonpea-11.5, Mustard-8.75, Sesamum-2.1, Potato-103.5, Brinjal-220, Chilli-65 Mango-52.2, Banana-18.3
6	Mean yearly temperature, rainfall, humidity of the district	14-43 ⁰ c, 1367.3mm, 74%
7	Production of major livestock products like milk, egg, meat etc.	Milk-45700MT, Meat-16400 MT, Egg-70.94 million

Note: Please give recent data only

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

Sl. No.	Name of Taluk	Name of the block	Name of the villages	Major crops & enterprises	Major problems identified (crop-wise)	Identified Thrust Areas
1	Bargarh	Sohela	Bandenbahal	Paddy, Pigeon pea, Groundnut Vegetables & Poultry	<ul style="list-style-type: none"> • Low yield and Non availability of improved variety in fingermillet • Poor productivity of groundnut due to disease complex • Food and Nutritional insecurity in farming community • Low productivity of country birds 	<ul style="list-style-type: none"> • Integrated crop management in fingermillet. • IPDM in groundnut. • Household foods & nutritional security • Income generating activities for rural women
2	Bargarh	Attabira	Lahanda	Paddy, Vegetables, Mushroom	<ul style="list-style-type: none"> • Poor Marketing of HYV rice • Difficulty to collect straw after harvest by combined Harvester in rice • No catch crop between two rice crops • Low yield due to shoot and fruit borer in brinjal • Low income from traditional var. of tomato • Distress sale of Tomato in rabi season • Food and Nutritional insecurity in farming community • Low productivity of country birds 	<ul style="list-style-type: none"> • Integrated crop management in rice • Farm Mechanization • Integrated crop management in mustard • IPDM in brinjal • Varietal Evaluation • Market Led Extension • Household foods & nutritional security • Income generating activities for rural women
3	Bargarh	Bhatli	Patrapalli	Paddy, Greengram Vegetables, Groundnut Sesamum,	<ul style="list-style-type: none"> • Low income from green gram due to traditional practices • Poor income from traditional var. of tomato • Low yield of Onion 	<ul style="list-style-type: none"> • Integrated crop management in greengram • Varietal evaluation in tomato. • Varietal evaluation of

Sl. No.	Name of Taluk	Name of the block	Name of the villages	Major crops & enterprises	Major problems identified (crop-wise)	Identified Thrust Areas
				Fishery	<ul style="list-style-type: none"> • Less price realization from raw banana • Digging of pits by manually is time consuming work, more costly and painful • Low milk production in cows due to inadequate feed management 	<p>onion.</p> <ul style="list-style-type: none"> • PHM in banana • Farm Mechanization Dairy management
4	Bargarh	Ambabhona	Kusmuda	Paddy, Greengram Mustard, Dairy	<ul style="list-style-type: none"> • Low income from green gram due to traditional practices • No income from fallow land after rice harvesting. • Low yield of Onion • Difficulty to collect straw after harvest by combined Harvester in rice 	<ul style="list-style-type: none"> • Integrated crop management in greengram • crop production technology of mustard • Varietal evaluation of onion. • Farm Mechanization in paddy
5	Bargarh	Bijepur	T. Gandapalli	Paddy, Greengram, pigeon pea Groundnut, vegetables Poultry	<ul style="list-style-type: none"> • Poor yield from local varieties in pigeon pea. • Poor mechanization in pulse crop • More time in manual weeding in brinjal. • Low productivity of country birds 	<ul style="list-style-type: none"> • Integrated crop management in pigeon pea • Farm Mechanization in pulses • Farm Mechanization in Brinjal • Income generating activities for rural women

2. c. Details of village adoption programme:

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

Name of village	Block	Action taken for development
Bandenbahal	Sohela	Popularisation of HYV of Finger millet (Var. Arjun) Assessment on Integrated Disease Management practices for Pea Nut Bud Necrosis Disease in Rabi Groundnut Demonstration of Nutritional garden for Improving Nutritional Security of farm family Demonstration of Kadaknath breed of poultry
Lahanda	Attabira	Popularisation of production technology of scenetd organic paddy Demonstration of Tractor Operated Straw Baler for collection of Paddy straw CFLD in mustard Demonstration of Integrated Pest Management modules for management of Shoot and fruit borer in brinjal during Rabi Popularization of Triple Disease Resistance tomato Hybrid “ Arka Rakshak Assessment of different planting time for better market price of Tomato Demonstration of Nutritional garden for Improving Nutritional Security of farm family Demonstration of Kadaknath breed of poultry
Patrapalli	Bhatli	CFLD on greengram Popularization of Triple Disease Resistance tomato Hybrid “ Arka Rakshak Assessment of different ONION varieties for higher yield Demonstration of Low cost Ripening Chamber in Banana Demonstration of tractor operated post hole digger. Assessment of low cost feed mixtures on milk production in dairy cows.
Kusmuda	Ambabhona	CFLD on greengram CFLD on mustard Assessment of different ONION varieties for higher yield Demonstration of Tractor Operated Straw Baler for collection of Paddy straw
T. Gandapalli	Bijepur	Popularisation of HYV of Finger millet (Var. Arjun) Assessment on ridge and furrow method of planting for Pigeon pea Demonstration of Integrated Pest Management practices against Mango thrips (<i>Coliothrips indicus</i>)

Achievements on technologies assessed and refined

OFT-1

1.	Title of On farm Trial	Assessment of Bioefficacy of Novel insecticide Triflumesopyrim 10.6SCfor BPH management in Kharif rice
2.	Problem diagnosed	Non availability of suitable preventive pesticide to control BPH before its outbreak
3.	Details of technologies selected for assessment/refinement	Spraying of Novel insecticide, Triflumesopyrim 10.6 SC @ 237 ml /Ha at 50DAS and second after 25days
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	NRRI, Cuttack 2019 & AICRP. Chiplima2018
5.	Production system and thematic area	Rice-Rice ,IPM
6.	Performance of the Technology with performance indicators	Preventivespray, Mesoionic insecticides, Beneficial/Harmless to natural enemies like Spiders % of damage by BPH, no. of hoppers /tillers Yield, Additional income over additional investment B:C ratio
7.	Final recommendation for micro level situation	Preventive spray of Triflumesopyrim 10.6 SC @ 237 ml /Ha at 50DAS and second after 25days will check building of BPH population to EIL.
8.	Constraints identified and feedback for research	High cost of chemical ,identification of low cost local available organic substitute of the chemical.
9.	Process of farmers participation and their reaction	Observing BPH population at P.I stage & they are happy after seeing no visible damage by BPH

Thematic area: Integrated Pest Management

Problem definition: High BPH population at grain maturing stage leading to heavy yield loss.

Technology assessed: **Bioefficacy of Novel insecticide Triflumesopyrim 10.6SCfor BPH management in Kharif rice**

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. (1000 grain wt.)						
Var: MTU-7029, manual transplanting, High N fertilizer (100kg/Ha), Spraying of Buprofezin 25 SC @ 325ml/Ha twice after appearance of BPH Symptom	7	34	23	25.3	8	40.8	56500	75480	18980	1.33
Var: MTU-7029+ Making alleys at a distance of 2 m in paddy field. use of spider trap @ 25/ha, neem based Alternate Spraying of flonicamid 50 WG @ 150 gm /ha and neem based pesticide 3000 ppm @ 1500 ml/ha at 10 days interval + Repeated with Spraying of pymetrozine 50 WG @ 120 gm/acre at 15 days interval commencing from insect appearance	7	37	25	26.2	6	46.3	63700	85655	21955	1.34
Var: MTU-7029, Spraying of Novel insecticide, Triflumesopyrim 10.6 SC @ 237 ml /Ha at 50DAS and second after 25days	7	38	27	26.7	1.5	49.6	66800	91760	24960	1.37

OFT-2

1.	Title of On farm Trial	Assessment of IDM practices against Pea Nut Bud Necrosis Disease of Rabi Groundnut
2.	Problem diagnosed	Low yield due to high occurrence of PNBD in rabi groundnut
3.	Details of technologies selected for assessment/refinement	Seed treatment with Imidacloprid 70 WS @ 5ml/kg of seed. Spraying of Fipronil 5 SC @ 3.0 mSl/lit. Removal of infected plant
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	RRTTS , Chipilima(OUAT)
5.	Production system and thematic area	Rice –Groundnut-Fallow, IDM
6.	Performance of the Technology with performance indicators	Lowcost, Eco- friendly, No. of pods /plant, Yield Qtl/ha, net income, B:C
7.	Final recommendation for micro level situation	Seed treatment with Imidacloprid 70 WS @ 5ml/kg of seed. Spraying of Fipronil 5 SC @ 3.0 ml/lit. is must to control PNBD
8.	Constraints identified and feedback for research	Availability of proper ST chemical in market ,developing resistant varieties to sucking pests.
9.	Process of farmers participation and their reaction	Actively involved during spraying of pesticides, counting infected plants and uprooting them, unwillingness to uprooting infected plants

Thematic area: Integrated Disease Management

Problem definition: Loss of foliage, Stunting and poor pod filling due to PNBD

Technology assessed: IDM practices such as treatment with Imidacloprid 70 WS @ 5ml/kg of seed. Spraying of Fipronil 5 SC @ 3.0 ml/lit.

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
		Number of branches /plant	No. of pods/plant	Test wt. (100grain wt.)						
Seed Rate@ 75kg /Ha. Spraying of Carbendazim 12 % + Mancozeb 67% @1.5 gm/lit after appearance of disease	7	8	21	38.2	8	16.5	56300	82500	26200	1.46
Seed treatment with Imidacloprid 70 WS @ 5ml/kg of seed. Spraying of imidacloprid 17.8 SL @ 0.3 ml/lit	7	12	29	39.1	5	19.4	60200	97000	36800	1.61
Seed treatment with Imidacloprid 70 WS @ 5ml/kg of seed. Spraying of Fipronil 5 SC @ 3.0 ml/lit. Removal of infected plant	7	13	32	43.2	1	21.6	62400	108000	45600	1.73

OFT-3

1.	Title of On farm Trial	Assessment of INM of Broccoli in Rabi season.
2.	Problem diagnosed	Low yield due imbalanced dose of fertilizer
3.	Details of technologies selected for assessment/refinement	In Broccoli, application of boric acid + MnSO ₄ @ 100 ppm each, three sprays at 10 days interval from 30 days after transplanting is recommended for maximum yield
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	OUAT2014
5.	Production system and thematic area	Irrigated upland,INM
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	INM with Boron and Mn can increase the yield.
8.	Constraints identified and feedback for research	Seeds are not timely available.
9.	Process of farmers participation and their reaction	Training and Field Day.

Thematic area:

Problem definition:

Technology assessed:

Table:

Technology option	No. of trials	Days to 50% Maturity	Avg curd weight(gm)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
FP	10	89.4	304.31	103	125000	206000	81000	1.64
TO1	10	85.6	292.20	112	144400	224000	79600	1.55
TO2	10	84.6	313.12	125	144000	250000	106000	1.73

OFT-4

1.	Title of On farm Trial	Assessment of different YMV resistance greengram varieties
2.	Problem diagnosed	Low yield from green gram due to YMV infestation
3.	Details of technologies selected for assessment/refinement	FP-Cultivation of Var. IPM 02-14 TO ₁ -Var. ML 2056 TO ₂ -Var. Pant Mung 8
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	PAU Ludhiana, 2016 & GBPUT, Panthnagar, 2016
5.	Production system and thematic area	Irrigated Medium land and Varietal evaluation
6.	Performance of the Technology with performance indicators	No. of Pods/plant, 1000 seed weight(g), Yield/ha(q/ha), B:C ratio
7.	Final recommendation for micro level situation	Variety pant Mung has better yield potential and tolerant to disease and pest.
8.	Constraints identified and feedback for research	Non-availability of quality seed at proper time
9.	Process of farmers participation and their reaction	Field visit, Yield result was good and less incidence of disease and pest.

Thematic area: Varietal evaluation

Problem definition: Low yield from green gram due to YMV infestation

Technology assessed: Assessment of different YMV resistance greengram varieties

Table :

Technology option	No. of trials	Yield component			Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		No. of Pods/plant	Pod length (cm)	% of YMV incidence					
FP	7	17	7.2	2.1	4.84	24527	34829	10302	1.42
TO1	7	20	7.9	1.8	4.2	21435	30223	8788	1.40
TO2	7	22	8.5	1.5	5.4	24286	38858	14572	1.6

OFT-5

1.	Title of On farm Trial	Assessment of drought tolerant rice varieties for transplanted rainfed Medium land
2.	Problem diagnosed	<ul style="list-style-type: none"> • Low yield under drought condition • Moisture stress condition at critical stage of plant growth • Unavailability of suitable drought tolerant variety
3.	Details of technologies selected for assessment/refinement	<p>TO₁-Sahabgadhyan- Early duration (100days), highly drought tolerance and has average productivity of 3.8-4.5t/ha.</p> <p>TO₂-Satyabhama- Early duration (105-110days), medium slender grains and tolerance to glume discoloration, average productivity of 2.8t/ha under drought and 4.7t/ha under favorable conditions.</p> <p>TO₃-Swarna Shreya- Medium Duration (120-125), long bold grains, Aerobic Rice variety, withstand drought, average productivity 4.5-5.0t/ha, under severe drought-2.0-2.5t/ha</p>
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	<p>Sahabgadhyan-NRRI, Cuttack 2011</p> <p>Satyabhama-NRRI, Cuttack 2012</p> <p>Swarna shreya- Source: ICAR Research Complex for Eastern Region, Patna, 2015</p>
5.	Production system and thematic area	<p>Transplanted rainfed Medium land</p> <p>Varietal evaluation</p>
6.	Performance of the Technology with performance indicators	No. of effective tillers/hill, No. of filled grain/panicle, 1000 grain weight (g), Yield/ha (q/ha), B:C ratio
7.	Final recommendation for micro level situation	Variety Swarna shreya has capacity to withstand drought and better yield potential as compare to other treatment in drought situation.
8.	Constraints identified and feedback for research	More research work is needed for weed management in rainfed situation.
9.	Process of farmers participation and their reaction	Field demonstration, showing interest to grow the variety swarna shreya and Yield result was good and less incidence of disease and pest.

Thematic area: Varietal evaluation

Problem definition: Low yield under drought condition

Technology assessed: Assessment of drought tolerant rice varieties for transplanted rainfed Medium land

Table:

Technology option	No. of trials	Yield component			Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		No. of effective tillers/hill	No. of filled grain /panicle	1000 grain weight (g)					
FP	7	10	114	22.2	32	42697	59776	17079	1.4
TO1	7	13	123	24.3	35	41506	65380	23874	1.57
TO2	7	14	125	24.1	38	42190	70984	28794	1.68
TO2	7	16	128	25.5	41	40956	76588	35632	1.87

OFT-7

1.	Title of On farm Trial	Assessment of packaging practices of paddy straw mushroom
2.	Problem diagnosed	Less price realisation from paddy straw mushroom in local market due to short shelf life during peak harvesting period
3.	Details of technologies selected for assessment/refinement	FP: Unwashed fresh fruit bodies in bud stage in polythene bags TO ₁ : Fresh Mushrooms Buds washed with potassium meta bisulphite (KMS 0.1% and 0.1% citric acid,) for 10 minutes and allowed to air dry on muslin cloth for 30 min and then packed in perforated polypropylene bags punched with 10 holes stored at room temperature. TO ₂ : Fresh Mushrooms Buds treated with potassium meta bisulphite (KMS 0.1% and 0.1% citric acid,) for 10 minutes and allowed to air dry on muslin cloth for 30 min and then packed in paper Bags punched with 10 holes (0.5 cm diameter) stored at room temperature
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	PAU,2010
5.	Production system and thematic area	Homestead & Value addition
6.	Performance of the Technology with performance indicators	shelf life (Hour) ,sensory evaluation (0-9 point hedonic scale),,wt. loss(%),B:C ratio,
7.	Final recommendation for micro level situation	The shelf life of mushroom can be retained upto 24 hours in paper bags after treating with citric acid & potassium metabisulphite for better marketing
8.	Constraints identified and feedback for research	More strong packaging material should be developed as sometime paper packaging have damaged due to more respiration.
9.	Process of farmers participation and their reaction	Women are actively involved in packaging of mushroom & showed their preference towards the paper packaging as the shelf life could be restored for more hours as compared to their conventional packaging.

Thematic area: Value addition

Problem definition: **Less price realisation from paddy straw mushroom in local market due to short shelf life during peak harvesting period**

Technology assessed: **Assessment of packaging practices of paddy straw mushroom**

Table:

Technology option	No. of trials	Yield component		Shelf life (Hr.)	Cost of intervention (Rs./kg of mushroom)	Gross return (Rs/kg of mushroom)	Net return (Rs./kg. of mushroom)	BC ratio
		Overall acceptability (0-9 point hedonic scale)	Weight loss (%)					
FP:	7	5	12	8	70	140	70	2.0
TO ₁ :	7	7	3	18	75	165	90	2.2
TO ₂ :	7	8	7	24	85	200	115	2.3

OFT-8

1.	Title of On farm Trial	Comparative Assessment of Heat tolerant improved poultry breeds for production in Backyard system
2.	Problem diagnosed	Poor production and income from local nondescript desi type chicken
3.	Details of technologies selected for assessment/refinement	FP-Rearing of Desi birds TO1-Rearing of Kadaknath TO2-Rearing of Aseel
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Annual Report 2016-17, Dir. of Poultry , ICAR Annual Report 2017-18, ICAR-CARI
5.	Production system and thematic area	Homestead & Income Generating activities
6.	Performance of the Technology with performance indicators	Adult Body weight (Kg), annual egg production(No.), B:C ratio
7.	Final recommendation for micro level situation	Kadaknath rearing in backyard is a profitable venture
8.	Constraints identified and feedback for research	Low body wt. compared to Aseel breed & Upgradation of kadaknath breed havin more body wt. & more egg laying capacity
9.	Process of farmers participation and their reaction	Active participation of farm women in kadaknath rearing & are satisfied with their additional income from it.

Thematic area- Income Generating activities

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

Technology assessed: **Comparative Assessment of Heat tolerant improved poultry breeds for production in Backyard system**

Table:

Technology option	No. of trials	Yield component	Adult body wt. (kg.)	Cost of rearing (Rs./20 birds)	Gross return (Rs/20 birds)	Net return (Rs./20 birds)	BC ratio
		No. of eggs/annum					
FP-Rearing of Desi birds	7	55	1.200	6100	14000	7900	2.2
TO1-Rearing of Kadaknath	7	90	1.750	8000	26680	18680	3.3
TO1-Rearing of Aseel	7	75	2.400	7700	24450	16750	3.1

OFT-9

1.	Title of On farm Trial	Assessment on power pulse thresher for threshing of green gram
2.	Problem diagnosed	Threshing by manually is time consuming work, more costly and more breakage
3.	Details of technologies selected for assessment/refinement	Threshing of green gram by power pulse thresher
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Validated by AICRP on FIM, CAET, OUAT, 2015
5.	Production system and thematic area	Paddy-Green gram, Farm Mechanisation
6.	Performance of the Technology with performance indicators	Field capacity (ha/hr), Labour (mandays/ha), Cost of operation/ha, Yield (Q/hr), B:C ratio
7.	Final recommendation for micro level situation	Use of power pulse thresher will solve breakage of seeds & more time of threshing.
8.	Constraints identified and feedback for research	Some seeds are coming along with dust and chaff. That should be checked.
9.	Process of farmers participation and their reaction	Farmers are happy due to less time taken for threshing and cleaning of seeds.

Thematic area: Farm Mechanisation

Problem definition: Threshing by manually is time consuming work, more costly and more breakage

Technology assessed: Threshing of green gram by electric operated pulse thresher.

Table:

Technology option	No. of trials	Yield component			Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Yield (Kg/hr)	Labour (mandays/qtl)	Cost of operation/qtl					
Threshing by hand beating	7	5	10	2100	3.2	11900	15100	3200	1.27
Threshing by Tractor treading	7	11	8	1600	3.7	14100	18400	4300	1.30
Threshing by power pulse thresher	7	24	3	650	4.1	15300	20600	5300	1.35

OFT-10

1.	Title of On farm Trial	Assessment on ridge and furrow method of planting for pigeon pea
2.	Problem diagnosed	Less germination of seed due to water stagnation and drainage problem
3.	Details of technologies selected for assessment/refinement	Use of 2 bottom tractor drawn ridger
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Validated by AICRP on FIM, CAET, OUAT, 2015
5.	Production system and thematic area	Pigeon pea- fallow, Farm Mechanisation
6.	Performance of the Technology with performance indicators	Field capacity (ha/hr), Labour (mandays/ha), Cost of operation/ha, Yield (Q/hr), B:C ratio
7.	Final recommendation for micro level situation	Use of tractor operated ridger will solve water drainage problem and germination of seeds for pigeon pea in Kharif season.
8.	Constraints identified and feedback for research	After ridging, sowing was done manually. So a seed drill should be attached with the ridger for reducing cost of production.
9.	Process of farmers participation and their reaction	Farmers are happy due to less time taken for making ridge and furrow and good germination of seeds.

Thematic area: Farm Mechanisation

Problem definition: Less germination due to water stagnation after sowing in the field leading to less yield.

Technology assessed: Use of tractor operated ridger for making ridge and furrow against sowing of pigeon pea

Table:

Technology option	No. of trials	Yield component			Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Field capacity (ha/hr)	Labour (mandays/ha)	Cost of operation/ ha					
Ridge and furrow manually	7	0.1	12	3100	7.3	24200	30700	6500	1.27
Bullock drawn plough	7	0.3	6	2500	9.7	26100	34000	7900	1.30
Tractor drawn ridger	7	0.5	2	1800	11.0	30200	41000	10800	1.36

OFT-11

1.	Title of On farm Trial	Assessment on Power operated Finger millet Thresher
2.	Problem diagnosed	High labour intensive, cost and time involved in manual threshing, Poor quality of Grain
3.	Details of technologies selected for assessment/refinement	Threshing by electric operated Finger millet Thresher
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	Validated by AICRP on FIM, CAET, 2018
5.	Production system and thematic area	Finger millet-Fallow, Farm Mechanisation
6.	Performance of the Technology with performance indicators	Working Capacity (Q/h), Threshing efficiency (%), Cleaning efficiency (%)
7.	Final recommendation for micro level situation	Use of power thresher reduces cost in threshing & reduction of drudgery.
8.	Constraints identified and feedback for research	Some seeds are coming along with husk. That should be checked.
9.	Process of farmers participation and their reaction	Actively participated during operation of machine and checking of seeds and separated husks

Thematic area: Farm Mechanisation

Problem definition: Manual threshing of finger millets leads to less recovery and poor quality seeds along with more cost.

Technology assessed: Use of power thresher for threshing of finger millets.

Table:

Technology option	No. of trials	Yield component			Yield (q/hr)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Field capacity (kg/hr)	Labour (mandays/ qtl)	Cost of operation/ qtl					
Threshing by hand beating	7	20	13	490	11	24500	40100	15600	1.6
Threshing by power tiller treading	7	40	5	350	15	23200	46600	23400	2.0
Threshing by power thresher	7	51	3	250	17	22800	55300	32500	2.4

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 short fall in achievement
				Proposed	Actual	SC		ST		Others		Total			
						M	F	M	F	M	F	M	F	T	
1.	Rice	Crop production	Introduction of Biofortified Rice variety CR Dhan 311 in transplanted irrigated Medium land Grown of Rice var. CR dhan 311 having duration 120-125 and contains 10.1% protein, zinc content 20ppm. Yield Potential 4.5t/ha	2	2					10		10		10	
2.	Rice	Crop production	POPULARISATION OF production technology of scenetd organic paddy ScenetedVar.Nuadhusara,/Nuaachharmatis Spraying of Bacillus thuringiensis(Bt),green manuring with Dhanicha,spraying of NSKE@10KG/acre & release of <i>Trichogramma japonicum</i> @40000/wk,.	2	2	1		2		7		10		10	
3.	Paddy	Farm Mechanization	Tractor Operated Straw Baler for collection of Paddy straw (It is tractor PTO operated. It picks up threshed straw left by combine harvester. It compresses straw into bales weighing 20-30kg. It requires 45hp or above dual clutch tractor.	2	2	3	0	1	0	6	0	10	0	10	
4	Mango	Farm Mechanization	Demonstration on tractor operated post- hole digger (Post hole digger can be operated by PTO of 45hp tractor. Hole size and depth can be made according to requirement)	2	2	2	0	3	0	5	0	10	0	10	
5	Chilli	Varietal Evaluation	Demonstration of Chilli variety for for Dry chilli.	1	1	2	0	2	0	6	0	10	0	10	
6	Tomato	Varietal Evaluation	Demonstration on triple resistant (early blight, bacterial wilt, leaf curl virus) tomato varieties	1	1	2	0	1	0	7	0	10	0	10	
7	Broccoli	INM	Demonstration of Alternate cole crop (Broccoli) with INM for better return	1	1	1	0	2	0	7	0	10	0	10	
8	Banana	PHM	Demonstration of Low cost Ripening Chamber in Banana	10	10	1	0	2	0	7	0	10	0	10	

Sl. No.	Crop	Thematic area	Technology Demonstrated with detailed treatments	Area (ha)		No. of farmers/ demonstration									Reasons for short fall in achievement
				Proposed	Actual	SC		ST		Others		Total			
						M	F	M	F	M	F	M	F	T	
9	Rice	IPM	HYV-HASANTA+ Making alleys at a distance of 2 m in paddy field. use of spider trap @ 25/ha, need based Alternate Spraying of flonicamid 50 WG @ 150 gm /ha and neem based pesticide 3000 ppm @ 1500 ml/ha at 10 days interval, commencing from insect appearance	2.0	2.0	2		2		6		10		10	
10	Rice	IPM	HYV-HASANTA+ Making alleys at a distance of 2 m in paddy field. use of spider trap @ 25/ha, need based Alternate Spraying of flonicamid 50 WG @ 150 gm /ha and neem based pesticide 3000 ppm @ 1500 ml/ha at 10 days interval, commencing from insect appearance	2.0	2.0	2		2		6		10		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	P2O5	K2O					
Rice	Kharif	Irrigated Medium land	Red laterite	212	43	251	Rice	11.07.2019	16.10.2019		67
Rice	Kharif	Irrigated Medium land	Red laterite	222	56	182	Rice	25.06.2019	21.10.2019		67
Paddy	Kharif	RF	Red laterite	223	49	253	Rice	29.06.2020	28.10.2020		
Mango	Kharif	RF	Red laterite	232	55	276	Fallow				
Rice	Kharif	Irrigated	Red laterite	232	42	248	Rice	20.06.2020	16.11.2020	1303.16	61

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 oilseed crops

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Groundnut	IDM	Popularisation of Integrated Disease Management practices for Pea Nut Bud Necrosis Disease in Rabi Groundnut (Seed treatment with Imidacloprid 70 WS @ 5ml/kg of seed. Spraying of Fipronil 5 SC @ 3.0 ml/lit. Removal of infected plant)	10	2.0	19.6	15.3	21.56	62800	98000	35200	1.56	57800	76500	18700	1.32

* 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

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
Green gram	Farm Mechanization	Demonstration on Tractor Drawn seed cum fertilizer drill for sowing of green gram	10	2	4.1	3.2	28	13300	18000	4700	1.35	12600	14900	2300	1.20
Green gram	Storage loss minimization techniques	Demonstration on "Grain pro super bag" for storage of Pulses	10	1	Insect infestation % - 2.3	17.8	15.5	5440	7820	2380	1.43	5200	6580	1380	1.26

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

** BCR= GROSS RETURN/GROSS COST

Other crops

Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	Other parameters		*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demonstration	Check		Demo	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Paddy	Farm Mechanization	Demonstration on Tractor Operated Straw Baler for collection of Paddy straw	10	2	41	38	9	3 (mandys/ha) 0.23 Field capacity (ha/hr)	10 (mandys/ha) 0.11 Field capacity (ha/hr)	32600	49600	16900	1.5	35800	46600	10800	1.3
Mango	Farm Mechanization	Demonstration on tractor operated post-hole digger	10	2	Cont..	Cont.	Cont.	1 (mandys/ha) 1250 Cost of operation (Rs/ha)	25 (mandys/ha) 3500 Cost of operation (Rs/ha)	Cont.	Cont.	Cont.	Cont.	Cont.	Cont.	Cont.	Cont.
Onion	Varietal evaluation	Popularization of Kharif onion Bhima super	10	0.4	136	125	8.8	64.5	56.8	62000	136000	74000	1:2.2	60500	125000	64500	1:2.06
Tomato	Varietal evaluation	Popularization of Triple Disease Resistance tomato Hybrid “Arka Rakshak”	10	0.6	445	422	5.4	(mortality) 0	(mortality) 8%	51700	89000	37300	1.72	53500	84400	30900	1.58

Category	Thematic Area	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters (Live body wt. -kg./annum)		% change in major parameter	Other parameter (No. of eggs/annum)		*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
Rabbitry																	
Pigerry																	
Sheep & goat																	
Duckery																	
Others (pl.spec)																	
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

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters (Productivity in q/ha.)		% change in major parameter	Other parameter (Avg. body wt in 8months) gm.		*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Common carps																	
Mussels																	
Ornamental fishes																	
Indian Major Carps																	
Indian Major Carps																	

* 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

Category	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters (yield-Kg./bed)		% change in major parameter	Other parameter (No. of days for pinhead formation)		*Economics of demonstration (Rs.) or Rs./unit				*Economics of check (Rs.) or Rs./unit				
				Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR	
Paddy straw mushroom																	
Button mushroom																	
Vermicompost																	
Sericulture																	
Apiculture																	

* 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/ha)	Cost reduction (Rs./ha or Rs./Unit)
					Demonstration	Check			
Tractor Drawn seed cum fertilizer drill	Green gram	Demonstration on Tractor Drawn seed cum fertilizer drill for sowing of green gram	10	2	Field capacity (Ha/hr): 0.4	Field capacity (Ha/hr):0.21	47	Demo: 1 Check: 3 % Change: 66	Demo: 210 Check: 630 % Change:
Tractor Operated Straw Baler	Paddy	Demonstration on Tractor Operated Straw Baler for collection of Paddy straw	10	2	Field capacity (Ha/hr): 0.23	Field capacity (Ha/hr):0.11	52	Demo: 3 Check: 10 % Change: 70	Demo: 3500 Check: 4700 % Change: 25
tractor operated post-hole digger	Mango	Demonstration on tractor operated post-hole digger	10	2	Field capacity (No of holes/hr): 46	Field capacity (No of holes/hr): 9	80	Demo: 1 Check: 25 % Change: 96	Demo: 1250 Check: 3500 % Change: 64
Cycle Weeder	Nutritional Garden	Demonstration of Cycle Weeder in nutritional garden for drudgery reduction of farmwomen	10	0.2	180	40	350	27	8310

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

Technical Feedback on the demonstrated technologies

Sl. No	Crop	Feed Back
1	Rice	They happy with high yield and tolerant to leaf blast, brown spot and bacterial leaf blight, yield potential is better and showing interest to grow paddy variety CR dhan 311 due to high protein and Zinc content.
2	Rice	Farmers are very much satisfied with this technology because of less incidence of disease and pest and reduction in cost of cultivation
3	Greengram	Efficient method of weed management and producing better yield with more economic return.
4	Rice	BPH Tolerant variety having fine grain quality(Long , Slender)
5	Brinjal	HYV Varieties having BT type performance
6	Nutritional Garden	More yield can be obtained through adopting trailey system for cucurbitace vegetables in nutritional Garden
7	Cycle weeder	Drudgery of farm women reduced to 62 %by use of cycle weeder
8	Azolla	Milk yield is enhanced through Supplementation of azolla in 1:1 with commercial feed
9	Pro garin super bag	Pulse can be safely stored upto six months in pro grain super bag

4. Extension and Training activities under FLD

Sl.No.	Activity	Date	No. of Activities Organized	Number of Participants	Remarks
1.	Field days	10.2.2020	1	40	Highly Appreciated
2.	Farmers Training	22.10.2020, 20.11.20, 29.12.2020	3	65	
3.	Media coverage	12.11.2020	1	Mass	
4.					
5	Field days	6.11.2020	1	35	Popularization of BPH Tolerant rice variety "Hasant"
6		01.03.2021	1	30	Popularization of IDM practices against
7	Farmers Training	01.12.2020	1	25	IDM OF Pointed Gourd
8		22.02.2020	1	25	IPM Modules for management of shoot and fruit aborer of Brinjal
9	Media coverage				
10	Training for extension functionaries	25.02.2021	1	12	New molecules for BPH Management
11	Field Day	02.12.20	1	30	Use of cycle weeder in nutritional garden for drudgery reduction of farm women
12		04.12.2020	1	30	Nutritional Gaarden for improving nutritional security of farm families
13	Radio tralk	17.02.21	1	Mass	Importance of Nutritional Garden
14	Preparation of CD	22.11.2020	1	5	Nutritional Garden (Odia)
15	Celebration of Poshan Maah	01.09.20-30.09.20	1	50	Creating Awareness on benefits of nutritional garden
16	Farmers Training	15.09.2020	1	25	Training on supplementary feed with azolla for milch cows
17		07.09.2020, 30.09.2020	2	25	Improved crop management practices in nutritional Garden
18		06.10.2020	1	25	Storage technique of green gram prograin super bag
19		19.10.2020	1	25	Use of cycle weeder in nutrional garden
20	Field days	16.10.2020	1	30	Highly appreciated
21	Farmers Training	04.03.2020	1	25	
23	Training for extension functionaries	29.01.2020, 09.12.2020	2	30	

Performance of the demonstration under CFLD on Oilseed & pulse Crops during summer 2019 & Kharif 2019:

PULSE

A. Technical Parameters:

Sl. No.	Crop demonstrated	Existing (Farmer's) variety name	Existing yield (q/ha)	Yield gap (Kg/ha) w.r.to			Name of Variety + Technology demonstrated	Number of farmers	Area in ha	Yield obtained (q/ha)			Yield gap minimized(%)		
				District yield (D)	State yield (S)	Potential yield (P)				Max.	Min.	Av.	D	S	P
1	Greengram Var.IPM-205-7(Virat)	Chaitu	5.6	495	480	1200	Var.IPM-205-7(Virat) - Line sowing behind plough 25 cm x 10 cm, Seed treatment with Carbendazim @1gm/kg & Rhizobium culture @ 20 gm/kg seed, STBF, Application of <u>Phospho - Gypsum @ 2.5 Q/Ha. Sprayingof Indoxacarb 15.8 SL @ 1ml/ 5litrs</u> of water, Spraying of Carbendazim 12% + Mancozeb 63% @ 2 gm. /ltr of water , Spraying of Sulphur 80WP @ 5 gm. /ltr of water	33	10	9.9	8.4	9.4	100	100	78.33

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	Greengram- Var.IPM-205-7(Virat) Line sowing behind plough 25 cm x 10 cm, Seed treatment with Carbendazim @1gm/kg & Rhizobium culture @ 20 gm/kg seed, STBF, Application of <u>Phospho - Gypsum @ 2.5 Q/Ha. Sprayingof Indoxacarb 15.8 SL @ 1ml/ 5litrs</u> of water, Spraying of Carbendazim 12% + Mancozeb 63% @ 2 gm. /ltr of water , Spraying of Sulphur 80WP @ 5 gm. /ltr of water	20000	25200	5200	1.25	28600	47000	18400	1.64

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	Greengram- Var.IPM-205-7(Virat) Line sowing behind plough 25 cm x 10 cm, Seed treatment with Carbendazim @1gm/kg & Rhizobium culture @ 20 gm/kg seed, STBF, Application of <u>Phospho - Gypsum @ 2.5 Q/Ha. Sprayingof Indoxacarb 15.8 SL @ 1ml/ 5litrs</u> of water, Spraying of Carbendazim 12% + Mancozeb 63% @ 2 gm. /ltr of water , Spraying of Sulphur 80WP @ 5 gm. /ltr of water	9462	200	55	2500	450	Labour Payment, loan payment, purchase of grocery, clothes for family members, school uniform for children & purchase of ornaments etc.	45

D. Pulse Farmers' perception of the intervention demonstrated

Sl. No.	Technologies demonstrated (with name)	Farmers' Perception parameters					Suggestions, for change/ improvement, if any
		Suitability to their farming system	Likings (Preference)	Affordability	Any negative effect	Is Technology acceptable to all in the group/ village	
1	HYV: Var.IPM-205-7(Virat) - Line sowing behind plough 25 cm x 10 cm, Seed treatment with Carbendazim @ 1gm/kg & Rhizobium culture @ 20 gm /kg seed, STBF, Application of <u>Phospho –Gypsum @ 2.5Q/Ha.</u> <u>Spraying of Indoxacarb 15.8 SL @ 1ml/ 5litrs of water</u> Spraying of Carbendazim 12%+ Mancozeb 63% @ 2 gm. /ltr of water	ideal	KVK, State Agri.Dept, ICAR, NGO, Input dealer	Good	No	yes	Purchase of pulses by RMCs.



E. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
Greengram- Var.IPM-205-7(Virat) Line sowing behind plough 25 cm x 10 cm, Seed treatment with Carbendazim @1gm/kg & Rhizobium culture @ 20 gm/kg seed, STBF, Application of <u>Phospho - Gypsum @ 2.5 Q/Ha.</u> <u>Spraying of Indoxacarb 15.8 SL @ 1ml/ 5litrs of water,</u> <u>Spraying of Carbendazim 12% + Mancozeb 63% @ 2 gm. /ltr of water ,</u> <u>Spraying of Sulphur 80WP @ 5 gm. /ltr of water</u>	Pods/plant Plant height	Av 79pods/plant(Demo) 41pods/plant(check) Av 56cm(Demo) 65cm (check)	<ul style="list-style-type: none"> Pod filling was better in rhizobium treated plants Colour of seeds was more shining in phospho- Gypsum plots Occurrence of YMV was very less than 2 %.

F. Extension activities under FLD conducted till dates:

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
	GREENGRAM		
1	Field visit	20.12.2020,29.12.2020,13.01.2021,25.02.2021 Ambabhona, Kusumuda, Bhukta, Patrapalli	59
2	Group meeting	20.12.2020,29.12.2020,13.01.2021,15.02.2021 Bhatli, Patrapalli, Bhukta, Kusumuda	45
3	Awareness Camp	28.12.2020 Ambabhona	60
4	Field day-cum-Exposure visit	27.02.2021 Bhatli,Patrapalli	30

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

	
<p>Greengram earthing up at Village- Kusumuda Block-Ambabhona, Bargarh, Odisha</p>	<p>Greengram harvesting at Village- Kusumuda, Block-Ambabhona, Bargarh, Odisha</p>

h. Farmers' training photographs



Farmers training at village Dumberpalli, Block: Shohella, Bargarh, Odisha

i. Quality Photographs of field visits/field days and technology demonstrated.



Field visit of Greengram at pod development stage, Village- patrapalli, Block-Bhatli, Bargarh, Odisha

j. Details of budget utilization

Crop (provide crop wise information)	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Green Gram	i) Critical input			
	ii) TA/DA/POL etc. for monitoring			
	iii) Extension Activities (Field day)			
	iv) Publication of literature			
	v) Technology Agent			
	G.Total	90000		

OILSEED

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	Mustard	Kujjisorisha	4.1	435	424	1000	HYV: Var: Tapeswhari , Line sowing behind plough 30 cm x 10 cm, Seed treatment with Vitavax power 9 (Carboxin 37.5% + Thiram 37.5%) @ 2.5 /kg seed, STBF, Application of <u>Spraying</u> of Imidachloprid 17.8SL @ 0.3 ml ml/litre of water, Spraying of Carbendazim 12%% plus Mancozeb 63 % @ 3 gm /Lit of water & spraying of Sulphur 80 WP @ 5 gm /lit of water	71	20	6.9	4.4	5.75	100	100	57

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	Mustard, HYV: Var: Tapeswhari , Line sowing behind plough 30 cm x 10 cm, Seed treatment with Vitavax power 9 (Carboxin 37.5% + Thiram 37.5%) @ 2.5 /kg seed, STBF, Application of <u>Spraying</u> of Imidachloprid 17.8SL @ 0.3 ml ml/litre of water, Spraying of Carbendazim 12%% plus Mancozeb 63 % @ 3 gm /Lit of water & spraying of Sulphur 80 WP @ 5 gm /lit of water	14200	18450	4250	1.3	20300	34500	14200	1.70

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	Mustard Variety – Tapeswhari	11546	170	40	1200	560	Labour Payment, loan payment, purchase of grocery, clothes for family members, school uniform for children purchase of ornaments etc.	35

d. Oilseed Farmers' perception of the intervention demonstrated

Sl. No.	Technologies demonstrated (with name)	Farmers' Perception parameters					Suggestions, for change/ improvement, if any
		Suitability to their farming system	Likings (Preference)	Affordability	Any negative effect	Is Technology acceptable to all in the group/village	
1	Mustard, HYV: Var: Tapeswhari , Line sowing behind plough 30 cm x 10 cm, Seed treatment with Vitavax power 9 (Carboxin 37.5% + Thiram 37.5%) @ 2.5 /kg seed, STBF, Application of <u>Spraying</u> of Imidachloprid 17.8SL @ 0.3 ml ml/litre of water, Spraying of Carbendazim 12%% plus Mancozeb 63 % @ 3 gm /Lit of water & spraying of Sulphur 80 WP @ 5 gm /lit of water	ideal	KVK, State Agri. Dept, ICAR, NGO, Input dealer	Good	No	yes	Establishment oil mill in the district

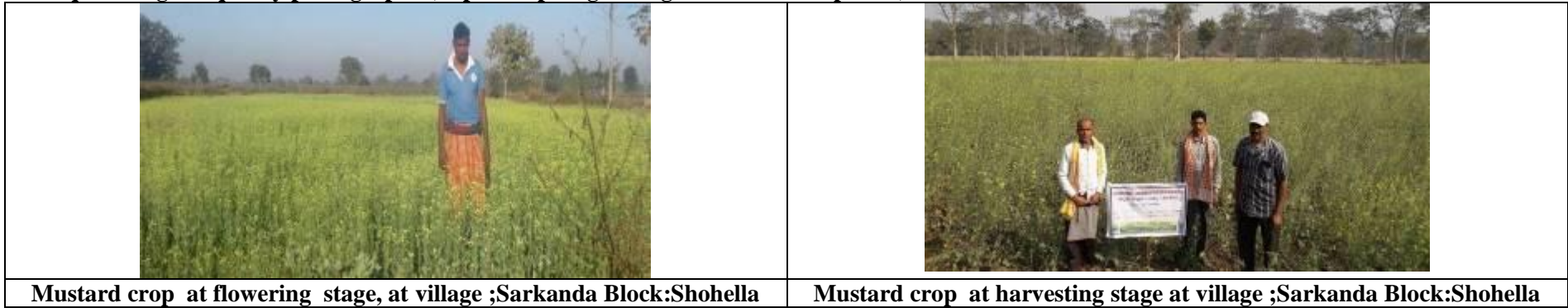
e. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
Mustard, Varitey Tapeswhari ,Moderately resistant to rust,Downey Mildew and Powdery mildew	Pods/plant Plant height	Av 97pods/plant(Demo), 85pods/plant(check) Av 120cm(Demo), 70cm (check)	<ul style="list-style-type: none"> No aphid problem

f. Extension activities under FLD conducted till dates:

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
1	Mustard		
	Field visit	10.01.2020, 08.02.2020, Shohella,Sarkanda	62
	Group meeting	28.11.2020, 27.12.2020, 3.01.2021, Padhanpalli, Sarkanda, Thapapalli	57
	Awareness Camp	29.11.2020, 04.01.2021, 22.01.2021, 19.02.2021, Padhanpalli, Sarkanda, Thapapalli	90
	Field day-cum-Exposure visit	20.02.2021, Padhanpalli	50

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



9. Farmers' training photographs



Training programme at KVK campus,Bargarh on IPm in Mustard

10. Quality Photographs of field visits/field days and technology demonstrated.



Field Day Rabi Mustard village : Sarkanda,Block-Shohellai,Dist-Bargarh, Odisha

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 (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														
Poultry Management														
Piggery Management														
Rabbit Management														
Animal Nutrition Management														
Disease Management														
Feed & fodder technologies														
Production of quality animal products														
Others(Duckery management)														
Total														
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	1	0	16	16	0	0	0	0	9	9	0	25	25	

G) Consolidated table (ON and OFF Campus)

i. Farmers & Farm Women

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			
I. Crop Production													
Weed Management	1	18	-	18	1	-	25	6	-	6	25	-	25
Resource Conservation Technologies													
Cropping Systems	1	21	-	21	1	-	1	3	-	3	25	-	25
Crop Diversification													
Integrated Farming													
Micro irrigation/irrigation													
Seed production	1	22	-	22	3	-	3	-	-	-	25	-	25
Nursery management													
Integrated Crop Management													
Soil & water conservation													
Integrated nutrient Management													
Production of organic inputs													
Others													
Total													
II. Horticulture													
a) Vegetable Crops													
Integrated nutrient management	1	14	0	14	07	0	07	04	0	04	25	0	25
Water management													
Enterprise development													
Skill development													
Yield increment													
Production of low volume and high value crops	1	14	0	14	09	0	09	02	0	02	25	0	25
Off-season vegetables													
Nursery raising													
Exotic vegetables like Broccoli													
Export potential vegetables													
Grading and standardization													
Protective cultivation (Green Houses, Shade Net etc.)													
Others, if any (Cultivation of Vegetable)													
Others													
Total (a)													
b) Fruits	1	20	1	21	03	0	03	01	0	01	24	1	25

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			
Total (g)													
Total(a-g)													
III. Soil Health and Fertility Management													
Soil fertility management	1	6	5	11	-	-	-	5	9	14	11	14	25
Integrated water management													
Integrated Nutrient Management	2	26	17	43	-	-	-	6	1	7	32	18	50
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													
Poultry Management													
Piggery Management													
Rabbit Management													
Animal Nutrition Management													
Disease Management													
Feed & fodder technologies													
Production of quality animal products													
Others													
Total													
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening	1	0	25	25	0	0	0	0	0	0	0	25	25
Design and development of low/minimum cost diet													
Minimization of nutrient loss in processing													
Gender mainstreaming through SHGs													
Storage loss minimization techniques	1	0	25	25	0	0	0	0	0	0	0	25	25
Enterprise development	1	0	20	20	0	4	4	0	1	1	0	25	25
Value addition	2	0	29	29	0	0	0	0	21	21	0	50	50
Income generation activities for empowerment of rural Women	3	0	56	56	0	7	7	0	12	12	0	75	75
Location specific drudgery reduction technologies	2	0	49	49	0	1	1	0	0	0	0	50	50

ii. RURAL YOUTH (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			
Nursery Management of Horticulture crops													
Training and pruning of orchards													
Protected cultivation of vegetable crops													
Commercial fruit production													
Integrated farming	1	9	0	9	0	0	0	6	0	6	15	0	15
Seed production													
Production of organic inputs	2	26		26	4		4				30		30
Planting material production													
Vermiculture	1	0	10	10	0	0	0	0	0	0	0	10	10
Mushroom Production	1	0	11	11	0	3	3	0	1	1	0	15	15
Beekeeping	1	9		9	1		1	2		2	12		12
Sericulture													
Repair and maintenance of farm machinery and implements	2	17	0	17	9	0	9	4	0	4	30	0	30
Value addition													
Small scale processing													
Post Harvest Technology													
Tailoring and Stitching													
Rural Crafts													
Production of quality animal products													
Dairying													
Commercial fruit production	1	9	0	9	1	0	1	5	0	5	15	0	15
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													
Enterprise development	3	41	0	41	10		10	4		4	45		45

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
Plant Science	15	Aromatic Rice production for more income	2	Off	15	-	15	2	-	2
Plant Science	25	Intercropping of maize with other crops	1	Off	25	-	25	4	-	4
Plant Science	15	Varietal characteristics of different greengram cultivars	1	Off	15	-	15	6	-	6
Plant Science	25	Integrated nutrient management in maize	1	Off	25	-	25	5	-	5
Plant Science	15	Scientific method of greengram seed production	2	Off	15	-	15	1	-	1
Plant Science	25	Integrated weed management in greengram	1	Off	25	-	25	7	-	7
Plant Science	15	Hybrid Seed production in Rice	2	On	15	-	15	1	-	1
Plant Science	25	Integrated Nutrient management in oilseed	1	Off	7	18	25	1	1	2
Plant Science	25	Quality Seed production in greengram	1	Off	25	-	25	3	-	3
Plant Science	15	Suitable Varieties and Improved technology in fingermillet production	1	Off	13	2	15	2	1	3
Plant Science	25	Soil quality and its management for sustainable farming	1	Off	11	14	25	5	9	14
Horticulture										
Horticulture	RY	Kharif onion cultivation	1	on	15	0	15	6	0	6
Horticulture	IS	Storage technique of onion	1	off	8	2	10	0	2	2
Horticulture	RY	Commercial Floriculture	2	ON	9	6	15	1	5	6
Horticulture	F/FW	Integrated crop management in Sweet Potato	1	off	8	17	25	8	17	25
Horticulture	F/Fw	Training on Chili Cultivation	1	OFF	11	4	15	7	4	11
Horticulture	F/FW	Integrated crop management in Banana	1	Off	25	0	25	5	0	5
Horticulture	F/FW	INM in Broccoli Cultivation	1	OFF	25	0	25	9	0	9
Horticulture	F/FW	Exotic vegetable Broccoli cultivation	1	OFF	25	0	25	11	0	11
Agril. Engineering										
Agril. Engg.	RY	Operation & maintenance of tractor operated paddy straw baler	1	OFF	15	0	15	5	0	5
Agril. Engg.	F/FW	Use & operation of power pulse thresher	1	OFF	25	0	25	2	0	2
Agril. Engg.	F/FW	Use & operation of MB plough for summer ploughing	1	OFF	25	0	25	7	0	7
Agril. Engg.	RY	Entrepreneurship development through Farm Mechanization	2	ON	15	0	15	4	0	4
Agril. Engg.	F/FW	Operation and maintenance of Micro Irrigation systems	1	ON	13	12	25	7	0	7

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
Agril. Engg.	RY	Use & operation of tractor operated ridger	2	ON	15	0	15	8	0	8
Agril. Engg.	F/FW	Value addition of different underutilized crops	1	OFF	7	18	25	6	12	18
Agril. Engg.	F/FW	Use & operation of tractor operated post hole digger	1	OFF	25	0	25	12	0	12
Agril. Engg.	F/FW	Water management practices in irrigated areas for paddy	1	OFF	25	0	25	7	0	7
Agril. Engg.	F/FW	Use of tractor operated straw baler	1	OFF	14	11	25	3	4	7
Agril. Engg.	F/FW	Use & operation of tractor drawn seed cum fertilizer drill	1	OFF	25	0	25	8	0	8
Agril. Engg.	F/FW	Use and operation of different Weeders	1	OFF	25	0	25	7	0	7
Home Science										
Home Science	F&FW	Use of women friendly tools related to groundnut cultivation	1	Off	0	25	25	0	0	0
Home Science	F&FW	Rearing management of improved poultry	1	Off	0	25	25	0	5	5
Home Science	IS	Preparation of low cost supplementary feed for children	1	Off	0	15	15	0	5	5
Home Science	F&FW	Value addition of nutriceals	1	Off	0	25	25	0	12	12
Home Science	VT	Vermicompost production for self –employment	5	On	0	10	10	0	0	0
Home Science	RY	Paddy straw mushroom cultivation from threshed straw	2	On	0	15	15	0	4	4
Home Science	F&FW	Training on supplementary feed with azolla for milch cows	1	On	0	25	25	0	7	7
Home Science	F&FW	Improved crop management practices in nutritional Garden	2	Off	0	25	25	0	0	0
Home Science	F&FW	Value added products of milk	1	On	0	25	25	0	9	9
Home Science	F&FW	Storage technique of green gram grain super bag	1	Off	0	25	25	0	0	0
Home Science	F&FW	Feeding managements of poultry chicks	1	Off	0	25	25	0	2	2
Home Science	F&FW	Use of cycle weeder in nutritional garden	1	Off	0	25	25	0	1	1
Home Science	F&FW	Scientific method of oyster mushroom cultivation	1	Off	0	25	25	0	10	10
Plant Protection	RY	Preparation of Biopesticides from local resources	2	Off	15		15	1		1
Plant Protection	RY	Preparation of organic inputs for sustainable organic production	2	Off	15		15	3		3
Plant Protection	F&FW	Storage technique in greengram	1	Off	25		25	4		4
Plant Protection	F&FW	IPM for Fruit fly affecting bittergourd	1	Off	25		25	18		18
Plant Protection	F&FW	Training on IDM practices against sheath blight	1	Off	25		25	1		1

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
		disease								
Plant Protection	F&FW	Integrated disease management for blast in rainfed medium land	1	Off	25		25			
Plant Protection	F&FW	IPM modules for management of shoot and fruit Borer of Brinjal	1	Off	25		25	3		3
Plant Protection	F&FW	Management of vinerot disease of pointed gourd	1	ON	25		25	4		4
Plant Protection	F&FW	Disease management of Kharif Tomato	1	Off	25		25	1		1
Plant Protection	VT	Techniques of Honey Bee keeping for income generation	1	Off	25		25	3		3
Plant Protection	F&FW	Training programme on management of sucking pest in green gram to check spread of YMV disease	1	Off	25		25	9		9
Plant Protection	F&FW	IPM Techniques for management of Mango Thrips	1	Off	25		25	15		15
Plant Protection	IS	New molecules of pesticide and their method of use for management of BPH	1	Off	12		12	6		6
Agril. Extn.	15	Market Led Extension	2	Off	15	-	15	3		3
Agril. Extn.	25	Group dynamics: Formation of Farm Science	1	Off	25	-	25	5	-	5
Agril. Extn.	25	Importance of Agro Advisory Services	1	Off	25	-	25	11	-	11
Agril. Extn.	25	Gender Mainstreaming through SHGs	1	Off	-	25	25	-	7	7
Agril. Extn.	15	Motivational and Communication skills for Impactful delivery of extension Services	1	Off	8	5	13	1	2	3
Agril. Extn.	15	ICT use for market networking	2	On campus	12		12	3		3
Agril. Extn.	25	Leadership development of farmers through farmers club	1	Off				15	10	25
Agril. Extn.	25	Group dynamics and formation of farmer-producer organization	1	Off				18	7	25
Agril. Extn.	15	Market led agriculture based on consumer preference	1	Off				12	3	15
Agril. Extn.	15	EDP training on agrienterprise sector to ensure startup	2	On campus	15		15	10		10
Agril. Extn.	15	Quality standard measures (good agricultural practices, packaging, branding)	2	On campus	14		14	1		1

H) Vocational training programmes for Rural Youth

Details of training programmes for Rural Youth

Crop / Enterprise	Identified Thrust Area	Training title*	Duration (days)	No. of Participants			Self Employed after training			Number of persons employed else where
				Male	Female	Total	Type of units	Number of units	Number of persons employed	
Production of Biopesticides	IPM	Production of Biopesticides from local resources	2	15		15	Small	3	10	24
Vermicompost	Income generating activities	Vermicompost production for self – employment	5	0	10	10	Homestead	6	6	2

*Training title should specify the major technology /skill transferred

(D) Sponsored Training Programmes

Sl.No	Title	Thematic area	Month	Duration (days)	Client PF/R/EF	No. of courses	No. of Participants										Sponsoring Agency
							Male			Female			Total				
							Others	SC	ST	Others	SC	ST	Others	SC	ST	Total	
1	Nursery Worker	Nursery Management	Feb & March	25	RY	1	15	5	0	0	0	0	15	5	0	20	ASCI, New Delhi
2	Tractor Operator	Farm Mechansm	Feb & March	25	RY	1	17	1	2	0	0	0	17	1	2	20	ASCI, New Delhi
3	Vermi Compost Production	Income generating activities	Aug 2019 to Jan 2020	80	PF	1	0	0	0	164	52	34	164	52	34	250	Dept. of women & Child Development & Mission Shakti, BBSR
4	Insecticide management	IPDM	Dec 2020	10	EF	1	39	1	0	0	0	0	39	1	0	40	NIPHM,. Hyderabad
5	ATMA Residential training	IFS	Oct Dec 2020	20	PF	10	250	10	10	20	5	5	270	15	15	300	ATMA

(E) Other Extension activities

Nature of Extension Activity	No. of activities
Newspaper coverage	7
Radio talks	8
TV talks	2
Popular articles	12
Extension Literature	15
Other, if any	-

(F) a. Production and supply of Technological products

Village seed

Crop	Variety	Quantity of seed (q)	Value (Rs)	No. of farmers involved in village seed production	Number of farmers to whom seed provided			
					SC	ST	Other	Total

KVK farm

Crop	Variety	Quantity of seed (q)	Value (Rs)	Number of farmers to whom seed provided			
				SC	ST	Other	Total
Paddy	Bina dhan-11 (FS)	80.60	264368				
	Bina dhan-11 (CS)	152.80	487432				
Paddy	Lalat (FS)	150.00	Unprocessed				
Pigeon pea	PRG-176 (TL)	0.6	5205	10		5	15
Ground nut	Dharani (TL)	0.72	5839	15	3	4	22
Black Rice	Kalamalliphula (TL)	0.42	952			5	5
	Debanna (TL) 2266	0.28	634		4	5	9
	Kalabati (TL)	0.23	521	4		5	9
BPH Resistance	Pratikshya (NS)	0.77	1745	3	2	3	8
	Hasanta (TL)	0.74	1677	2	1	4	7
	Reeta (NS)	0.74	1332	1	3		4
	CR Dhan 300 (NS) 1800	0.33	594	1		5	6
	Talmuli (NS)	0.61	1098	7			7

Upland Rice	Sahabagi Dhan (TL)	0.42	952		6	1	7
	Satyabhama (TL)	0.42	952	5		4	9
Aerobic Rice	CR Dhan 202 (NS)	0.32	576	3		1	4
	CR Dhan 203 (NS)	0.31	558	2		3	5
Protein Rich Rice	CR Dhan 310 (NS)	0.39	702	2	1	1	4
	CR Dhan 311 (TL)	0.94	2130	7		10	17
Aromatic Rice	Nua Acharamati (NS)	0.76	1368		5	3	8
	Poomabhog (TL)	0.94	2130	4		10	14
	Sugandha Dhan (NS)	0.81	1458	3	2	5	10
Grand Total			781271	69	27	74	170

Production of planting materials by the KVKs

Crop	Variety	No. of planting materials	Value (Rs)	Number of farmers to whom planting material provided			
				SC	ST	Other	Total
Vegetable seedlings							
Cauliflower	DM-60	540	1350	10			10
Cabbage	Red Winter	300	750		20		20
Tomato	Arka Rakshak, Arka Samrat	40080	100200	170	200	50	420
Brinjal	Arka Harshitha, Arka Keshav	386	579	7		5	12
Chilli	Arka Haritha, Arka Lohita, Arka Meghna	2166	5415	5	4		9
Capsicum	Arka Mohini, Arka Gourav	550	1375		15		15
Broccoli	Pusa KTS-1	11500	17250		40	115	155
Others							
Fruits							
Mango							
Guava							
Lime							
Drumstick	KDM-1, PKM-2	1116	16740	40		60	100
Papaya	Red Lady, Arka Surya	273	6825		12		12
Banana							
Others							

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

Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers benefitted			
				SC	ST	Other	Total
Dairy animals							
Cows							
Buffaloes							
Calves							
Others (Pl. specify)							
Small ruminants							
Sheep							
Goat							
Other, please specify							
Poultry							
Broilers							
Layers	Kadaknath	750	60000	40	3	7	50
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							
Fish fingerlings	Amur Carp	2000	8000			5	5
	Jayanti Rohu	1000	4000			3	3
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 :	Nursingha Ch Barik, Sr. Scientist and Head KVK Bargarh
Address :	KVK, Gambharipali, Bargarh
e-mail :	kvkbaragarh.ouat@gmail.com
Phone No. :	06682225238,
Mobile :	09437414979

ii) Quality Seed Production Reports

Season	Crop	Variety	Production (q)			
			Target	Area sown (ha)	Production	Category of Seed (F/S, C/S)
Rabi 2019-2020	Greengram	IPM 02-14	150	53 (30 of rabi + 23 of kharif)	Crop at seedling stage	C/S
Kharif 2020	Arhar	PRG-176	40	5	30(expt)	F/S
Rabi 2020-21	-	-	-	-	-	-
Summer/Spring 2021	-	-	-	-	-	-

iii) Financial Progress

YEAR	Fund received (2016-17, 2017-18, 2018-19, 2019-20 & 2020-21)		Expenditure (Rs. in lakhs)		Unspent balance (Rs. in lakhs)		Remarks
	Infrastructure	Revolving fund	Infrastructure	Revolving fund	Infrastructure	Revolving fund	
2016-17	-	1.54614	-	0.30970	-	1.23644	
2017-18	50	3.45386	48.36336	3.78307	1.63664	3.63311	
2018-19	-	-	-	4.47968	1.63664	3.98693	
2019-20	-	-	0.09912	2.94760	1.53752	6.42679	
2020-21	-	-	-	-	-	-	

iv) Infrastructure Development

Item	Progress
Seed processing unit	Completed, Yet to be handed over
Seed storage structure	

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

Item	Title	Author's name	Number	Circulation
Research paper	Critical review on cooperative societies in agricultural development in India	All scientists	-	-
Seminar/conference/ symposia papers				
Books				
Bulletins	Scientific Mustard cultivation	Mr. N.C.Barik, Sr. Scientist & Head, Miss Rukeiya Begum, Scientist(Plant Sc.), Mr. D.Jena, Prog.Asst. (Seed Sc)	500	500
News letter	Dhanusree	All Staff	500	500

Item	Title	Author's name	Number	Circulation
Popular Articles	Benefits of Broccoli introduction in Bargarh Dist by KVK	Mr.S.K.Meher Scientist (Horticulture) Mr. A.K.Sahoo, SMS, Agril Ext. Miss Rukeiya Begum, Scientist(Plant Sc.),		
	Evolving extension approaches in India: Prospectus of Innovative extension approaches carried out by KVK, Bargarh	Mr. A.K.Sahoo, SMS, Agril Ext. Mrs. Susrita Sahu, Scientist(Home Sc), Miss Rukeiya Begum, Scientist(Plant Sc.), Mr.T.C.Panda, Scientist Ag.Engg.		
	Effect of Processing Technologies on fingermillet	Mrs. Susrita Sahu, Scientist(Home Sc), Miss Rukeiya Begum, Scientist(Plant Sc.),		
	Under utilized crops: significance for food and nutritional security in India	Mr.T.C.Panda, Scientist Ag.Engg. Mr. A.K.Sahoo, SMS, Agril Ext..		
Book Chapter				
Extension Pamphlets/ literature				
Technical reports	APR and Action Plan	All Staff	20	20
Electronic Publication (CD/DVD etc)	Nutritional Garden	Mr. N.C.Barik, Sr. Scientist & Head, Mrs. Susrita Sahu, Scientist(Home Sc), Mr.S.K.Meher, Prog. Asst. Computer, KVK, Bargarh	10	10
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	107 th Indian Science congress	107 th Indian Science congress	N.C.Barik,SS&H	3-7,Jan.2020	UAS,Bengalure
2	IC Pulse2020	IC Pulse2020	N.C.Barik,SS&H	10-12,Feb,2020	IIPR,Kanpur
3	11 th National KVK Conference,2020	11 th National KVK Conference,2020	N.C.Barik,SS&H	28Feb-1 st ,March,2020	ICAR NewDelhi
4	MOOC training Programme	Gender in Agricultural Development	Mrs. Susrita Sahu, Scientist(Home Sc),	27.07.2020 to 05.08.2020	MANAGE, Hyderabad
5	MOOC training Programme	Market led extension	Mrs. Susrita Sahu, Scientist(Home Sc),	14.08.2020 - 23.08.2020	MANAGE, Hyderabad
6	MOOCs programme	Market-led Extension	Rukeiya begum, scientist (Plant Science)	14 th -23 rd August, 2020	MANAGE, Hyderabad
7	MOOCs programme	Risk Mitigation in Agriculture	Rukeiya begum, scientist (Plant Science)	17 th -24 rd August, 2020	MANAGE, Hyderabad

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

Success story - Financial security through Finger Millet cultivation

Name of farmer	Phuleswar Rana
Address	At- Bhengarajpur, Block – Paikmal. Dist -Bargarh
Contact details (Phone, mobile, email Id)	Mobile No.- 93480 00243
Landholding (in ha.)	2
Name and description of the farm/ enterprise	<ul style="list-style-type: none"> • He is an industrious farmer • He usually grows paddy, pigeonpea, groundnut and millet • He was not satisfied with the overall return due to the low yield owing to inadequate knowledge regarding good quality seed & proper packaging practices of cultivation.. • One day during an training programme he was came in contact with KVK scientist & seeking for a better solution.
KVK intervention	<ul style="list-style-type: none"> • So he was promoted for high yielding fingermillet variety “Arjuna” under FLD prog. in rainfed upland farming situation by KVK. • He was provided with critical inputs such as 4 kg of seeds for 0.4 ha area along with nursery management, seedling (leaf & root) treatment, line transplanting, proper drainage system with critical irrigation, STBF with need based IPDM measures. • KVK scientists made training and field visit with regular inspection of field to provide support at critical crop stages. • KVK facilitated market linkage with line department officials, ORMAS, NGOs for better marketing of his harvested millet
Economic impact	<ul style="list-style-type: none"> • He earned a net income of Rs 6980/ac from local millet switched over to Rs 16,530/ac from HYV millet
Social impact	<ul style="list-style-type: none"> • Farmers of near by places were now sensitised with the market demand of the nutri-cereals owing to its nutritional importance
Environmental impact	Proper coverage of Fallow upland prevent soil and water erosion and increase cropping intensity in the rain fed situation.
Horizontal/ Vertical spread	Being influenced by his success, other fellow farmers of rainfed areas are interested for seed replacement with HYV Arjun.



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	Online training	All Scientist	Training was imparted among trainees thorough online during COVID-19 pandemic situation

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
1	Watermelon	Placing the watermelon in the field by digging a hole . Then covering it with soil & paddy straw	To prevent cracking of watermelon during hailstorm & from monkey menace

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)
1	Paddy	180	5600q.	295	Y
2	Pulse	330	950q.	575	Y
3	Vegetable	190	1050q	1350	Y

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
1	PRA, Survey, Field visit, Group meetings, Farmers scientist interaction	To identify the problem of Farmers & Farm women
2	Field visit, Query redressal, Whatsapp group	To sort out the constraints faced by Rural Youths
3	Diagnostic field visit, Discussion during R-E linkage meeting & bi-weekly meeting	To upgrade the knowledge of In-service Personnel

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

Sl. No	Name of the Equipment	Qty.
01	Mrida Parikshyak Soil Testing Kit (Minilab)	3

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			
125	0	125	260	35	0

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	<ul style="list-style-type: none"> • Exhibition on soil health management • Farmers-scientist Interaction • Distribution of soil health card • workshop on soil health management 	85	1	Mr. Jyoti Ranjan Pradhan Collector and District Magistrate, Baragarh	30	65

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
Demonstration on Kadaknath breed of poultry	1	20	Rearing management of poultry in backyard
Dist. Level Exhibition	1	Mass	Creating awareness on new Technologies
Seedling distribution	1	22	Tomato seedling for nutritional garden
Film show	1	25	vermicompost production, poultry rearing
Awareness camp on Seed treatment	1	25	Seed treatment with seed treating chemicals

3.14. RAWE/ FET Programme– is KVK involved? (Y/N)

No of student 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
10.11.2020	Prof. P.K. Agrawal, Von'ble Vice-Cahncellor, OUAT, BBSR	Review the progress of KVK activities
10.11.2020	Prof. L.M. Garnayak, Dean Extension Education, OUAT, BBSR	Review the progress of KVK activities

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)
Transplanting of paddy by self-propelled rice transplanter	60	40	18000/ha	23000/ha
Application of post emergence herbicide BispyribacSodium @ 25 g ai/ha in transplanted rice within 25 days	250	94	16000/ha	21000/ha
Application of Borax @ 3 gm/lt. at 30, 40,50 DAT in cauliflower to avoid brown rot	120	88	45000/ha	70000/ha
Application of eco-friendly insecticide Spinosad 45% SC @1ml/4lit for control of shoot and Fruit borer in brinjal	140	85	62000/ha	99000/ha
Supplementation of vitamin-mineral mixture @ 30gm / day improve the milk yield of cows	110	84	22000/cow	25200/cow

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
Improved Cultivation Technology of Green gram (Var. IPM 02-14)	Spread in 65 villages of 6 blocks

Barren to Green

Name of farmer	Laba Patel					
Address	At- Badadarllipalli, P.O-bhukta, Block- Ambabhona, Dist- Bargarh					
Contact details (Phone, mobile, email Id)	Mobile No.-9777250395					
Landholding (in ha.)	8.2					
Name and description of the farm/ enterprise	Laba Patel is a educated farmer of village Badadarllipalli far away from(appx. 70km KVK. Bargarh. Though he is practising farming since last decade he has not seen a good pulse crop during rabi season due to lack of irrigation after monsoon rain. He always keeps his land fallow after harvesting of paddy and had no alternative crop for his rainfed land. Even he consumes only rice thrice a day with little or no dal. He dreams about dal every day throughout year but realised it in meager.					
KVK intervention	One day he visited KVK Campus during last rabi season and observed a nice demonstration plot of greengram inside where variety IPM-02-14 was grown in upland by deep bore irrigated condition . He interacted with KVK scientists and came to know that greengram can be cultivated in rabi season in well drained plots with hardly three to four irrigations. After that, he contacted Block agriculture officer and installed a deep bore well in his land with assistance of govt. subsidy and took up greengram in three hacter upland field out of 8.2 hactres of land during rabi2020-21.He was supplied greengram variety IPM-02-14 and Virat under CFLD(pulse) programme and followed line sowing behind plough at a spacing of 30cmx10cm, seed treatment with Carbendazim@1gm/kg & Rhizobium culture@20gm/kg seed, applied DAP 100kg and MOP 38 kg after soil testing of his plot along with <u>Phospho-Gypsum@ 2.5Q/Ha. During pre pod formation stage he sprayed Indoxacarb15.8SL@ 1ml/5litrs</u> of water to control pod borers and Sulphur 80WP @ 5 gm. /ltr of water to manage powdery mildew disease. He has also appllied two irrigations at pre flowering and pod development stage in consultation with KVK crop scientist. Subsequently he got a very nice crop that he had never seen and harvested3100kg of seed from three hectare land.					
Economic impact	Sl. No.	Crop	Area (Ac.)	Net income before adoption (Rs)	Area (Ac.)	Net income after adoption (Rs)
	1	Paddy (only kharif season)	20.0	80500	20.0	80500
	2	Green gram			7.5	60000
		Total	20	80500	27.5	140500
Social impact	The reasons for Mr. Patels's financial success from his small area that he didn't depend much on external inputs for his crops. Secondly he and his entire family was involved in farming so he spent no money on outside labourers. As					

	greengram needed less labour than paddy, he spent his balance labour in rabi paddy and got more yield than last season. After getting so much produce he kept 300kg of it for own consumption and sold rest to neighbouring farmers. His family now preparing dish every day from mung dal and consuming cheerfully. His income from barren rabilands has been increased a lot and 59 farmers of his nearby villages are purchasing seeds from him for sowing during coming season
Environmental impact	The improved variety IPM-205-7(Virat) being a short duration (75 days) variety, helped the farmers to plan third crop even in summer season and which in turn helped in improving the economy of the farming community. Also being resistant to Mungbean Yellow Mosaic Virus and crinkling disease lead to less cost of cultivation compared to local variety. The positive attribute of IPM -205-7 variety helped in the dissemination of technology in and around the villages in paddy fallow areas of Ambabhona block. Now other farmers have shown interest in taking this crop during coming kharif,rabi and summer season. The rabi crop also consumed less water than the traditional rabi paddy. It can also be cultivated in paddy fallow areas under residual moisture condition.
Horizontal/ Vertical spread	59 farmers of the nearby villages and blocks are now rushing to him for getting greengram seedsfor cultivation during coming kharif and rabi season.



Sri Laba Patel

With Greengram crop at peak vegetative stage & at harvesting stage in his plot

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
1	Technological Dissemination of Bio-fortified rice variety CR Dhan 311	high yield and tolerant to leaf blast, brown spot and bacterial leaf blight	Productivity has increased by 10 %
2	POPULARISATION OF production technology of scenetd organic paddy	less incidence of disease and pest and reduction in cost of cultivation	Net profit increased by Rs 7500/ha
3	Popularisation of Integrated Disease Management practices for Pea Nut Bud Necrosis Disease in Rabi Groundnut	Uniform plant density Most effective method to control the diseases	Productivity has increased by 21 %
4	Demonstration on Tractor Drawn seed cum fertilizer drill for sowing of green gram	Better utilization of residual moisture, Sowing & fertilizer application done simultaneously ,Saving of time & money	Working efficiency is increased by 98%
5	Demonstration on “Grain pro super bag” for storage of Pulses	Increase in germination % and storability of seeds Less incidence of pulse beetle	Decrease in insect infestation by 85%
6	Popularization of Triple Disease Resistance tomato Hybrid “ ArkaRakshak”	Less plant mortality Increase in no. of fruits per m2	Net profit increased by Rs. 6400/ha
7	Technological Dissemination of Azolla cultivation and feeding for cost effective milk production in cows	Cost effective technology Easily available to farmer	Increase in live body weight/annum by 14%
8	Demonstration of Cycle Weeder in nutritional garden for drudgery reduction of farmwomen	Increase in yield due to integrated management of weeds Saving of time & money	Labour reduction (man days/ha) by 27 no.

4.4 Details of innovations recorded by the KVK

Thematic area	Farm machineries
Name of the Innovation	Drum cage wheel for tractors
Details of Innovator	
Back ground of innovation	He is generally growing paddy in 3 ha. And vegetable in 0.4 ha if land. He was upset during puddling of the low land as the cage wheel sometimes sank down. So he tired for an alternate cage wheel to make it light so that it can float.
Technology details	He used an air tight oil drum as principle axis in drum wheel that increased. It is volume and thereby enable it floating in lowland.
Practical utility of innovation	This innovation saves unnecessary dipping and sinking of tractor and cage wheel in water stagenant and lowland. Thus saves time, labours and fuel efficiency of tractor.

4.4. Details of entrepreneurship development

Entrepreneurship development	
Name of the enterprise	MUSHROOM CULTIVATION FOR ECONOMIC EMPOWERMENT
Name & complete address of the entrepreneur	Mrs. Rita Bhoi, At- Ainalakanta, Po- Ainlapali, Block- Bheden, Dist.- Bargarh, Odisha-768104 Contact No-9556152535
Role of KVK with quantitative data support:	<ul style="list-style-type: none"> • Mrs. Rita Bhoi is a dynamic farm woman with a positive mindset and indomitable spirit. • She belongs to a family of five members comprising of her husband, mother-in-law and two daughters. • She was depressed from the meager income of her husband from just one acre of land. • So, she always wanted to find a better additional alternate option to support her husband for making her family more financially sound. • She decided to go for paddy straw mushroom cultivation after watching the telecasted programme on profitable mushroom cultivation through T.V as paddy straw is abundantly available due to the paddy – paddy cropping system of her locality. • Out of her curiosity, she used the service of Kisan call center from where she got the contact number of Krishi Vigyan Kendra, Bargarh for technical assistance. • Then she contacted KVK for technical guidance and support for mushroom cultivation. • By observing her enthusiasm, she has been provided with twenty no. of paddy straw mushroom spawn bottles under FLD programme and trained on sterilization of paddy straw, maintenance of temperature and humidity of mushroom bed, harvesting and packaging of mushroom. • Her beds are frequently visited at regular interval by scientist of KVK. • Soon after the first success from this, she started production of paddy straw mushroom in a commercial scale.
Timeline of the entrepreneurship development	2018-19-paddy straw mushroom cultivation from threshed straw only during kharif 2019-20- paddy straw mushroom cultivation only during kharif & summer & bought a knapsack sprayer for maintaining the moisture 2020-21-Purchased a paddy reaper to cut the left out straw in the field
Technical Components of the Enterprise	Paddy straw , spawn, Reaper, sickle, Wheat bran powder, polythene, bavistin, Formalin
Status of entrepreneur before and after the enterprise	Before mushroom production she could able to earn Rs. 1,10,000/- from her one acre of land & by working as a daily wage labourer. While She is now raising 30 beds of paddy straw mushroom per day during June to October and 10 beds per day during March to April. She earns a net profit of Rs.2,28,000 during last year by selling it @ Rs. 130–160/ Kg in rainy season and Rs. 250-280 Kg in early summer
Present working condition of enterprise in terms of raw materials availability, labour	At present she is happy as she could utilize the abundantly available threshed paddy straw of her locality & managed labour problem for collection of straw with efficient use of reaper. More consumer are attracted towards her bigger size fruiting bodies of mushroom. She is now a popular progressive mushroom lady in her block She has established a unique place

availability, consumer preference, marketing the product etc. (Economic viability of the enterprise):	in the local & distance places for marketing of paddy straw mushroom.
Horizontal spread of enterprise	Being inspired by her success, the house wife and youth of the nearby 8 villages are came forward to adopt mushroom cultivation as an profitable venture.

4.6. Any other initiative taken by the KVK

5. LINKAGES

5.1. Functional linkage with different organizations

Name of organization	Nature of linkage
ICAR-CIWA, BBSR	Celebration of international women day
ICAR-NRRI, Cuttack	Agro advisory services, contingent planning, improved paddy sseeds
ICAR-CTCRI, BBSR	To promote tuber crops in rainfed uplands
ICAR-IIHR, Bengaluru	Supplying vegetable seeds to KVK
Dept. of Agriculture, Bargarh	Creating awareness on safe use of pesticides, collaborative celebration of special days, Resource Person for HRD training
Dept. of Horticulture, Bargarh	Inspection of nurseries, Resource Person for HRD training
Animal Resources Dept., Bargarh	Participated in Exhibition & Animal health camp
Dept. of Fishery, Bargarh	Joint field visit, Resource Person for HRD training, Departmental training prog. at KVK
Watershed Mission	Participated in Meeting & Exhibition organized by the Watershed Dept.
Dept. of women & Child Development & Mission Shakti, BBSR	Capacity Building of women SHGs Developed under Mission Shakti
District Administration, Bargarh	For taking up initiative measures to control pest & disease incidence in the district
Odisha state seed corporation, Bargarh	Production of foundation & certified seed of paddy & Pulses
All India Radio, Sambalpur	Radio talks, Participation in Farm & Home programme
Doordarsan, Sambalpur	TV talk, SAC meeting
State Livestock breeding Farm, Chipilima	For supply of poultry chicks & ducklings
NABARD, Bargarh	Field visit under different funded project
NGOs: Debadutta Club, Ahinsa Club, Matrushakti, Basix	Pulse seed production, Promotion of organic farming, Exposure visit, HRD training Prog

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

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.)
ATMA Residential training programme	Capacity building of farmers	October 2020	ATMA	113171
Insecticide Management training	Capacity building of Input dealers 2020	December 2020	NIPHM	304000

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 (Kg)	Cost of inputs	Gross income	
1	Vermicompost	2010	80.4	<i>Eisenia. Foetida</i>	vermin	10	4100	5000	Sold to farmer & nearby KVK
2	Nutritional Garden	2017	400	Local	Vegetable	420	3000	4200	Public sale
3	Horticultural Demo Unit	2015-16	400	Hybrid	Vegetable	250	1700	2500	Public Sale
4	Mushrrom Unit	2010	80.4	<i>V.volvacea</i> and <i>P.sajarcagu</i>	Mushroom	110	7300	9500	Public Sale
	Total								

6.2. Performance of Instructional Farm (Crops)

Name Of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty (q)	Cost of inputs	Gross income	
Paddy	20.06.2020	02.11.2020	6	Lalat	FS	150	200000	487000 (Appro.)	Un-proceed

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

Sl. No.	Name of the Product	Qty. (Kg)	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1.	Vermicompost	3000	33000	45000	Recycling of farm wastage into vermicompost

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.	Fish	Amur carp & JayantiRohu	Fingerlings	3000	4000	12000	Public sale

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)
November	120	2	-
December	120	2	
Total :	240	4	

(For whole of the year)

Utilization of staff quarters

Whether staff quarters has been completed: Yes Only One

No. of staffs quarters: One,

Date of completion: 2002

Occupancy details:

Months	Q I	Q II	Q III	Q IV	Q V	Q VI
Jan.2020-Nov.2020	N.					

7. FINANCIAL PERFORMANCE

7.1. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
Contingency	State bank of India	Godbhaga	10777584215
Revolving fund	State bank of India	Godbhaga	30163765041
Seed hub	State bank of India	Kadobahal	36026592693

7.2 Utilization of funds under CFLD on Oilseed (Rs. In Lakhs) 2019-20

Item	Released by ICAR		Expenditure		Unspent balance as on – 01.04.2020 Kharif
	Kharif	Rabi	Kharif	Rabi	
Ground nut	0	780000	0	734254	45746
Mustard	0	390000	0	228106	161894

7.3 Utilization of funds under CFLD on Pulses (Rs. In Lakhs) 2019-20

Item	Released by ICAR		Expenditure		Unspent balance as on 1 st April 2020
	Kharif	Rabi	Kharif	Rabi	
Green Gram	180000	0	158820	0	19980
Pigeon Pea	180000	0	160241	0	19759

7.4 Utilization of KVK funds during the year 2019-20

Sl. No.	Particulars	Sanctioned	Released	Expenditure
1	2	3	4	5
(A)	RECURRING CONTINGENCIES (REVENUE)			
1.	Pay and allowances			
2.	Travelling allowances	110000	110000	104998
3.	Contingency			
a.	Stationary, telephone, postage & other exp. On office running publication of newsletters	400000	398800	398504
b.	POLs, repair of vehicles, tractor & equipments			
c.	Training of farmers (Melas / refreshment of trainees)	300000	300000	297215
d.	Training materials (need based material and equipments for conducting			

Sl. No.	Particulars	Sanctioned	Released	Expenditure
	the training)			
e.	Training on extension functionaries			
f.	Training on Rural Youth			
g.	Frontline Demonstration	150000	150000	117578
h.	On-farm testing (on need based location specific and newly generated information of the major production systems of the area.	150000	150000	117355
i.	Soil & Water testing & issue of soil Health cards			
j.	Maintenance of buildings			
k.	SCSP Contingencies	300000	300000	299514
	TOTAL (A)	1440000	1438800	1364488
(B)				
a.	Equipments & Furnitures			
	i) Office automation			
	ii) Furniture & fixtures			
b.	Works			
	i) Repairing & Renovation			
c.	Vehicle			
d.	Library (purchase of assets like books & journals back volume)	10000	10000	10000
	TOTAL (B)			
I	REVOLVING FUND			
	Grand TOTAL (A+B+C)	1450000	1448800	1374488

Utilization of KVK funds during the year 2020 (1.4.2020 to 31.12.2020)

Sl. No.	Particulars	Sanctioned	Released	Expenditure
1	2	3	4	5
(A)	RECURRING CONTINGENCIES (REVENUE)			
1.	Pay and allowances			
2.	Travelling allowances	1,00,000	50,000	19487
3.	HRD	30000	15000	1000
3.	Contingency			
a.	Stationary, telephone, postage & other exp. On office running publication of newsletters	4,40,000	150000	600000
b.	POLs, repair of vehicles, tractor & equipments			
c.	Training of farmers (Melas / refreshment of trainees)	3,30,000	125000	
d.	Training materials (need based material and equipments for conducting			

Sl. No.	Particulars	Sanctioned	Released	Expenditure
	the training)			
e.	Training on extension functionaries			
f.	Training on Rural Youth			
g.	Frontline Demonstration	1,65,000	55000	
h.	On-farm testing (on need based location specific and newly generated information of the major production systems of the area.	1,65,000	55000	
i.	Soil & Water testing & issue of soil Health cards	0		
j.	Maintenance of buildings	200000		
k.	SCSP Contingencies	400000	150000	
	TOTAL (A)	1700000	600000	620487
(B)	NON-RECURRING CONTINGENCIES (CAPITAL)			
a.	Equipments & Furnitures			
	i) Office automation			
	ii) Furniture & fixtures			
b.	Works			
	i) Repairing & Renovation		0	0
c.	Vehicle			
d.	Library (purchase of assets like books & journals back volume)	10,000	0	0
	TOTAL (B)	10,000	0	0
I	REVOLVING FUND	0	0	0
	Grand TOTAL (A+B+C)	1710000	600000	620487

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	0.22	17.21	14.84	2.46
2016-17	2.46	2.30	5.16	0
2017-18	0	4.20	6.84	2.64
2018-19	2.64	9.53	6.56 + 5.0 (Profit Deposit to DEE, OUAT) = 11.56	0.61
2019-20	0.61	5.71	5.56	0.26
2020-21	0.26	1.58	2.64	2.21 on 31.12.2020

- 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- vermicompost production, Use of gender friendly farm tools, vegetable cultivation, Mushroom production, Duckery, poultry, Dairy management
(iii) Details of marketing channels created for the SHGs- Marketing of vegetables has been channelized to Sambalpur, Jharasugarh & Bhubaneswar market & paddy straw mushroom to near by Bargarh & Attabira NAC market.

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
Research-Extension linkage meeting	3	Kharif & Rabi	-	-	Both
Celebration of special days (World Soil Day, Krishak Diwas, World Food Day, Women in Agriculture Day, Mahila Kisan Divas ,National constitution Day, Education day etc.)	6	Kharif & Rabi	-	-	Both
Field visit	93	Kharif & Rabi	-	-	Both
Dist. Level Farmers Fair	3	Rabi	-	-	Both
District Agriculture strategy Planning Meeting	2	Kharif & Rabi	-	-	Both

8 Other information

8.1. Prevalent diseases in Crops

Name of the disease	Crop	Date of outbreak	Area affected (in ha)	% Commodity loss	Preventive measures taken for area (in ha)
Die-back	Pointed gourd	13.05.2020	160	40	350
Zinger Rot	Ginger	6.09.2020	120	85	280

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)
Chicken fox	Kadakhnath	15.11.2020	84	200	500

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/ SMSPortal)

Type of message	No. of messages	No. of farmers covered
Crop	11	80,000
Livestock	-	80,000
Fishery	-	80,000
Weather	1	80,000
Marketing	-	80,000
Awareness	4	80,000
Training information	1	80,000
Other	2	80,000
Total	19	80,000

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	80000
3.	Mobile Apps developed by <i>KVK</i>	-
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
12.08.2020	personal hygiene
09.09.2020	Hand washing with soap during before and after taking food
02.10.2020	Campaign on Swachh bharat
12.10.2020	Weeding in nutritional garden
10.11.2020	Use of poultry droppings in Azzola pit
16.12.2020	Recycle of agro weaste in to vermi compost

b. Details of Swachhta activities with expenditure

Activities	Number	Expenditure (in Rs.)
1. Digitization of office records/ e-office	6	-
2. Basic maintenance	20	6000
3. Sanitation and SBM	10	4000
4. Cleaning and beautification of surrounding areas	40	12000
5. Vermicomposting/ Composting of biodegradable waste management & other activities on generate of wealth for waste	14	4200
6. Used water for agriculture/ horticulture application	13	1300
7. Swachhta Awareness at local level	12	4000
8. Swachhta Workshops	1	2000
9. Swachhta Pledge	1	500
10. Display and Banner	2	300
11. Foster healthy competition	1	-
12. Involvement of print and electronic media	1	-
13. Involving the farmers, farm women and village youth in the adopted villages (no of adopted village)	400	8000
14.No of Staff members involved in the activities	15	-
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

9.8. Agriculture Knowledge in rural school

Name and address of school	Date of visit to school	Areas covered	Teaching aids used
Larambha High School	02.10.2019	Rasing of seedlings in nursery bed, Establishment of nutritional garden	LCD Projector

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	Farm ers	Govt. Officials, PRI & member etc.	Tota l		

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)
1	<ul style="list-style-type: none"> • Rangoli competition on agricultural activities • Felicitation to best Farm women • Promoting SHG activity 	1	50	-	-

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
1	Debendra Seth	Lahanda,	Vegetable Production
2	Sri jagadananda Pradhan	Gudisira, Baragarh 9776389860	Bio-formulation
3	Sri Prassna Patel	Tal, Padampur,9777232795	Commercial horticulture
4	Mr. Sebak Bhoi	Remeta, Barapali, 7894988532	Farm Mechanization in vegetables
5	Smt. Mandakini sahu	Katapali, Baragarh 9776522338	Dairy
6	Smt. Rita Bhoi	Ainlapali, Bheden, 9861765620	Paddy straw mushroom production

9.13. Revenue generation

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

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
Odisha	Bargarh	ICM	2	55	Promotion of Green manuring in paddy to increase water holding capacity through FYM
		IPM	2	85	Proper spraying techniques & drainage of standing water for BPH management in paddy
		INM	3	115	Foliar Sparying of Boron in cauliflower to avoid cracking
		IWM	2	63	Spraying of 1% kaolinite clay to restrict transpiration loss in green gram & blackgram
		HOF	1	34	Application of Paclobutrazol after pruning in Mango to induce flowering

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 2019-20

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 92ones)	

14. 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							Remarks		
		SC		ST		Other		Total			
		M	F	M	F	M	F	M		F	T

Extension activities

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

Detailed report should be provided in the circulated Performa

15. Awards/Recognition received by the KVK

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

Award received by Farmers from the KVK district

Sl. No.	Name of the Award	Name of the Farmer	Year	Conferring Authority	Amount	Purpose
1	Jagjiwan Ram abhinab krusi Puraskar	Sudam saho	2020	ICAR	50000	Conservation of local germ plasm
2	Best agri entrepreneur in Odisha	V. Sudha Rani	2020	OUAT	-	Commercial layer farming
3	Best progressive farmers	Debendra Seth	2020	OUAT	-	Vegetable production

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

17. 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
1	Bodasambar Dal & Vegetable Producer Company Ltd., 2015-16	U01403OR2016PTC019845 & 28.01.2016	28.01.2016At/P.o- Kendubhatta PS-Gaisilet Bargarh 768037	Production of processed dal and vegetables	Involving the FPO members for Pigeon pea seed production under pulse seed hub programme	1056	13.49	Promotion of Dal in the brand name "Bodasambar"
2	Ahinsa Farmer Producer Company Ltd.	U01403OR2015PTC019157 & 08.07.2015	08.07.2015 At- Bhutibahala PO- Raisalpadar PS-Gaisilet Bargarh 768037	Production of local paddy, pulses, millets	Training was given on production of different type of processed dal i.e. Pigeon pea, Horse gram with suitable branding	500	5.0	Conservation of local germ plasam of paddy, Dal processing & marketing, Preparation of value added products from fingermillet



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
3	Maa Mangala Farmer's producer Company Ltd.	CINVO1110OR 2019PTC030238	11.01.2019	Production of organic paddy seeds, Pigeon pea Groudnut	Involving the FPO members for Pigeon pea seed production	205	1.25	Conservation of local germ plasam of paddy, Groundnut, Pigeon pea

18. Integrated Farming System (IFS)
Details of KVK Demo. Unit

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

19. Technologies for Doubling Farmers' Income

Sl. No.	Name of the Technology	Brief Details of Technology (3- 5 bullet points)	Net Return to the farmer (Rs.) per ha per year due to adoption of the technology	No. of farmers adopted the technology in the district	One high resolution 'Photo' in 'jpg' format for each technology
1	Cultivation of scented paddy var. Purnabhog	Sceneted variety, -Purnabhog, Spraying of Bacillus thuringiensis(Bt), green manuring with Dhanicha, spraying of NSKE@10KG/acre & release of <i>Trichogramma japonicum</i> @40000/wk,.	22560	56	
2	Introduction new Greengram Variety - Virat	Var. IPM-205-7(Virat) - Line sowing behind plough 25 cm x 10 cm, Seed treatment with Carbendazim @1gm/kg & Rhizobium culture @ 20 gm/kg seed, STBF, Application of Phospho - Gypsum @ 2.5 Q/Ha. Spraying of Indoxacarb 15.8 SL @ 1ml/ 5litrs of water, Spraying of Carbendazim 12% + Mancozeb 63% @ 2 gm. /ltr of water , Spraying of Sulphur 80WP @ 5 gm. /ltr of water	18400	85	

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
3	Popularisation of Triple resistant variety Arka Rakshyak	Seed Rate 250gm/ha, High yield 500Q/ha	150000	200	
4	Popularisation of Poultry Breed _ Kadaknath	Feeding and housing Management with timely vaccination	18000/20birds		

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

Phase	Database prepared/ covered for		KVK level Committee		Various activity conducted for farmers
	Total no. of villages	Total no. of farmers	Date of formation	Name of members	

21. 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)
			•

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

Year	Name of the Job role	Name of the certified Trainer of KVK for the Job role	Date of start of training	Date of completion of training	No. of participants	Whether uploaded to SDMS Portal (Y/N)	Fund utilized for the training (Rs.)
19-20	Nursery Trainer	Sanat Kumar Meher	25.02.2020	20.03.2020	20	Y	180000
	Tractor operator	Tarak Chandra Panda	25.02.2020	20.03.2020	20	Y	210000

D. Other activities

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

25. Nutri-garden

Sl.no.	Name of KVK	Established in KVK Campus	No. of nutria-garden established in the village	Major vegetables production
1.	Baragarh	2019	15	Brinjal, tomato, Chilli, Cowpea, Pumpkin

Please provide one or two good quality photographs

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

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

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

		
<p>Assessment on Integrated Disease Management practices for Pea Nut Bud Necrosis Disease in Rabi Groundnut</p>	<p>Assessment of INM of Broccoli in Rabi season.</p>	<p>Assessment of Novel insecticide Triflumesopyrim 10.6 SC for BPH management in Kharif rice .</p>
		
<p>Comparative Assessment of Heat tolerant improved poultry breeds for production in Backyard system</p>	<p>Assessment on power pulse thresher for threshing of green gram</p>	<p>Assessment of drought tolerant rice varieties for transplanted rainfed Medium land</p>



Assessment on ridge and furrow method of planting for pigeon pea



Assessment of packaging practices of paddy straw mushroom



Assessment of different Drumstick varieties for higher yield



Assessment on Power Thresher for threshing of finger millet.



Assessment of IDM practices against Sheath rot disease of Rabi Paddy



Assessment of different ONION varieties for higher yield

		
<p>Assessment of low cost feed mixtures on milk production in dairy cows.</p>	<p>Introduction of HYV of Finger millet (Var. Arjun)</p>	<p>Demonstration of Integrated Weed Management in Greengram</p>
		
<p>Demonstration of Integrated Pest Management modules for management of Shoot and fruit borer in brinjal during Rabi</p>	<p>Popularization of Triple Disease Resistance tomato Hybrid “ Arka Rakshak”</p>	<p>Demonstration of tractor drawn seed cum fertiliser drill</p>



**Demonstration on “Grain pro super bag”
for storage of Pulses**



**Popularization of BPH resistant variety”
HASANTA”**



**Popularization of IDM practices against
Vine rot disease of Pointed gourd CAUSED
BY *Phytophthora cinnamomi***



**Introduction of Biofortified Rice variety
CR Dhan 311 in transplanted irrigated
Medium land**



**Demonstration of Low cost Ripening
Chamber in Banana**



**Demonstration of tractor operated post hole
digger.**



Demonstration of tractor operated straw baler



Demonstration of Cycle Weeder in nutritional garden for drudgery reduction of farmwomen



Demonstration of Integrated Pest Management practices against Mango thrips (*Coliothrips indicus*)



Demonstration on chilli variety for higher yield also for Dry chilli var. Arka Harita



Popularisation of Integrated Disease Management practices for Pea Nut Bud Necrosis Disease in Groundnut during Rabi



Demonstration of Nutritional garden for Improving Nutritional Security of farm family

		
<p>Demonstration of Value added products of Groundnut (Peanut butter)</p>	<p>Cluster Demonstrations oilseeds Rabi (2019-20) - Mustard crop at flowering stage, Village Kanheipali, Dist Bargarh</p>	<p>Cluster Demonstration, PULSE (2020-21) At pod development stage stage (Vill.Bhukta,Ambabhona Block,Bargarh)</p>
		
<p>Cluster Demonstration, OILSEED (2020-21) At pod maturity stage (Vill.Pradhantikira,Shohella Block,Bargarh)</p>	<p>Celebration of Mahila Kisan Divas</p>	<p>Celebration of World Egg Day</p>



Celebration of Agricultural Education Day



Celebration of Constitution Day



Celebration of Vanomatsav



Celebration of World Soil Day



Celebration of Women in Agriculture Day



Celebration of Food Day



Mushroom training for WSHGs of MS & Horticulture Dept.



Nursery training for WSHGs of MS & Horticulture Dept.



ATMA Residential training



INSECTICIDE MANAGEMENT FOR INSECTICIDE DEALERS



Celebration of PMKSN Yojona



Awareness on Farmers Bill



National Horticulture Fair 2021



Hon'ble PM to launch financing facility under agriculture infrastructure fund



Hon'ble Vice-Chancellor & Dean, Extension Education, OUAT, BBSR



Hon'ble Vice-Chancellor & Dean, Extension Education, OUAT, BBSR



NATIONAL NUTRITIONAL MAAH



Radio & Video Talk



Training - Agricultural Engineering

Training – Plant Science

Training – Home Science



Training - Horticulture



Exhibition - Farmers Fair 2020



Exhibition - World Soil Day 2020



Publications : News Letter Oct 2019 to March 2020

86. Evolving Extension Approaches in India: Prospects of Innovative Extension Approaches Carried Out by KVK Bargarh
 ALOK K SAHOO, SUBHITA SAMAP, BUREKA BELEGU AND EMRAN P ANSARI
 (KVK Bargarh, Odisha-751005, Odisha, India)
 (KVK Bargarh, Odisha-751005, Odisha, India)

Introduction: Agricultural Extension is the bridge between change agents and those who are to be benefited and farmers. The strategic challenge of agricultural extension delivery approaches has been developed in various stages through a change agent extension model. It has been evolved with various approaches with time to time to meet the changing needs of farmers. The extension approaches have been evolved with time to time to meet the changing needs of farmers. The extension approaches have been evolved with time to time to meet the changing needs of farmers.

Evolution of Extension Approaches in India: Extension approaches have evolved over time to meet the changing needs of farmers. The extension approaches have been evolved with time to time to meet the changing needs of farmers.

Future Prospects: The future prospects of extension approaches are bright. The extension approaches have been evolved with time to time to meet the changing needs of farmers.

Popular Article

International Journal of Chemical Studies

Impact analysis of demonstration on integrated nutrient management in Green gram

Hakshaya Rajapatra, Bhanu Saha and Dr. Anil Kumar Swain

Introduction: Green gram (Cicer arietinum) is one of the major pulse crops in the world. Integrated Nutrient Management (INM) is a sustainable approach for increasing the efficiency of fertilizer use and reducing the environmental impact of fertilizer application.

Materials and Methods: The present investigation was conducted in the KVK Bargarh, Odisha, India. The experiment was conducted in a randomized block design with three treatments: Control (C), INM (I), and INM + Demonstration (D).

Results and Discussion: The results of the experiment showed that the INM + Demonstration treatment significantly increased the yield and nutrient use efficiency of green gram compared to the Control and INM treatments.

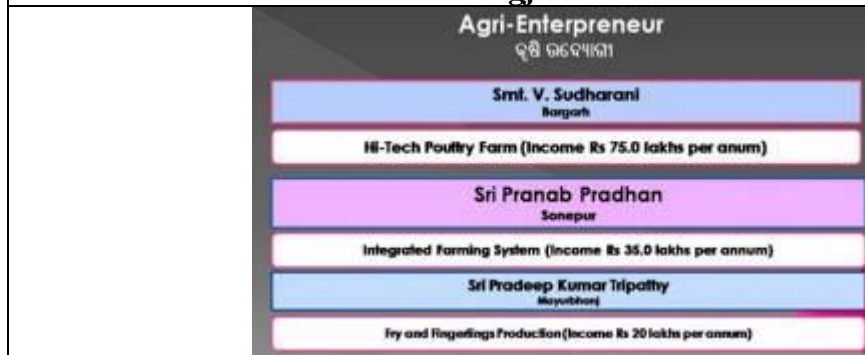
Publications: Research Paper



Zonal Level

Zone I	Zone II	Zone III	Zone IV (Shared)		Zone V	Zone VI
50,000.00	50,000.00	50,000.00	25,000.00	25,000.00	50,000.00	50,000.00
Smt. V. Chelma, Leh, Ladakh	Sh. J.C. Prasad, Chittorgarh, Rajasthan	Sh. V. Shukla, Banda, Uttar Pradesh	Sh. S.P. Sahani, Bikaner, Bihar	Dr. R.S. Singh, Muzaffarpur, Bihar	Sh. S. Sahu, Bargarh, Odisha	Sh. B. Hain, Nalbari, Assam
Zone VII	Zone VIII (Shared)		Zone IX	Zone X	Zone XI (Shared)	
50,000.00	25,000.00	25,000.00	50,000.00	50,000.00	25,000.00	25,000.00
Sh. N. Devnath, Lufanga, Tripura West, Tripura	Sh. V.B. Sharma, Saltan, Goa	Smt. V.B. Murkesh, Beroil (Bihar) (Bihar)	Sh. Vishal Kumar, Balaghat, M. P.	Smt. R. Laxmi, Karimnagar, Telangana	Sh. S. C. Thimmarajulu, Kothaguda, Karnataka	Sh. Purushothaman, Kannur, Kerala

Jagjivan Ram Abhinav Kisan Puraskar to Mr. Sudam Sahu, Katapali



1st Prize for Agri Entrepreneur by OUAT to Mrs. V. Sudha Rani

28. SC SP quarter-wise

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

Physical Output 2020-2021

Sl. No.	Indicator/Activities	Unit of Indicator	Quarterly Breakup (Target)	Targets Achieved	No. of Beneficiaries	Outcome
1	Farmers, farm women trained by KVKs	Number	Q-1,1 Q-2 ,1	Q-1,1 Q-2 ,1	Q-1,25 Q-2 ,25	Increase in production of vegetables by 20%

Sl. No.	Indicator/Activities	Unit of Indicator	Quarterly Breakup (Target)	Targets Achieved	No. of Beneficiaries	Outcome
			Q-3 ,1 Q-4,1	Q-3 ,1 Q-4,1	Q-3,25 Q-4,25	
2	Extension personnel trained by KVKs	Number	Q-1 Q-2 Q-3 ,1 Q-4	Q-1 Q-2 Q-3,1 Q-4	Q-1 Q-2 Q-3,15 Q-4	Proper timing of application of micronutrient has been increased.
3	On-farm trials conducted by KVKs	Number	Q-1 , Q-2 Q-3 Q-4 ,1	Q-1 Q-2 Q-3 Q-4,1	Q-1 Q-2 Q-3 Q-4,7	Increase in quality production of scented paddy by 10%
4	Frontline demonstrations conducted by KVKs	Number	Q-1 Q-2 Q-3,2 Q-4,	Q-1 Q-2 Q-3,2 Q-4	Q-1 Q-2 Q-3,20 Q-4	Brinjal production increased by 50q/ha
5	Quantity of seeds produced	Quintal	Q-1 Q-2 Q-3,10 Q-4	Q-1 Q-2 Q-3,20 Q-4	Q-1 Q-2 Q-3,50 Q-4	Better seed has been ensured to 50 farmers.
6	Planting materials Produced	Number	Q-1 Q-2 Q-3 ,50000 Q-4	Q-1 Q-2 Q-3,50000 Q-4	Q-1 Q-2 Q-3,300 Q-4	Production of Kharif onion has been increased by 5q/ha
7	Livestock strains and fingerlings produced	Number	Q-1 Q-2 Q-3,1500 Q-4	Q-1 Q-2 Q-3,1500 Q-4	Q-1 Q-2 Q-3,30 Q-4	Fish yearling and poultry production was encouraged.
8	Soil & water samples tested	Number	Q-1 Q-2,20 Q-3 Q-4 ,20	Q-1 Q-2 ,20 Q-3 Q-4,20	Q-1 Q-2,20 Q-3 Q-4,20	N-Fertilizer application has been reduced by 5%

Senior Scientist & Head
KVK, Bargarh
