

ANNUAL PROGRESS REPORT 2018-19

(April 2018 to March 2019)



कृषि विज्ञान केन्द्र
कृषि विज्ञान केन्द्र
KRISHI VIGYAN KENDRA
BARGARH



ODISHA UNIVERSITY OF AGRICULTURE & TECHNOLOGY

Gambharipali, P.O.-Larambha, Dist-Bargarh, Odisha - 768102

PROFORMA FOR ANNUAL REPORT 2018-19
(April 2018 to March 2019)

1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail
	Office	FAX	
Krishi Vigyan Kendra, 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
Dr. Anil Kumar Swain	-	9438615702	anilkumarswainouat@gmail.com

1.4. Year of sanction of KVK: 1992

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

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline/	Pay Scale with present basic	Date of joining	Permanent/ Temporary	Category (SC/ST/OBC/ Others)
1	Senior Scientist& Head	Dr. Anil Kumar Swain	Sr. Scientist & Head	Fishery Science	15600-39100 + AGP-8000 (28230)	18.09.2017	Temporary	OBC
2	Subject Matter Specialist	Mrs. SusritaSahu	Scientist	Home Science	15600-39100 + AGP-6000 (22220)	06.06.2010	Temporary	OBC
3	Subject Matter Specialist	Mr. Nrusingh Charan Barik	Scientist	Nematology	15600-39100 + AGP-6000 (21390)	22.07.2011	Temporary	OBC
4	Subject Matter Specialist	Mr. Sanat Kumar Meher	Scientist	Horticulture	15600-39100 + AGP-6000 (21390)	31.05.2015	Temporary	OBC
5	Subject Matter Specialist	Ms. Rukeiya Begum	Scientist	Plant Science	15600-39100 + AGP-6000 (17610)	29.05.2015	Temporary	Other
6	Subject Matter Specialist	Mr. Tarak Chandra Panda	Scientist	Agril. Engineering	15600-39100 + AGP-6000 (17610)	04.12.2015	Temporary	Other
7	Subject Matter Specialist	Mr. Alok Kumar Sahoo	Subject Matter Specialist	Agril. Extension	15600-39100 + AGP-5400 (15600)	31.01.2019	Temporary	OBC
8	Programme Assistant	Mr. Deepankar Jena	Programme Assistant	Seed Science	9300-34800 + GP4200 (11010)	06.02.2015	Temporary	OBC
9	Computer Programmer	Mr. Sanat Kumar Meher	Programme Assistant	Computer	9300-34800 + GP-4200 (11940)	06.02.2016	Temporary	OBC
10	Farm Manager	Mrs. Prarthana Mohanty	Farm Manager	Horticulture	9300-34800 + GP-4200 (11470)	04.02.2019	Temporary	Other
11	Accountant / Superintendent	Vacant	-	-	-	-	-	-
12	Stenographer	Mr.Sumant Kumar Jally	Steno cum Comp. Operator	-	5200-20200 + GP-2400 (6430)	14.02.2014	Temporary	SC
13.	Driver	Mr. Anirudhha Chhanda	Driver cum Mechanic	-	5200-20200+ GP – 1900 (7400)	23.07.2008	Temporary	OBC
14.	Driver	Mr. Jagannath Sahoo	Driver cum Mechanic	-	5200-20200+ GP – 1900 (7400)	23.05.2018	Temporary	OBC
15.	Supporting staff	Mr. Safetlal Debata	Peon cum Watchman	-	4440-7440 +GP – 1700 (6290)	28.07.2008	Temporary	Other
16.	Supporting staff	Mr. Okil Khamari	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

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
15.	Soil Test Lab					√	43.8		ICAR
16	Vermi compost Unit					√	80.4		ICAR
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	630000	2,15,627	Good
Tractor	2009	420000	2823.22 (Running Hours)	Good
Motor Cycle	2010	51000	84,817	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
VacuumSealing Machine	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

Name of Equipment	Year of Purchase	Cost (Rs.)	Present Status	Source of Fund
Power sprayer	2012	9400	Good	ICAR
Drum Seeder	2017	3000	Good	ICAR
Paddle Paddy Thresher	2017	6225	Good	ICAR
Mandwa Weeder	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
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
PrintScan cum Copier	2018	14000	Good	ICAR
Solar Light	2018	20499	Good	ICAR
DSLR Digital Camera	2018	47806	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.	15.03.2019	25	Technological dissemination of pigeon pea var. PRG176 with nipping practice	One OFT has been planned on the performance of different pigeon pea varieties	
			Popularization of vegetable production during Kharif season	Raising of seedlings has been started under FLD& RF programme	
			Production of Tomato seedling var. Arka Rakshak for line departments	The seedling will be produced as per demands of line department	
			Demonstration of sun hemp as green manuring	Demonstration on green manuring with Sunhemphas proposed.	
			Performance evaluation of millets through farm mechanization	Seed cum- Fertilizer drill and cycle Weeder will be introduced in the FLD based on finger millet cultivation.	
			Studies on performance of Kadaknath poultry in backyard	OFT on performance of Kadaknath poultry in backyard has been planned	
			A trial for BPH management in paddy through ITK	Afield study is to be taken on the effect of spraying of Mahua oil cake extract with Kirozin Oil for BPH management	
			Popularization of floating feed in fisheries.	Already done in last year & will spread in more area in this year through FLD and training programmes	

* Salient recommendation of SAC in bullet form

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

2.a. District level data on agriculture, livestock and farming situation (2018-19)

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 Rain fed • 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-44.2 (K), Paddy-62.9 (R), Greengram-2.65(K), Greengram-4.9(R), Groundnut-16.6 (K), Groundnut-23.85 (R), Wheat-14.1, Maize-32.9, Blackgram-2.67, Pigeonpea-10.3, Mustard-8.75, Sesamum-2.5, Potato-103.5, Brinjal-22, Chilli-71.9 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-16300 MT, Egg-27.03 million

Note: Please give recent data only

2.b. Details of operational area / villages (2018-19)

Village Name	Year of adoption	Block Name	Distance from KVK	Population	Number of farmers (having land in the village)
Bandenbahal	2017	Sohela	98	833	225
Lahanda	2017	Attabira	18	6183	1493
Patrapalli	2015	Bhatli	69	2500	280
Kusmuda	2017	Ambabhona	82	948	205
T. Gandapalli	2017	Bijepur	74	1390	349

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"> Labour problem in different agricultural operation in pulses & millets Poor productivity of groundnut due to disease complex Low voltage for operation of electrified borewell Non-commercialisation of Organic wastage Low productivity of country birds 	<ul style="list-style-type: none"> Farm mechanization in pigeon pea & millets IPDM in groundnut. Promotion of renewable energy Vermi-compost production Rearing management of improved poultry
2	Bargarh	Attabira	Lahanda	Paddy, Vegetables, Mushroom	<ul style="list-style-type: none"> Severe yield loss due to attack of BPH in paddy Low price of vegetables in Rabi season Less income from Indian major carps (Catla, Rohu, Mrigal) with limited yield after 10 months of culture period. Underutilisation of threshed paddy straw 	<ul style="list-style-type: none"> IPDM measures in paddy Off season vegetable cultivation & Promotion of floriculture Varietal evaluation & production management of fish Cultivation of Paddy straw mushroom with threshed straw
3	Bargarh	Bhatli	Patrapalli	Paddy, Greengram Vegetables, Groundnut	<ul style="list-style-type: none"> Severe infestation of insect pest and disease in paddy, pulses, oilseed & vegetables 	<ul style="list-style-type: none"> Organic farming in paddy, oilseeds & vegetables Integrated weed management in pulses & mango

Sl. No.	Name of Taluk	Name of the block	Name of the villages	Major crops & enterprises	Major problems identified (crop-wise)	Identified Thrust Areas
				Sesamum, Fishery	<ul style="list-style-type: none"> • Imbalance use of manures and fertilizers with weed problem in Paddy, pulses & oilseeds leading to low productivity • Poor yield due to disease Complex in vegetables & fruits. • Potato chips through open sun drying is a more time consuming and poor hygienic process • Low growth rate of normal Rohu with low availability of natural plankton leading to less fish yield 	<ul style="list-style-type: none"> • INM & IDM in vegetables • Value addition of vegetables • Introduction of improved fish variety with feed management
4	Bargarh	Ambabhona	Kusmuda	Paddy, Greengram Mustard, Dairy	<ul style="list-style-type: none"> • Use of excessive nitrogenous fertilizer in rice leads to degradation of soil fertility & more incidence of pest & disease. • Low growth rate and yield of green gram due to sowing during (low temp)4th week of Dec. • Labour problem in sowing of greengram • Less return from paddy fallow areas • Low milk yield due to poor feeding practices. 	<ul style="list-style-type: none"> • INM & IPDM in paddy • ICM in Rabigreengram • Farm mechanization. • Introduction of short duration oilseed crops • Feeding management of dairy animals.
5	Bargarh	Bijepur	T. Gandapalli	Paddy, Greengram, pigeon pea Groundnut, vegetables Poultry	<ul style="list-style-type: none"> • Labourer problems for different farm activities • Low yield from local varieties of pigeon pea • Poor yield from degenerated groundnut varieties • Low price of vegetables in Rabi season • Low productivity of country birds. 	<ul style="list-style-type: none"> • Farm mechanization in greengram & vegetables • Varietal evaluation of pigeon pea • Introduction of high yielding varieties • Off season cultivation of onion & cauliflower • Rearing management of improved breed of Poultry

2. c. Details of village adoption programme:

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

Name of village	Block	Action taken for development
Bandenbahal	Sohela	Assessment of Power Pulse Thresher Demonstration of tractor drawn seed cum fertiliser drill for sowing of finger millets Demonstration of Integrated Management of Disease Complex in Groundnut Demonstration of solar pump for irrigation in Nutritional Garden Assessment of different substrates in vermicompost production Demonstration of backyard poultry (Rainbow rooster)
Lahanda	Attabira	Assessment of BPH tolerant Rice varieties Assessment of the cauliflower production during Kharif Season Demonstration of Tuberose “Arka Prajwal” Assessment the incorporation of Amur carp in composite carp culture Assessment of different combination of carps in aquaculture System
Patrapalli	Bhatli	Demonstration of organic scented Rice production Demonstration on green manuring in rice Demonstration of Eco-friendly pest management in Sesamum Demonstration of Integrated weed management in greengram Demonstration on “Grain pro super bag” for storage of greengram seed Assessment of Production of okra through INM. Demonstration of Micronutrient application on growth and yield of Watermelon Demonstration of Triple Disease Resistant tomato Hybrid “ Arka Rakshak” Assessment of “SEEDPRO”(Microbial plant growth promoter) against Fusarium wilt of Tomato. Demonstration of plastic mulching in new mango orchard Assessment the efficiency of solar drier for value added products Demonstration of Improved Rohu, Var.-Jayanti Demonstration of supplementary feeding management in pisciculture
Kusmuda	Ambabhona	Demonstration of Customised Leaf Colour Chart (LCC) for nitrogen management in rice Demonstration of new generation pesticide for leaf folder management in rice Assessment on performance of green gram var. IPM 02-14 with different date of sowing Assessment on Performance of Tractor drawn Happy Seeder for Sowing Green Gram CFLD on mustard

Name of village	Block	Action taken for development
T. Gandapalli	Bijepur	Assessment the performance of different pigeon pea varieties Assessment of the cauliflower production during Kharif Season Demonstration of Kharif onion var. Agri Found Dark Red Demonstration on Power Weeder for weeding in Brinjal Demonstration of backyard poultry (Rainbow rooster) CFLD on Kharif groundnut

2.1 Priority thrust areas

S. No	Thrust area
1.	Introduction of suitable varieties with improved packages of practices
2.	Organic farming
3.	Reclamation of degraded land
4.	Integrated Nutrient Management practices
5.	Integrated Disease and Pest Management Practices
6.	Quality seeds and seedlings production
7.	Skill/enterprise related technology for rural youths
8.	Value addition in seasonal vegetables
9.	Integrated farming system
10.	Rearing management of animals & birds
11.	Farm Mechanization
12.	Off season vegetable cultivation
13.	Use of gender friendly farm tools for drudgery reduction
14.	Doubling farmers income through need based livelihood option
15.	Conservation of natural resources.

3. TECHNICAL ACHIEVEMENTS

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

OFT												FLD											
No. of Technologies Tested:												No. of Technologies Demonstrated:											
Number of OFTs			Number of farmers									Number of FLDs			Number of farmers								
Target	Achievement	Target	Achievement									Target	Achievement	Target	Achievement								
			SC		ST		Others		Total						SC		ST		Others		Total		
			M	F	M	F	M	F	M	F	T				M	F	M	F	M	F	M	F	T
12	12	80	5	1	6	0	55	13	66	14	80	20	20	200	17	0	28	5	165	15	210	20	230

Training												Extension activities											
Number of Courses		Number of Participants										Number of activities		Number of participants									
Target	Achievement	Target	Achievement									Target	Achievement	Target	Achievement								
			SC		ST		Others		Total						SC		ST		Others		Total		
			M	F	M	F	M	F	M	F	T				M	F	M	F	M	F	M	F	T
66	55	1390	8	6	6	4	60	33	75	44	120	80000	88779		745	220	645	215	6295	793	7649	1228	8877
			1	5	8	6	1	8	1	9	0				0	0	0	0	7	2	7	2	9

Impact of capacity building												Impact of Extension activities										
Number of Participants trained		Number of Trainees got employment (self/ wage/ entrepreneur/ engaged as skilled manpower)										Number of Participants attended		Number of participants got employment (self/ wage/ entrepreneur/ engaged as skilled manpower)								
Target	Achievement	SC		ST		Others		Total			Target	Achievement	SC		ST		Others		Total			
		M	F	M	F	M	F	M	F	T			M	F	M	F	M	F	M	F	T	
		60	40	2	0	3	0	14	4	19			4	23	80000	88779	7000	2100	6200	2000	40000	7000

Seed Production (q)						Planting Material (in Lakh)					
Target			Achievement			Target			Achievement		
310			342.2			50000			173356		

Livestock strains and fish fingerlings produced (in lakh)*						Soil, water, plant, manures samples tested (in lakh)					
Target			Achievement			Target			Achievement		
20000			6500			500			113		

* Give no. only in case of fish fingerlings

Publication by KVKs							
Item	Number	No. circulated	No. of Research papers in NAAS rated Journals	Highest NAAS rating of any publication	Average NAAS rating of the publications	Details of awarded publication, if any	Details of Award given to the publication
Research paper	3	-	3	5.31	4.58	-	-
Seminar/conference/symposia papers	1	-	-	-	-	-	-
Books	-	-	-	-	-	-	-
Bulletins	-	-	-	-	-	-	-
News letter	2	1000	990				
Popular Articles	15	-	-	-	-	-	-
Book Chapter	-	-	-	-	-	-	-
Extension Pamphlets/literature	2	1000	920	-	-	-	-
Technical reports	7						
Electronic Publication (CD/DVD etc)	-	-	-	-	-	-	-
TOTAL							

1 **Achievements on technologies assessed and refined**
OFT-1

1.	Title of On farm Trial	Assessment the performance of different pigeon pea varieties
2.	Problem diagnosed	Less yield from local varieties.
3.	Details of technologies selected for assessment/refinement	Assessment FP:Local Variety (Magusuria) (Duration—180days, P. Yield-8q/ha) TO ₁ :PRG 176 Name: Ujwala, (Duration-135-145days, P. Yield-12q/ha) TO ₂ :BRG 4 (Duration-140days, P. Yield-12q/ha)
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	ICRISAT-2016, UAS Dharwad-2014
5.	Production system and thematic area	Rainfed upland Kharif (Pigeon pea-Fallow), Varietal evaluation
6.	Performance of the Technology with performance indicators	No of pod per plant, no of seeds per pod, Yield:q/ha ,B:C ratio
7.	Final recommendation for micro level situation	Spacing should be 150cm and Nipping at 40-45DAS for profused branching and increase in no. of pods per plant.
8.	Constraints identified and feedback for research	Research on maturity duration of var. PRG 176
9.	Process of farmers participation and their reaction	Group involvement in crop management & farmers are happy because fruit maturity was completed before depletion of soil moisture.

Thematic area:

Problem definition:

Technology assessed:

Table:

Technology option	No. of trials	Yield component			Disease/ insect pest incidence (%)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		No. of effective tillers/hill	No. of spikelet per panicle	Test wt. (100 grain wt.)						
FP	7	120	76	15.1	33	7.2	36400	50400	14000	1:1.38
TO ₁	7	210	105	14.5	12	9.8	34800	68600	33800	1:1.97
TO ₂	7	185	91	14.7	21	9.1	34100	63700	29600	1:1.86

OFT-2

1.	Title of On farm Trial	Assessment on performance of green gram var. IPM 02-14 with different date of sowing
2.	Problem diagnosed	Low growth rate and yield of green gram during sowing 4 th week of Dec
3.	Details of technologies selected for assessment/refinement	Assessment FP: Seed @20kg/ha, seed treatment & inoculation, sowing 4 th week Dec TO ₁ :Seed @20kg/ha, seed treatment & inoculation, line sowing 2 nd week Jan TO ₂ :Seed @20kg/ha, ST& inoculation, line sowing 4 th week Jan FP: Seed @20kg/ha, seed treatment & inoculation, sowing 4 th week Dec
4.	Source of Technology	OUAT,2016
5.	Production system and thematic area	Irrigated medium land Rabi (Paddy-Greengram) , Integrated Crop Management
6.	Performance of the Technology with performance indicators	No. of pod per plant, No.of seeds per pod,yield(q/ha), B:C ratio
7.	Final recommendation for micro level situation	Sowing at 4 th week of January recorded better yield as more plant survival percentage and less attacked of disease and pest
8.	Constraints identified and feedback for research	Difference in sowing date as per availability of soil moisture and irrigation facilities.
9.	Process of farmers participation and their reaction	Farmers were more involved during time of sowing & harvesting. They are yet to be realized the yield after 2-3 years.

Thematic area: Integrated Crop Management (ICM)

Problem definition: Low growth rate and yield of green gram during sowing 4th week of Dec

Technology assessed: Assessment on performance of green gram var. IPM 02-14 with different date of sowing

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 siliqua per plant	No. of primary branches per plant						
FP: Seed @20kg/ha, seed treatment & inoculation, sowing 4 th week Dec	7	72	9	23	2.5	10400	12500	2500	1:1.2
TO ₁ :Seed @20kg/ha, seed treatment & inoculation, line sowing 2 nd week Jan	7	76	12	12	3.2	12300	16000	3700	1:1.3
TO ₂ :Seed @20kg/ha, ST & inoculation, line sowing 4 th week Jan	7	84	22	8	3.8	12600	19000	6400	1:1.5

OFT-3

1.	Title of On farm Trial	Assessment of Brown Plant Hooper (BPH) tolerant Rice varieties
2.	Problem diagnosed	Severe yield loss due to attack of BPH in paddy
3.	Details of technologies selected for assessment/ Refinement-Assessed (Mention either Assessed or Refined)	Assessment FP: MTU-7029 (Duration:140 days, Resistant to BLB,susceptible to BPH, Yield Potential:48q/ha, Year of Release:1982 TO ₁ :HASANTA (Duration:145 days, Resistant to BPH, Yield Potential:50q/ha,Year of Release:2014 TO ₂ :PRATIKHYA(Duration:145 days, Moderately Resistant to BPH, Yield Potential:45q/ha, Year of Release:2014
4.	Source of Technology	Ouat, DRR(2014)
5.	Production system and thematic area	Irrigated medium land, Kharif, Paddy-Paddy,
6.	Performance of the Technology with performance indicator	BPH Population/hill after 60,75 & 90 DAT , 1000 grain wt(gm) ,Yield(q/ha), B:C ratio
7.	Final recommendation for micro level situation	Hasanta can be taken in BPH endemic area where cyclone / heavy wind occurs very rarely
8.	Constraints identified and feedback for research	Lodging of the variety due to heavy wind & increasing the doses of potash to prevent lodging
9.	Process of farmers participation and their reaction	Observing BPH population at P.I stage & they are happy as Hasanta var. is not affected by BPH

Thematic area:

Problem definition: Severe yield loss due to attack of BPH in paddy

Technology assessed:Assessment of BPH tolerant Rice varieties

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 grains/panicle	Plant Height (Cm)						
FP: MTU-7029 (Duration:140 days, Resistant to BLB,susceptible to BPH, Yield Potential:48q/ha, Year of Release:1982	7	175.7	98.8	43	41	53700	61500	7800	1.14
Paddy var. Pratikshya(2014)with recommended package of practices (142days duration, MR to WBPH,105Cm height, Yield potential - 45Q/Ha	7	206	114	10	57.6	71050	86400	15350	1.21
Paddy var. HASANTA(2014)with recommended package of practices (145days duration, Resistant to BPH,110Cm height, Yield potential - 75Q/Ha	7	189	121	-	53.8	69750	80700	10950	1.15

OFT-4

1.	Title of On farm Trial	Assessment of “SEEDPRO”(Microbial plant growth promoter) against Fusarium wilt of Tomato.
2.	Problem diagnosed	Poor yield due to <i>Fusarium sp.</i> dominated wilt disease Complex.
3.	Details of technologies selected for assessment/refinement	Assessment FP: Seed treatment with only carbendazim TO ₁ :seed treatment with Carbendazim 1.5gm/kg of seed followed by <i>Trichoderma viridae</i> @5gm/kg seed after 10 days TO ₂ :seed treatment with Carbendazim 1.5gm/kg of seed followed by SEEDPRO@4gm/kg seed after 10 days
4.	Source of Technology	SOURCE:IIHR-2017
5.	Production system and thematic area	Irrigated Upland,Rabi,Paddy-veg-fallow, Integrated Disease Management
6.	Performance of the Technology with performance indicators	Disease index,% of affected plant/Sq.meter,Yield(q/ha), B:C ratio
7.	Final recommendation for micro level situation	Farmers are suggested to gofor seed treatment of tomato seeds with SEEDPRO @5gmkg before sowing
8.	Constraints identified and feedback for research	Poor availability of seed pro at local market & formulation of seed pro from local resources
9.	Process of farmers participation and their reaction	Active participation during seed treatment&mortality observation at peak vegetative stage. They are delighted after getting more fruits per plant with maximum plant survivability

Thematic area: Integrated Disease Management

Problem definition: Poor yield due to *Fusarium sp.* dominated wilt disease Complex.

Technology assessed:Assessment of “SEEDPRO”(Microbial plant growth promoter) against *Fusarium* wilt of Tomato.

Results: 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
		Seedling mortality	No.of fruits/plant (gm)						
FP: Seed treatment with only carbendazim	7	17	28	19	135	73000	108000	35000	1.47
TO ₁ : Seed treatment with Carbendazim 1.5gm/kg of seed followed by <i>Trichoderma viridae</i> @5gm/kg seed after 10 days	7	4	36	8	157	77600	125600	48000	1.61
TO ₂ : Seed treatment with Carbendazim 1.5gm/kg of seed followed by SEEDPRO@4gm/kg seed after 10 days	7	2	49	4	198	106900	158400	51500	1.48

OFT-5

1.	Title of On farm Trial	Assessment of Production of Okra through INM.
2.	Problem diagnosed	Poor yield due to injudicious application of chemical fertilizer
3.	Details of technologies selected for assessment/Refinement	Assessment FP: Application of RDF TO1:100% RDF + FYM@10 t/Ha + Biofertilizers (4 kg each of Azotobacter, Azosprillum,PSB) TO2:75% RDF + FYM@10 t/Ha + Biofertilizers (4 kg each Azotobacter ,Azosprillum,PSB)
4.	Source of Technology	Dept. of horticulture, AAU,JORHAT(2017)
5.	Production system and thematic area	Irrigated,Upland,Kharif,Veg-Veg,Integrated Nutrient Management
6.	Performance of the Technology with performance indicators	Avg number of Fruit per Plant, Avg. wt. of the fruit,(gm.) ,Yield(q/ha),B:C ratio
7.	Final recommendation for micro level situation	For Promotion of Organic vegetable production FYM and Bio-fertilizer should be Included in vegetable farming.
8.	Constraints identified and feedback for research	Available of Bio-Fertilizer is a constraint Availability of sufficient FYM is also a constraint. Availability of Bio-fertilizer should be made available at block level and at input dealer.
9.	Process of farmers participation and their reaction	Involvement during application of FYM mixed with bio fertilizer & They are happy due to prolonged fruiting

Thematic area: Integrated Nutrient Management (INM)

Problem definition: Poor yield due to injudicious application of chemical fertilizer

Technology assessed: Assessment of Production of okra through INM

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
		Avg. number of Fruit per Plant,	Avg. wt. of the fruit (gm.)	Average plant height (cm)					
FP: Application of RDF	7	7.36	24.45	123.2	131	62000	131000	69000	2.11
TO1:100% RDF + FYM @10 t/Ha + Biofertilizers (4 kg each of Azotobacter, Azosprillum,PSB)	7	8.04	25.12	131.6	142	66500	142000	75500	2.13
TO2:75% RDF + FYM@10 t/Ha + Biofertilizers (4 kg each Azotobacter ,Azosprillum,PSB)	7	7.86	25.05	126.4	138	65700	138000	72300	2.10

OFT-6

1.	Title of On farm Trial	Assessment of the cauliflower production during kharif
2.	Problem diagnosed	Low price of cauliflower in Rabi season
3.	Details of technologies selected for assessment/refinement	Assessment FP: Application of RDF TO ₁ :Planting at cauliflower variety 1088 in 1 st week of July TO ₂ :Planting at cauliflower variety Atisighra in 1 st week of July
4.	Source of Technology	IIHR,2010
5.	Production system and thematic area	Irrigated Upland,Kharif,Veg-Veg ,Varietal evaluation
6.	Performance of the Technology with performance indicators	Avg. Curd weight(gm),Average curd diameter (cm),Yield:q/ha B:C ratio
7.	Final recommendation for micro level situation	Planting of Cauliflower in July will be more remunerative(Pan 1008)
8.	Constraints identified and feedback for research	Availability Kharif variety is sometime problem and should be ensure at market.
9.	Process of farmers participation and their reaction	Group involvement during seedling raising & transplanting. They are happy due to better plant stand under heavy rain

Thematic area: Varietal evaluation

Problem definition: Low price of cauliflower in Rabi season

Technology assessed: Assessment of the cauliflower production during Kharif Season

Results 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
		Avg. Curd weight(gm)	Average curd diameter (cm)					
FP: Planting at early cauliflower PusaKetki in July last week	7	158	8.25	92.5	58550	138750	80200	2.36
TO ₁ :Planting at cauliflower variety 1088 in 1 st week of July	7	210	8.4	105	64000	157500	93500	2.46
TO ₂ :Planting at cauliflower variety Atisighra in 1 st week of July	7	197	8.32	98.5	62000	147750	85750	2.38

OFT-7

1.	Title of On farm Trial	Assessment on Performance of Tractor drawn Happy Seeder for Sowing Green Gram
2.	Problem diagnosed	Low yield due to delayed sowing and less net return due to high cost of cultivation, more labour and time consumption. Burning of left out paddy straw after harvesting .
3.	Details of technologies selected for assessment/refinement	Assessment FP:Broadcasting method of sowing TO ₁ :Line Sowing behind the Plough TO ₂ :Sowing by Tractor Drawn Happy Seeder
4.	Source of Technology	Source: CIAE, Bhopal,2010
5.	Production system and thematic area	Irrigated medium land,Rabi,Paddy-Green Gram, Farm machinery
6.	Performance of the Technology with performance indicators	Seed rate(kg/ha), field capacity(ha/hr), Yield (q/ha), B:C ratio
7.	Final recommendation for micro level situation	
8.	Constraints identified and feedback for research	Weight of the implement to be reduced, Implement should be run by low hp tractor
9.	Process of farmers participation and their reaction	

Thematic area: Farm machinery

Problem definition: Low yield due to delayed sowing and less net return due to high cost of cultivation, more labour and time consumption. Burning of left out paddy straw.

Technology assessed: Assessment on Performance of Tractor drawn Happy Seeder for Sowing Green Gram

Table:

Technology Option	No. of trials	Yield component		Cost of Cultivation (Rs./ha)	Gross Return (Rs/ha)	Net Return (Rs./ha)	BC Ratio
		Labour (MDs / ha.):	Field Capacity (Ha/hr)				
FP:Broadcasting method of Sowing	7	3	0.2	12500	15000	2500	1.2
TO ₁ :Line Sowing behind the Plough	7	6	0.18	14280	18000	3720	1.26
TO ₂ :Sowing by Happy Seeder	7	1	0.4	15550	20500	4950	1.3

OFT-8

1.	Title of On farm Trial	Assessment of Power Pulse Thresher
2.	Problem diagnosed	Threshing by manually is time consuming work, more breakage and more
3.	Details of technologies selected for assessment/refinement	Assessment FP: Manual Threshing TO ₁ : Threshing by Tractor Treading TO ₂ : Threshing by Power Pulse Thresher
4.	Source of Technology	Source: CIAE, Bhopal, 2013
5.	Production system and thematic area	Rainfed upland, Kharif, Pigeon pea-fallow, Farm machinery
6.	Performance of the Technology with performance indicators	Labour requirement (Man-days/ctl), Cost of operation (Rs./ctl), Labour savings (%), Field capacity (q/hr), B:C Ratio
7.	Final recommendation for micro level situation	
8.	Constraints identified and feedback for research	Screens aperture size are to be changed. Arrangement for regulation of motor speed, screen fitting arrangement to be made easier
9.	Process of farmers participation and their reaction	

Thematic area: Farm machinery

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

Technology assessed: Assessment of Tractor Drawn Multi Crop Thresher

Table:

Technology option	No. of trials	Yield component		Cost of operation (Rs. / ha.):	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Labour (MDs / ha.):	Field Capacity (Ha/hr)					
FP: Manual threshing	7	10	0.05	2000	22000	24500	2500	1.11
TO ₁ : Threshing by Tractor treading	7	8	0.12	1600	20500	25800	5300	1.25
TO ₂ : Threshing by tractor drawn multi crop thresher	7	2	0.15	580	18200	26200	8000	1.44

OFT-9

1.	Title of On farm Trial	Assessment of different combination of carps in aquaculture System
2.	Problem diagnosed	Less income from Indian major carps (Catla, Rohu, Mrigal) with limited yield after 10months of culture period.
3.	Details of technologies selected for assessment/refinement	Assessment FP: Indian Major Carps TO ₁ :FP+Exotic carp TO ₂ :TO ₁ +Minor carp+ <i>P.gonionotous</i>
4.	Source of Technology	CIFA, Bhubaneswar, 2013
5.	Production system and thematic area	Pond based and Production & Management
6.	Performance of the Technology with performance indicators	Avg. wt. of carps (gm),Time required for table size (month), Yield (q/ha),B:C ratio, Farmers feed back
7.	Final recommendation for micro level situation	The TO ₂ gives more yield compared to TO ₁ . TO ₁ sustainability is better compared to TO ₂ as the availability of minor carp seeds are difficult at farmers level. (Best combination of Indian major carps, exotic carps and minor carps)
8.	Constraints identified and feedback for research	Seed production technology for different minor carps to be standardized
9.	Process of farmers participation and their reaction	IMC fish seed, pond and feeding management

Thematic area: Fishery

Problem definition: Less income from Indian major carps (Catla, Rohu, Mrigal) with limited yield after 10months of culture period

Technology assessed: Assessment of different combination of carps in aquaculture System

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
		Avg. wt of carps (gm)	Month for table size					
FP:Stocking with Indian major carps @6000 nos. of advanced fingerling per ha. with 10months of culture practice.	5	850	10	23.25	131320	279000	147680	2.12
TO ₁ : FP.+ Exotic carp (Silver carp, Grass carp and Common carp) @1000 nos. of advanced fingerling per ha.	5	1200	6	26.58	155830	352250	196420	2.26
TO ₂ :TO ₁ + Minor carp and Barb (<i>P. gonionotus</i>) @3000 nos. of fingerling per ha	5	1300	6	26.81	163350	382500	219150	2.34

OFT-10

1.	Title of On farm Trial	Assessment of the incorporation of Amur carp in composite carp culture
2.	Problem diagnosed	Slow growth rate of Mrigal affects the average yield from composite carp culture
3.	Details of technologies selected for assessment/refinement	Assessment FP: Catla : Rohu: Mrigal (30:40:30) TO ₁ :Catla : Rohu: Mrigal: Amur carp (30:40:20:10) TO ₂ : Catla : Rohu: Mrigal: Amur carp (30:40:10:20)
4.	Source of Technology	UAS, Bangalore, 2015
5.	Production system and thematic area	Pond based and Varietal Evaluation
6.	Performance of the Technology with performance indicators	Growth rate (%), Yield (q/ha), B:C ratio
7.	Final recommendation for micro level situation	Amur carp should be stocked with advanced fingerling
8.	Constraints identified and feedback for research	Availability of Amur carp fingerlings should be sufficiently available to the farmers
9.	Process of farmers participation and their reaction	Carp stocking, pond management and feeding management

Thematic area: Production and Management

Problem definition: Slow growth rate of mrigal affects the average yield from composite carp culture

Technology assessed: Assessment the incorporation of Amur carp in composite carp culture

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
		Avg. wt of carps (gm)	Growth rate per month (6month) (%)					
FP :Mrigal as bottom feeder with stocking rate of more than 30%	5	480	80	24.15	131620	275500	143880	2.09
TO ₁ : Stocking ratio catla: rohu : mrigal :Amur carp :: 30:40:20:10	5	680	113.3	25.68	157850	356850	199000	2.26
TO ₂ : Stocking ratio catla: rohu : mrigal :Amur carp :: 30:40:10:20	5	750	125	26.78	164430	385300	220870	2.34

OFT-11

1.	Title of On farm Trial	Assessment of different substrates in vermicompost production
2.	Problem diagnosed	Non-commercialisation of Organic wastage
3.	Details of technologies selected for assessment/refinement	Assessment FP:Vermicomposting from Cow dung + vegetable waste (2:3) TO ₁ : Vermicomposting from Cow dung + Crop residue (2:3) TO ₂ : Vermicomposting from Cow dung + spent mushroom substrate (2:3)
4.	Source of Technology	KVK, OUAT, 2012
5.	Production system and thematic area	Homestead, Enterprise development
6.	Performance of the Technology with performance indicators	N-P-K status of the vermicompost (%), Conversion period (days), Conversion ratio,B:C ratio
7.	Final recommendation for micro level situation	Spent mushroom substrate can be better utilized with cow dung in 3:2 for vermicompost production.
8.	Constraints identified and feedback for research	Foul smell from spent mushroom substrate&Formulation of a chemical for quick decomposition other substrates without hampering the microbial activity
9.	Process of farmers participation and their reaction	Active participation in moisture maintenance &harvesting at regular interval. Farm women are overwhelmed as they are now able to earn extra income from mushroom wastages.

Thematic area: Enterprise development

Problem definition: Non-commercialisation of Organic wastage

Technology assessed: Assessment of different substrates in vermicompost production

Table:

Technology option	No. of trials	Yield component		Cost of cultivation (Rs./1 Q of substrate/annum)	Gross return (Rs.)	Net return (Rs.)	BC ratio
		N-P-K (%)	Conversion % of substrate after 3 months				
FP :Vermicomposting from Cow dung + vegetable waste (2:3)	7	1.37:1.04:1.13	16	480	640	160	1.33
TO ₁ : Vermicomposting from Cow dung + Crop residue (2:3)	7	2.26:1.73:1.84	57	1240	2280	1040	1.74
TO ₂ : Vermicomposting from Cow dung + spent mushroom substrate (2:3)	7	2.08:0.91:0.62	64	1320	2560	1240	1.93

OFT-12

1.	Title of On farm Trial	Assessment the efficiency of solar drier for value added products
2.	Problem diagnosed	Potato chips through open sun drying is a more time consuming and poor hygienic process
3.	Details of technologies selected for assessment/refinement	Assessment FP:Drying of Potato slices through open sun drying followed by blanching treatment with salt water TO ₁ :Drying of Potato slices through oven drying followed by blanching treatment with 2 gm. Potassium metabisulphite solution TO ₂ :Drying of Potato slices through Solar drier followed by blanching treatment with 2 gm. Potassium metabisulphite solution
4.	Source of Technology	OUAT, 2012
5.	Production system and thematic area	Homestead
6.	Performance of the Technology with performance indicators	Drying period (days), sensory evaluation (9- Point hedonic scale),BC Ratio, farmers feedback
7.	Final recommendation for micro level situation	Potato chips can be prepared in Solar dryer in more hygienic way with less time
8.	Constraints identified and feedback for research	Poor availability of the machine & Fixing of more reflectors to quicken the process
9.	Process of farmers participation and their reaction	Women are actively involved in making of potato chips & showed their interest towards the solar drier as it can also used for drying of papad, banana chips.

Thematic area: value addition

Problem definition: Potato chips through open sun drying is a more time consuming and poor hygienic process

Technology assessed: Assessment the efficiency of solar drier for value added products

Table:

Technology option	No. of trials	Yield component		Drying period (h)our	Cost of intervention (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Overall acceptability (0-9 point hedonic scale)	Moisture (%)					
FP:Drying of Potato slices through open sun drying followed by blanching treatment with salt water	7	6	9.4	14	500	900	400	1.8
TO ₁ :Drying of Potato slices through oven drying followed by blanching treatment with 2 gm. Potassium metabisulphite solution	7	8	8.9	7	500	990	490	1.98
TO ₂ :Drying of Potato slices through Solar drier followed by blanching treatment with 2 gm. Potassium metabisulphite solution	7	8	9.1	10	530	990	460	1.86

3.2 Achievements of Frontline Demonstrations

A. Details of FLDs conducted during the year

Cereals

Sl. No.	Crop	Thematic area	Technology Demonstrated with detailed treatments	Area (ha)		No. of farmers/demonstration									Reasons for shortfall in achievement
				Proposed	Actual	SC		ST		Others		Total			
						M	F	M	F	M	F	M	F	T	
1	Rice	Fertilizer management	Demonstration on green manuring in rice (Green manuring of sunhemp/ Dhanicha in paddy with seed rate 10kg/acre)	8	8	2	3	5	10						
2	Rice	Fertilizer management	Demonstration of customised leaf colour chart (LCC) for nitrogen management in rice (Application of nitrogenous fertiliser based on LCC reading)	4	4	4	8	28	40						
3	Rice	Organic	Demonstration of organic rice production (Scented rice Var. NuaAcharamati spraying of Bacillus thuringiensis (Bt), green manuring with Dhanicha, spraying of NSKE 5% (extract from 10KG diluted to 200lit/acre & release of Trichogramma japonicum @40000/wk.)	0.4	0.4	0	0	10	10						
4	Rice	IPM	Popularization of new generation pesticide for management of leaf folder in rice (Flubendiamide 240 SC + Thiacloprid 240 SC @300ml/Ha to be applied at tillering and panicle initiation stage)	1	1	1	1	8	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	248	56	220	Fallow	12.06.2018	15.11.2018	1998	42
Rice	Kharif	Irrigated medium land	Red laterite	235	66	190	fallow	20.06.2018	20.11.2018	1998	42
Rice	Kharif	Rainfed upland	Red laterite	219	41	245	fallow	17.06.2018	12.11.2018	1998	42
Rice	Kharif	Irrigated medium land	Red laterite	330	54	225	paddy	10.06.18	08.12.2018	1998	42

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	Demonstration of Integrated Management of Disease Complex in Groundnut (Seed treatment with Tebuconazole 25WG @ 1.5gm/kg seed, Furrow application of <i>Trichoderma viridae</i> @ 4kg inoculated with 50kg of FYM, broadcasting of <i>Trichoderma viridae</i> at @4kg inoculated with 250kg FYM AT 40DAS, 2 sprays of Tebuconazole 25.9EC@ @1ml/lit at 60&75 DAS)	10	1	15.9	11.8	34.7	40000	71550	31550	1.8	35000	53100	18100	1.5

Sesamum	IPM	Demonstration of Eco-friendly pest management in Sesamum (Seed treatment with Imidachloprid 70WG @ 5 gm/kg, intercropping with sesamum + black gram (5:3) with two foliar applications of Triazophos 40EC @ 2 ml/lit)	10	1	.7.04	4.17	68	11000	24640	13640	2.24	9000	14595	5595	1.6
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* 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
Geengram	Integrated Weed Management	Demonstration on IWM in greengram (Application of pre-emergence weedicide (Pendimethalin 30EC @ 2000 ml/ha) within 3rd day and post-emergence (Quizalo-fop-Ethyl 5% Ec @ 1000 ml/ha at 20DAS))	10	1	4.2	3.5	20	12000	21000	8000	1:1.61	13200	17500	4300	1:1.3
Greengram	Post-harvest management	Demonstration on grain pro super bag for storage of greengram seeds (Use of grain pro super bag for storage of pulse seeds)	10	1	Insect infestation% 2.2% Germination % 82%	17.5% 74%	10.8	5200	6800	1600	1:1.3	5040	5750	710	1:1.14

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

** BCR= GROSS RETURN/GROSS COST

Other crops

Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	Other parameters		*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demonstration	Check		Demo	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Rice	INM	Demonstration on green manuring in rice (Green manuring of sunhemp/ Dhanicha in paddy with seed rate 10kg/acre)	10	8.0	38.9	36.8	14	No. of tillers/m ² 241	236g	49000	68075	19075	1:1.4	46600	64400	17800	1:1.38
Rice	INM	Demonstration of 30ember30r30r leaf colour chart (LCC) for nitrogen management in rice (Application of nitrogeneous30ember30 r30r based on LCC reading)	40	4.0	40.2	38.6	3.6	268	231	49500	70350	20850	1:1.42	48450	67550	19100	1:1.39
Rice	Organic	Demonstration of organic rice production (Scented rice Var. NuaAcharamati spraying of <i>Bacillus thuringiensis</i> (Bt), green manuring with Dhanicha, spraying of NSKE 5% (extract from 10KG diluted to 200lit/acre & release of <i>Trichogramma japonicum</i> @40000/wk.)	10	1	35.1	29.6	18.5	Plant ht. (cm. 141	147	30200	60400	30200	2.0	12140	20640	8500	1.7

Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	Other parameters		*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demonstration	Check		Demo	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Rice	IPM	Popularization of new generation pesticide for management of leaf folder in rice (Flubendiamide 240 SC + Thiacloprid 240 SC @300ml/Ha to be applied at tillering and panicle initiation stage)	10	1	42.6	30	42	No. of effective tiller- 30	27	55000	74550	19550	1.35	45000	52500	7500	1.16
Onion	Varietal Evaluation	Popularization of Kharif onion Bhima super (Growing Kharif Onion Bhima Super)	10	0.3	140	72	94	56	-	60000	140000	80000	2.33	43000	72000	19000	1.62
Tuberose	Varietal Evaluation	Popularization of Tuberose “Arka Prajwal – Tube rose “Arka Prajwal”	10	0.1	76	32	237	1.05	-	100000	304000	153000	3.04	36500	64000	27500	1.75
Mango	Production management	Demonstration of plastic mulching in new mango orchard- Mulching with drip irrigation	10	1	10.2	9.6	9	-	-	15300	5464	9836	2.8	14400	6000	8400	2.4

Livestock

Category	Thematic Area	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters (Live body wt. – kg./9months)		% change in major parameter	Other parameter (No. of eggs/month)		*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Dairy																	
Cow																	
Buffalo																	
Poultry	Backyard	Rearing management of Rainbow Rooster with timely vaccination (Rearing management of Rainbow Rooster with timely vaccination)	10	100	2.6	1.2	116	12	5	3000	6600	3600	2.2	1930	3480	1550	1.8
Rabbitry																	
Pigerry																	
Sheep and goat																	
Duckery																	
Others (pl. specify)																	
Total																	

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

** BCR= GROSS RETURN/GROSS COST

Fisheries

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	Feeding Management	Supplementary feeding management(Floating feed) in pisciculture (Commercially formulated fish feed (with protein, fat, vitamins and mineral mix) of floating type (5-2% of avg. B. wt.)	10	10	38.5	21.2	81.6	890	540	269500	462000	192500	1.71	116600	254400	137800	2.18
Indian Major Carps	Varietal Evaluation	Improved Rohu breed "Jayanti" (Replacement of "Jayanti" rohu fingerlings with normal rohu in the pond based culture system)	10	10	26.8	22.2	20.7	780	650	140400	321600	181200	2.29	111000	244200	133200	2.2

* 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-gm./day)		% 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	Demonstration on production of Paddy straw mushroom with threshed straw production of P.S.M with(5kg straw,Pulse powder 3%,Soaking period 5hr)	10	100	450	500	(-)10%	9	8	3600	5400	1800	1.5	4300	6000	1700	1.39
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					

Crop	Name of the Hybrid	No. of farmers	Area (ha)	Yield (kg/ha) / major parameter			Economics (Rs./ha)			
Sorghum (Fodder)										
Others (Pl.specify)										

Technical Feedback on the demonstrated technologies

Sl. No	Crop	Feed Back
1	Rice	Green manuring increases the yield of rice to 10-15% and improve the soil fertility status.
2	Rice	LCC reduces excessive use of N-fertilizer and cheapest & easiest tool for nitrogen management.
3	Rice	Development of short duration scented paddy
4	Rice	Research on triple resistant (Stem borer, Leaf folder & case worm) paddy varieties
5	Finger millet	Development of fingermillet trans planter
6	Greengram	Reduces the labour cost for weeding and increase in yield up to 20%
7	Greengram	Less deterioration of seed quality and 10% increase in germination % as stored in grain pro super bag.
8	Groundnut	Development of suitable variety of groundnut resistant to foliar disease
9	Sesamum	Selection of suitable trap crop for capsule borer
10	Tomato	Development of tomato var. that can be cultivated throughout the year
11	Onion	Bhima Super is suitable for 38ember season and should be promoted for 38ember cultivation.
12	Tuberose	Tuberose "Arka Prajwal" should be promoted for commercial floriculture.
13	watermelon	More research should be done on fruit cracking of watermelon.
14	Plastic mulching	Research should be done on Bio-Degradable and eco-friendly plastic mulch.
15	Nano Solar Pump	Low cost solar panel should be promoted for better adaptable among farmer.
16	Power Weeder	Provision for More Govt. subsidy for more horizontal spread of the technology.
17	Paddy Straw mushroom	More Research on alternate substrate for paddy straw mushroom.
18	Poultry	Promotion of Brooding center at village level for better adaptability.
19	Fishery	Supplementary feeding enhances the body wt.
20	Fishery	Advanced Jayanti Fingerling shows better growth

4. Extension and Training activities under FLD

Sl.No.	Activity	Date	No. of Activities Organized	Number of Participants	Remarks
1.	Field days	08.10.18, 02.02.19 05.11.18.	3	130	Wilt resistant tomato Hybrid var. Arka Rakshak Mushroom production from threshed straw Disease management in Groundnut

2.	Farmers Training	05.06.18,08.06.18, 30.06.18, 8.07.18, 14.08.18,27.08.18, 28.08.18,25.09.18 25.11.18,14.12.18, 31.12.18,31.12.18, 01.01.19,10.01.19	12	280	Training includes F& FW, Rural youth
3.	Media coverage	18.02.19,	4	Mass	Tomato Production, Disease management in groundnut Fingerlings production,Income generating activities for farm women
4.	Training for extension functionaries	02.11.18	2	30	Organic Tomato production,seed sampling & quality testing ofgreengram

Performance of the demonstration under CFLD on Pulse and Oilseed Crops during Kharif 2018, Rabi 2018-19 & Summer 2019:

A. Technical Parameters:

Sl. No.	Crop demonstrated	Existing (Farmer's) variety name	Existing yield (q/ha)	Yield gap (Kg/ha) w.r.to			Name of Variety + Technology demonstrated	Number of farmers	Area in ha	Yield obtained (q/ha)			Yield gap minimized (%)		
				District yield (D)	State yield (S)	Potential yield (P)				Max.	Min.	Av.	D	S	P
1	Greengram Var.I PM-02-3	Kalichikni	2.5	2.0	1.68	11	80	20	8.3	6	7.32	100	100	66	
2	Pigeon pea Var.PRG-176	Kandula	6.2	3.2	4.3	12	175	30	11.7	9.9	10.4	100	100	86	

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			
3	Green gram Var.I PM-02-14	Baisakhi	5.6	495	480	1200	Prophenophos 50 EC @2ml/lit.	213	50	9.97	7.6	8.38	100	100	69.8			
1	Groundnut	TM V-2	11.3	1205	1460	2000	Var.Devi Line sowing behind plough 30cm x 10cm Seed treatment with Vitavax Power @2.5gm/kg seed, STBF, Application of Phospho-Gypsum @ 2.5Q/Ha. Spraying of Indoxacarb 15.8SL @ 1ml/5liters of water, Spraying of Sulphur 80WP @ 5 gm. /ltr of water	159	20	14.45	10.1	12.9	100	82	60			

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	Groundnut	Smurti	16.6	2385	1936	2500	Var.Devi Line sowing behind plough 30cm x 10cm Seed treatment with Vitavax power @ 2.5gm/kg of seeds, STBF, Application of <u>Phospho-Gypsum @ 2.5Q/Ha.</u> <u>Spraying</u> of Chloropyrifos 50% + Cypermethrin 5% EC @ 0.5ml / lit of water. Spraying of Carbendazim 12%+ Mancozeb 63% @ 3gm /Lit of water	69	20	22.56	18.81	20.9	87.63	100	83.6

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	Var.IPM-02-03 Line sowing behind plough 30 cm x 10 cm, Seed treatment with Rhizobium culture @ 20gm/kg seed, STBF, Application of <u>Phospho-Gypsum @ 2.5Q/Ha.</u> <u>Spraying of Indoxacarb 15.8 SL@ 1ml/5liters of water</u>	14670	24662	9992	1.68	19780	36600	14820	1.85
2	HYV SEED-PRG-176, HYV SEED-PRG-176, Line sowing behind plough 60cm x 30cm, Seed treatment with Rhizobium culture @20 gm/kg seed, STBF, Spraying of <u>Hormone Planofix @1ml/4.5lit</u> , <u>spraying</u> of pesticide Prophenophos 50 EC @2ml/lit.	18300	31000	12700	1.69	29500	62400	32900	2.11
3	Var.IPM-02-14, Line sowing behind plough	23000	28000	5000	1.21	26500	41900	15400	1.58

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
	25cm x10cm & sowing by Happy seeder, Seed treatment with Vitavax Power @ 2.5 gm/kg & Rhizobium culture @ 20 gm/kg seed, STBF, Application of Phospho-Gypsum @ 2.5Q/Ha. Spraying of Indoxacarb 15.8SL @ 1ml/5litrs of water, Spraying of Sulphur 80WP @ 5 gm. /ltr of water								
4	Var.Devi,Line sowing behind plough 30cmx10cm,Seed treatment with Vitavax Power @ 2.5gm/kg seed , STBF, Application of Phospho – Gypsum @ 2.5Q/Ha. Spraying of Profenophos 50EC @2ml/litre of water, Spraying of Carbendazim 12%% plus Mancozeb 63% @3gm /Lit of water	31000	44200	13200	1.33	42000	64500	22500	1.53
5	Var.Devi, Line sowing behind plough 30cmx10cm, Seed treatment with Vitavax power @ 2.5gm/kg of seeds, STBF, Application of Phospho-Gypsum@ 2.5Q/Ha. Spraying of Chloropyrifos 50% + Cypermethrin 5% EC @ 0.5ml / lit of water. Spraying of Carbendazim 12%+ Mancozeb 63% @ 3gm /Lit of water	39060	66400	27340	1.69	41390	83600	42210	2.01

C. Socio-economic impact parameters

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/household)
1	Var.IPM-02-03, Line sowing behind plough 30 cm x 10 cm, Seed treatment with Rhizobium culture @ 20gm /kg seed, STBF, Application of Phospho-Gypsum @ 2.5Q/Ha. Spraying of Indoxacarb 15.8 SL@ 1ml/5litrs of water	14650	11720	50	1600	1330	Labour payment, payment of fertilizer and pesticides dues, purches of grocery ,and school uniform for children	37
2	HYV Seed-PRG-176, HYV Seed-PRG-176, Line	31371	26665	60	1450	3306	Labour payment,	24

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/household)
	sowing behind plough 60cm x 30cm, Seed treatment with Rhizobium culture @20 gm/kg seed, STBF, Spraying of <u>Hormone Planofix @1ml/4.5lit</u> , spraying of pesticide Prophenophos 50 EC @2ml/lit.						payment of fertilizer and pesticides dues, purchase of grocery & stationeries, ornaments	
3	Var. IPM-02-14, Line sowing behind plough 25cm x 10cm & sowing by Happy seeder, Seed treatment with Vitavax Power @ 2.5 gm/kg & Rhizobium culture @ 20 gm/kg seed, STBF, Application of <u>Phospho-Gypsum @ 2.5Q/Ha</u> , <u>Spraying of Indoxacarb 15.8SL @ 1ml/5liters</u> of water, Spraying of Sulphur 80WP @ 5 gm. /ltr of water	25866	20690	50	2560	2616	Loan repayment, purchase of grocery, school uniform for children	35
4	Var. Devi, Line sowing behind plough 30cm x 10cm, Seed treatment with Vitavax Power @ 2.5 gm/kg seed, STBF, Application of <u>Phospho – Gypsum @ 2.5Q/Ha</u> . <u>Spraying of Profenophos 50EC @2ml/litre</u> of water, Spraying of Carbendazim 12%% plus Mancozeb 63% @3gm /Lit of water	41945	35595	50	3350	3000	Labour Payment, loan payment, purchase of grocery, Dress material for family members, school uniform for children, Purchase of mobile voucher, utensil, Payment of electric bill.	45
5	Var. Devi, Line sowing behind plough 30cm x 10cm, Seed treatment with Vitavax power @ 2.5 gm/kg of seeds, STBF, Application of <u>Phospho-Gypsum @ 2.5Q/Ha</u> . <u>Spraying of Chloropyrifos 50% + Cypermethrin 5% EC @ 0.5ml / lit</u> of water. Spraying of Carbendazim 12%+ Mancozeb 63% @ 3gm /Lit of water	41806	540	30	90	55	Labour Payment, loan payment, purchase of grocery, clothes for family members, Payment of electricity bill.	41

D. Pulses & 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	Var. IPM-02-03 Line sowing behind plough 30 cm x 10 cm, Seed treatment with Rhizobium culture @ 20gm /kg seed, STBF, Application of <u>Phospho-Gypsum @ 2.5Q/Ha. Spraying of Indoxacarb 15.8 SL @ 1ml/5litrs of water</u>	ideal	KVK, state agri. Dept, ICAR, NGO, Input dealer	Good	No	yes	Need for Procurement of produce from farmers at MSP through RMCs
2	HYV SEED-PRG-176, HYV SEED-PRG-176, Line sowing behind plough 60cm x 30cm, Seed treatment with Rhizobium culture @20 gm/kg seed, STBF, Spraying of <u>Hormone Planofix @1ml/4.5lit. spraying of pesticide Prophenophos 50 EC @2ml/lit.</u>	ideal	KVK, state agri. Dept, ICAR, NGO, Input dealer	Good	Susceptable to <u>Helicoverpa armigera</u>	yes	Exposure visit of farmers to other states/areas.
3	Var. IPM-02-14, Line sowing behind plough 25cm x 10cm & sowing by Happy seeder, Seed treatment with Vitavax Power @ 2.5 gm/kg & Rhizobium culture @ 20 gm/kg seed, STBF, Application of <u>Phospho-Gypsum @ 2.5Q/Ha. Spraying of Indoxacarb 15.8SL @ 1ml/5litrs of water, Spraying of Sulphur 80WP @ 5 gm. /ltr of water</u>	Ideal	KVK, State Agriculture Department, NGOs, Input dealer, State level institutes.	Moderate	Weed problem, uprooting problem	Yes	Bulk procurement by Government at MSP
4	Var. Devi, Line sowing behind plough 30cm x 10cm, Seed treatment with Vitavax Power @ 2.5gm/kg seed, STBF, Application of <u>Phospho-Gypsum @ 2.5Q/Ha. Spraying of Profenophos 50EC @2ml/litre of water, Spraying of Carbendazim 12% plus Mancozeb 63% @3gm /Lit of water</u>	ideal	KVK, State Agri. Dept, ICAR, NGO, Input dealer	Medium	Less fruiting in late winter sown crop	Yes by 82 % farmer	Purchase of pulses by RMCs
5	Var. Devi, Line sowing behind plough 30cm x 10cm, Seed treatment with Vitavax power @ 2.5gm/kg of seeds, STBF, Application of <u>Phospho-Gypsum @ 2.5Q/Ha. Spraying of Chloropyrifos 50% + Cypermethrin 5% EC @ 0.5ml / lit of water. Spraying of</u>	ideal	KVK, State Agri. Dept, ICAR, NGO, Input dealer	Good	No	yes	Purchase of groundnut at MSP by govt. agencies.

Sl. No.	Technologies demonstrated (with name)	Farmers' Perception parameters					
		Suitability to their farming system	Likings (Preference)	Affordability	Any negative effect	Is Technology acceptable to all in the group/village	Suggestions, for change/improvement, if any
	Carbendazim 12% + Mancozeb 63% @ 3gm /Lit of water						

E. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
Green Gram – Var. IPM-02-3, Line sowing behind plough 30cm x 10cm, Seed treatment with Rhizobium culture @ 20gm/kg seed, STBF, Application of <u>Phospho-Gypsum @2.5Q/Ha. Spraying of Indoxacarb 15.8SL @ 1ml/5litrs of water</u>	Pods/plant Plant height Test weight(gm)	Av pods/plant(Demo)-46 pods/plant(check)-32 Av 63cm(Demo) 67 cm (check) 35.28gm(Demo) 31.8 gm(Check)	Pod filling was better in rhizobium treated plants Colour of seeds was more shining in 45ember45r-Gypsum plots
Pigeonpea VAR.PRG-176 HYV Seed-PRG-176, Line sowing behind plough 60cm x 30cm Seed treatment with Rhizobium culture @ 20gm/kg seed, STBF Spraying of <u>Hormone Planofix @ 1ml/4.5lit, spraying of pesticide Prophenophos 50EC @ 2ml/lit.</u>	Pods/plant Plant height Test weight(gm)	268(Demo)-, 155 (check) 234 cm (Demo) 215 cm. (Check) 68gm(Demo) 55 gm(Check)	Pod filling was better in rhizobium treated plants Number of pods in hormone treated plots was 35% more than untreated plots.
Var. IPM-02-14, resistant to YMV and leaf crinkle disease. Line sowing behind plough 25cm x 10cm & sowing by Happy seeder, Seed treatment with Vitavax Power @ 2.5 gm/kg & Rhizobium culture @ 20gm/kg seed, STBF, Application of <u>Phospho-Gypsum @ 2.5Q/Ha. Spraying of Indoxacarb 15.8SL @ 1ml/5litrs of water, Spraying of Sulphur 80WP @ 5 gm. /ltr of water</u>	Pods/plant Plant height	Av 79 pods/plant(Demo) 41 pods/plant(check) Av 69cm(Demo) 63cm (check)	<ul style="list-style-type: none"> Pre Rabi sowing produced more than November-December sowing Pod filling was better in rhizobium treated plants Colour of seeds was more shining in 45ember45r- Gypsum applied plots Occurrence of YMV was very less than 2 %. Fruting habit of the var. is better than Local

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
Groundnut Variety –Devi, duration 95 days, Bold seeded, White kernel, Thin seed coat, Draught tolerant, Erect/Bunch type	Pods/plant	Av 25pods/plant(Demo) 18pods/plant(check)	<ul style="list-style-type: none"> Pod filling was 93% in Phospho-Gypsum treated plots against 71% in non-treated plots
	Plant height	Av 71cm(Demo) 65cm (check)	
Groundnut Variety –Devi, duration 95 days, Bold seeded, White kernel, Thin seed coat, Draught tolerant, Erect/Bunch type	Pods/plant	Av 32pods/plant(Demo) 21pods/plant(check)	<ul style="list-style-type: none"> Foliar diseases were less in fungicide treated plot. Leaves remain green till harvest in Phospho-Gypsum treated plots Bold seeds were obtained from insecticides treated plots.
	Plant height	Av 44cm(Demo) 39cm (check)	

F. Extension activities under FLD conducted:

Sl. No.	Extension Activities Organized	Date and Place of Activity	Number of Farmers Attended
	GREENGRAM(Kharif)		
1	Awareness camp on Improved cultivation Technology of Kharif Greengram	Dt.03.08.2018, Vill: Sambalpuri, Block: Ambabhona Dt.19.09.2018, Vill:Gudesira, Block: Bargarh	50 35
2	Group meeting	01.08.2018,03.08.2018, Vill.:Jharmunda, GP:Chhuriapalli, Block: Sohela	35
3	Field visit	31.08.2018, 27.09.2018, 27.10.2018, Vill: Sambalpuri, Block: Ambabhona	47
	PIGEONPEA (Kharif)		
1	Awareness camp on Integrated crop management of Kharif pigeon pea	Dt.11.06.2018, Vill. Sadhupalli, GP: Kanapalli & Vill. Brahmanadei, GP:Rengalli, Block: Shohella	83
2	Field visit	Dt 14.07.2018, 06.11.2018 & 26.09.2018, Vill.Brahmanadei, GP:Rengalli, Block: Shohella,Vill.Charpalli, GP-T.Gandapalli, Block-Bijepur	52
3	Group meeting	Dt13.07.2018, 28.09.2018 & 09.11.2018, Vill.Brahmanadei, GP:Rengalli, Block:Shohella, Vill.Charpalli, GP-T.Gandapalli, Block- Bijepur	45
	GRONDNUT (Kharif)		
1	Field visit	27.7.2018, 01.08.2018 & 18.08.2018, 6.9.2018, 29.9.2018	85
2	Group meeting	09.10.2018, 11.10.2018, 20.09.2018, 18.08.2018	96
3	Awareness Camp	16.07.2018	100
4	Field day		50
	GREENGRAM (Rabi)		
1	Field visit	6.11.2018, 14.11.2018, 28.11.2018, 7.12.2018, 14.12.2018, 27.12.2018, 10.1.2019, 14.1.2019, 25.1.2019, 29.1.2019 Sambalpuri, Ghugurapalai, Kanheipali, Bakti, Bargaon, Biripali, Putputpali, Silate, Lahanda, Bhadigaon, Nuabatimunda	264
2	Group meeting	2.11.2018, 12.11.2018, 26.11.2018, 7.12.2018, 15.12.2018, 21.12.2018, 26.12.2018, 5.1.2019, 18.1.2019, 22.1.2019, 31.01.19 Nillipali, Jogipali, Putputpali, Silate, Nuabatimunda, Larambha, Bakti, Janhapada, Bhadigaon, Biripali, Kanheipali, Ghugurapali, Bargaon	130
3	Awareness Camp	15.11.2018-Biripali G.P-Rengali Block-Sohela 27.11.2018-Runipali G.P-Mulbar Block-Bhatli	69
4	Field day	29.1.2019, Vil-Kanheipali Block-Ambabhona, Bargarh	100
5	Exposure visit	29.1.2019-Vil-Kanheipali	114
	GRONDNUT (Summer)		
1	Field visit	28.03.2019 & 30.03.2019, Turunga, Singhenpali, Papanga	30
2	Group meeting	2.03.2019,13.03.2019,23.03.2019,28.03.2019,30.03.2019 K.Tikra, Turunga, Jhilminda, Papanga, Singhenpalli	63
3	Awareness Camp	10.1.2019, KVK Campus Bargarh	35
4	Exposure visit	6.4.2019, KVK Demo unit	50

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

	
<p>Line sown Greengram (Kharif) crop at village: Jharmunda, Block: Shohella, Bargarh</p>	<p>Pigeon pea Crop (Kharif) at peak vegetative stage at village: Charpali, Block: Bijepur, Bargarh</p>
	
<p>Rabi –Greengram crop at peak vegetative stage- Vil-Runipali Block-Bhatli: Bargarh</p>	<p>Weeding Summer Groundnut at village: Singhenpali ,Bheden Block: Bargarh</p>

H. Farmers’ Training Photographs

	
<p>Farmers training at village: Sambalpuri, Block: Ambabhona, Bargarh</p>	<p>Training of Pulse farmers At Vil-Kanheipali Organised by Nodal officer Seed hub project,OUAT, Bhuabaneswar</p>
	
<p>Training Programme at Vill: Balijuri, Block: Bhatli, Bargarh, Crop – Kharif Ground Nut</p>	<p>Awareness camp on Integrated pest management of pulses At-Nillipali Block-Attapura Dist-Bargarh</p>

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



Kharif Green Gram crop Visit of Dr Arvind Kumar, DRR, Patna to CFLD sites Bargarh on Dt.11.07.2018



Rabi Green gram Field day At-Kanheipali Block- Ambabhona Dist-Bargarh,29.01.2019



Visit of Dr. Srikant , NRSC, Hyderabad to Vill: Balijuri, Block: Bhatli, Bargarh Crop – Kharif Ground Nut



Field day 49ember groundnut at vil- Kanheipali dated 23.12.2018



Demonstration of Tractor drawn Groundnut Thresher under CFLD Programmne, KVK, Bargarh



Groundnut at Crop Cafeteria inside KVK Campus Bargarh

Thematic Area	No. of Courses	No. of Participants									Grand Total			
		Other			SC			ST			M	F	T	
		M	F	T	M	F	T	M	F	T				
Composite fish culture & fish disease														
Fish feed preparation & its application to fish pond, like nursery, rearing & stocking pond														
Hatchery management and culture of freshwater prawn														
Breeding and culture of ornamental fishes														
Portable plastic carp hatchery														
Pen culture of fish and prawn														
Shrimp farming														
Edible oyster farming														
Pearl culture														
Fish processing and value addition														
Others, if any														
IX. Production of Inputs at site														
Seed Production														
Planting material production														
Bio-agents production														
Bio-pesticides production														
Bio-fertilizer production														
Vermi-compost production														
Organic manures production														
Production of fry and fingerlings														
Production of Bee-colonies and wax sheets														
Small tools and implements														
Production of livestock feed and fodder														
Production of Fish feed														
Others, if any														
X. Capacity Building and Group Dynamics														
Leadership development														
Group dynamics														
Formation and Management of SHGs														
Mobilization of social capital														
Entrepreneurial development of farmers/youths														
WTO and IPR issues														
Others, if any														
XI Agro-forestry														
Production technologies														
Nursery management														
Integrated Farming Systems														
XII. Others (Pl. Specify)														
TOTAL	1	11	2	13	6	5	11	1	0	1	18	7	25	

2. Rural Youth (on campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total			
		Other			SC			ST			M	F	T	
		M	F	T	M	F	T	M	F	T				
Mushroom Production														
Bee-keeping														
Integrated farming														
Seed production	2	13	5	18	3	4	7	0	0	0	16	9	25	
Production of organic inputs	1	9	0	9	1	0	1	0	0	0	10	0	10	
Integrated Farming														
Planting material production	1	9	0	9	0	0	0	1	0	1	10	0	10	

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST			M	F	T
		M	F	T	M	F	T	M	F	T			
Production of quality animal products													
Dairying													
Sheep and goat rearing													
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Para vets													
Para extension workers													
Composite fish culture													
Freshwater prawn culture													
Shrimp farming													
Pearl culture													
Cold water fisheries													
Fish harvest and processing technology													
Fry and fingerling rearing													
Small scale processing													
Post-Harvest Technology													
Tailoring and Stitching													
Rural Crafts													
Enterprise development													
Others, if any Lac Production	1	9	0	9	6	0	6	0	0	0	15	0	15
TOTAL	14	102	39	141	27	8	35	11	3	14	140	50	190

iii. Extension Personnel (On and Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST			M	F	T
		M	F	T	M	F	T	M	F	T			
Productivity enhancement in field crops	1	8	0	8	4	1	5	0	1	1	13	2	15
Integrated Pest Management													
Integrated Nutrient management	1	12	5	17	0	3	3	0	0	0	12	8	20
Rejuvenation of old orchards													
Value addition													
Protected cultivation technology													
Formation and Management of SHGs													
Group Dynamics and farmers organization													
Information networking among farmers													
Capacity building for ICT application													
Care and maintenance of farm machinery and implements													
WTO and IPR issues													
Management in farm animals													
Livestock feed and fodder production													
Household food security													
Women and Child care													
Low cost and nutrient efficient diet designing													
Production and use of organic inputs													
Gender mainstreaming through SHGs													
Crop intensification													
Others if any													
TOTAL	2	20	5	25	4	4	8	0	1	1	25	10	35

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

Discipline	Clientele	Title of the training programme	Duration in days	Venue (Off/On Campus)	Number of participants			Number of SC/ST		
					Male	Female	Total	Male	Female	Total
Plant Science	F/FW	Scientific method of Pigeon pea seed production	1	Off	22	3	25	4	2	6
	F/FW	Scientific method of green gram seed production	1	Off	25	0	25	2	0	2
	F/FW	Importance of green manuring in different crops	1	Off	24	1	25	2	0	2
	F/FW	Importance of micronutrient application in different crops	1	Off	10	15	25	2	4	6
	F/FW	Integrated nutrient management in different crops	1	Off	25	0	25	4	0	4
	F/FW	Importance of biofertilizer in different crops	1	Off	24	1	25	2	1	3
	F/FW	Seed selection, seed treatments in different crops	1	Off	0	25	25	0	0	0
	RY	Pulse seed production	2	Off	15	0	15	15	0	15
	RY	Objective of seed packaging, handling and seed storage	2	On	6	9	15	3	4	7
	IS	Seed sampling and different method of seed quality testing	1	Off	13	2	15	4	2	6
Plant Protection	F&FW	Commercial pest management in Godown&Kitchen	1	On	18	7	25	7	5	12
	F&FW	Organic pest management strategy for homestead gardens	1	Off	22	3	25	4	1	5
	F&FW	Integrated pest & disease management in vegetable nurseries	1	Off	21	4	25	0	0	0
	F&FW	Management of soil borne insects & diseases in 66ember groundnut	1	Off	25	0	25	8	0	8
	F&FW	IPM against pod borer complex in 66ember green gram	1	Off	7	18	25	1	5	6
	F&FW	Pest management strategy for BPH & leaf folder in affecting 66ember paddy	1	Off	10	15	25	3	12	15
	F&FW	Management of sucking pest in oilseed crops.	1	Off	3	22	25	0	6	6
	F&FW	Management of insects & diseases in Rabi paddy nurseries	1	Off	11	14	25	5	5	10
	F&FW	IDM against wilt complex in pigeon pea	1	Off	5	20	25	0	2	2
	RY	Use of power sprayers for income generations	2	Off	15	0	15	0	0	0
	RY	Importance of microbial formulation for disease pest management	2	Off	15	0	15	6	0	6
Horticulture	F/FW	Cultivation practices of Okra .	1	Off	25	0	25	8	0	8

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
	F/FW	Kharif Onion cultivation	1	Off	25	0	25	3	0	3
	F/FW	Cultivation and Scientific management of Hybrid vegetable like Tomato, Brinjal, Chilli.	1	Off	25	0	25	5	0	5
	F/FW	Training on cultivation Practices of 67ember cauliflower.	1	Off	25	0	25	12	0	12
	F/FW	Improved Cultural practices of Vegetable in Net House	1	Off	22	3	25	0	0	0
	F/FW	Onion cultivation with INM, IWM and IPM.	1	Off	3	22	25	2	19	21
	F/FW	Training on production technology of marigold and medicinal plant	1	Off	8	17	25	2	3	5
	RY	Scientific management of cucurbits in trellis	2	On	14	1	15	3	1	4
	RY	Commercial Floriculture in Rural area	2	Off	15	0	15	1	0	1
	IS	Organic vegetable production and importance of soil testing	2	On	12	8	20	0	3	3
Agril. Engineering	F/FW	Use of different types of weeders in Agriculture	1	Off	11	14	25	1	1	2
	F/FW	Use and Operation of Different Harvesting Implements	1	Off	25	0	25	2	0	2
	F/FW	Use and Operation of Different sprayers	1	Off	25	0	25	5	0	5
	F/FW	Use of different Seed cum fertilizer drills	1	Off	25	0	25	10	0	10
	F/FW	Machineries used for Processing of different seeds	1	Off	25	0	25	3	0	3
	F/FW	Use of renewable energy in Agriculture	1	Off	25	0	25	1	0	1
	F/FW	Use, Operation and Maintenance of Sprinkler Irrigation System	1	Off	15	10	25	6	7	13
	RY	Entrepreneurship development through Farm Mechanization	2	Off	15	0	15	3	0	3
	RY	Use and operation of power tiller	1	Off	15	0	15	5	0	5
Home Science	F/FW	Development of organic kitchen garden	1	Off	0	25	25	0	1	1
	F/FW	Storage techniques of pulses	1	Off	0	25	25	0	2	2
	F/FW	Preparation of Value added products from tomato	1	Off	0	25	25	0	3	3
	F/FW	Preparation of Value added products from Potato	1	Off	0	25	25	0	4	4
	F/FW	Use of women friendly tools in paddy cultivation for drudgery reduction	1	Off	0	25	25	0	3	3
	F/FW	Use of women friendly tools in groundnut cultivation for drudgery reduction	1	Off	0	25	25	0	9	9

				(day s)	PF/R Y/EF	cou rses	Oth ers	S C	S T	Oth ers	S C	S T	Oth ers	S C	S T	To tal	Agenc y

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

Nature of Extension Activity	No. of 69em beriti es	Farmers				Extension Officials			Total		
		M	F	T	SC/ST (% of total)	Male	Female	Total	Male	Female	Total
Field Day	3	80	50	130	28	4	1	5	84	51	135
KisanMela	1	92	08	100	35	6	2	8	98	10	108
KisanGosthi	2	24	0	24	29	2	0	2	26	0	26
Exhibition	5	-	-	Mass	30	10	4	14	-	-	Mass
Film Show	15	273	112	385	32	8	3	11	281	115	396
Method Demonstrations	22	194	70	264	34	18	8	26	212	78	290
Farmers Seminar	1	20	5	25	12	4	1	5	24	6	30
Workshop	2	118	32	150	23	9	2	11	127	34	161
Group meetings	24	290	70	360	35	16	8	24	306	78	384
Lectures delivered as resource persons	25	480	145	625	28	19	7	26	499	152	651
Advisory Services	33	70105	9843	80000	79948	35	17	52	70140	9860	80000
Scientific visit to farmers field	213	733	245	978	22	42	12	54	775	257	1032
Farmers visit to KVK	631	509	122	631	32	12	8	20	521	130	651
Diagnostic visits	58	1564	661	2225	34	24	12	36	1588	673	2261
Exposure visits	4	25	0	25	29	2	0	2	27	0	27
Ex-trainees Sammelan	1	22	3	25	25	2	1	3	24	4	28
Soil health Camp	2	82	18	100	32	2	2	4	84	20	104
Animal Health Camp	1	122	28	150	33	9	4	13	131	32	163

Total							

KVK farm

Crop	Variety	Quantity of seed(q)	Value (Rs)	Number of farmers to whom seed provided			
				SC	ST	Other	Total
Paddy	Swarna sub-1	342.2	10,37,208 (Expected).	-	-	-	Sell to OSSC, Bargarh
Pigeonpea	PRG-176	0.2	2400	0	1	1	2
Grand Total		342.4	1039608				

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	PAN-1008, Atisighra	7425	14850	2	2	8	12
Cabbage	KGMR	200	400	1	0	3	4
Tomato	Arkarakshak	21765	43650	4	3	14	21
Brinjal	PPC	310	310	0	1	2	3
Chilli							
Onion	Bhima super	120000	12000	2	5	18	25
Others							
Brussel sprouts		640	640				6
Broccoli	Pusa KTS-1	21060	21060	4	7	13	24
Turnip	PTWG	200	200	1	1	3	5
Knolkhol	WV	1370	1370	2	1	9	12
Fruits							
Mango							
Guava							
Lime							
Papaya	Red lady	106	2120	3	2	21	26
Banana							
Others							
Watermelon	Patengra	280	5600	2	2	6	10
Ornamental plants							
Medicinal and Aromatic							
Plantation							
Spices							
Turmeric							
Tuber							
Elephant yams							
Fodder crop saplings							
Forest Species							
Others, pl.specify							

Total		173356	102200	21	24	97	148
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Production of Bio-Products

Name of product	Quantity	Value (Rs.)	No. of Farmers benefitted			
	Kg		SC	ST	Other	Total
Bio-fertilizers (vermi compost)	2920	39200	6	8	44	58
Bio-pesticide						
Bio-fungicide						
Bio-agents						
Others, please specify. Vermin	12	6000	1	1	10	12
Total	2932	45200	7	9	54	70

Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)
Dairy animals			
Cows			
Buffaloes			
Calves			
Others (Pl. specify)			
Small ruminants			
Sheep			
Goat			
Other, please specify			
Poultry			
Broilers			
Layers			
Duals (broiler and layer)	Rainbow rooster, Kadaknath	45.2kg	4520
Japanese Quail			
Turkey			
Emu			
Ducks			
Others (Pl. specify)Egg	Rainbow rooster	150no.	750
Piggery			
Piglet			
Hog			
Others (Pl. specify)			
Fisheries			
Indian carp			
Exotic carp			
Mixed carp			
Fish fingerlings	Amur carp, Jayanti rohu	6500no.	26000
Spawn			
Others (Pl. specify)			
Grand Total			31270

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

i) Name of Seed Hub Centre:

Name of Nodal Officer :	Dr. Anil Kumar Swain Sr. Scientist and Head KVK Bargarh
Address :	KVK, Gambharipali, Bargarh

E-mail :	kvkbaragarh.ouat@gmail.com
Phone No.:	06682225238,
Mobile :	9438615702

ii) Quality Seed Production Reports

Season	Crop	Variety	Production (q)			
			Target (ha)	Area sown (ha)	Production	Category of Seed (F/S, C/S)
Kharif 2018	Pegionpea	PRG-176	50	50	21.96 (Unprocessed)	C/S
Rabi 2018-19	Greengram	IPM 02-14	100	100	50 (Expected)	C/S

iii) Financial Progress

Year	Fund received	Expenditure (Rs. In lakhs)		Unspent balance (Rs. In lakhs)	Remarks
		Infrastructure	Revolving fund		
2016-17	1.54614	-	0.30970	1.23644	
2017-18	3.45386	48.36336	3.78307	3.63311 + 1.63664 (Seed Processing plant)	
2018-19	-	-	4.47968	3.98693 + 1.63664 (Seed Processing plant)	

iv) Infrastructure Development

Item	Progress
Seed processing unit	80% work has been completed
Seed storage structure	

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

Item	Title	Author's name	Number	Circulation
Research paper	Impact analysis of demonstration on INM in green gram- International journal of chemical studies, 2018;6(6):PP:1267-1268	Ms. Rukeiya Begum, Scientist(Plant Sc.), Mrs. Susrita Sahu, Scientist(Home Sc.), Dr. Anil Kumar Swain, Senior Scientist	-	-

Item	Title	Author's name	Number	Circulation
		& Head, KVK, Bargarh		
	Performance of Onion varieties against thrips(ThripsTabacilindeman) incidence at Bargarh,Odisha- Journal of applied Research(2018)29(2):202-208	Mr. Nrusingh Charan Barik, Scientist (Plant Protection)	-	-
	Comparative efficacy of few chemicals on BPH,Nilaparvatalugens stall infestating paddy cv.MTU-1001 at farmers field of Bargarh district, Odisha- Journal of applied Research(2018)29(1):53-58	Mr. Nrusingh Charan Barik, Scientist (Plant Protection)	-	-
Seminar/conference/ symposia papers	A study on storage life of green gram by farmwomen of Bargarh district, A compendium of abstract of papers on FFCSWR-2019:PP-134	Mrs. Susrita Sahu, Scientist(Home Sc), Miss Rukeiya Begum, Scientist(Plant Sc.), Dr. Anil Kumar Swain, Senior Scientist & Head, KVK, Bargarh	-	-
Books	Scientific cultivation of Groundnut	Mr. Nrusingh Charan Barik, Scientist (Plant Protection)	500	480
	Commercial cultivation of Pigeon pea	Mr. Nrusingh Charan Barik, Scientist (Plant Protection)	500	440
Bulletins	-	-	-	-
News letter	Dhanuyatra	All staff	1000	990
Popular Articles	LabhadayakaMatarchasa, Potolchasa, Kakudichasa ,Kharadinia bhindi chasa	Mr. S.K. Meher ,Scientist (Horticulture)		
Book Chapter	-	-	-	-
Extension Pamphlets/ literature	-	-	-	-
Technical reports	Annual Progress Report & Annual Action plan	All staff	7	7

Item	Title	Author's name	Number	Circulation
Electronic Publication (CD/DVD etc)	-	-	-	-
TOTAL			2007	1917

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	Short course training prog.	One health special reference to Fisheries & Aquaculture.	Dr. Anil Kumar Swain, Senior Scientist & Head	18.02.19-27.02.19 (10 DAYS)	ICAR-CIFE, Mumbai
2	Short course training prog.	Ergonomic Interventions for designing women friendly agricultural technologies for reduction of occupational health hazards”.	Mrs. Susrita Sahu, Scientist (Home Science)	05.12.18-12.05.18 (10 DAYS)	CAET, OUAT, BBSR
3	Training Prog.	Training on ‘Recent advances in nutrient vis-à-vis soil health management for major oilseed cropping systems of India”.	Mr. Nrusingh Ch. Barik, Scientist (Plant protection)	05.12.18-12.05.18 (8 DAYS)	ICAR-IIOR, Hyderabad
4	Training cum workshop	Training cum workshop for plant protection SMS	Mr. Nrusingh Ch. Barik, Scientist (Plant protection)	13.12.18-15.12.18 (3 DAYS)	ATARI, Kolkatta
5	Training	Improved production practices in horticultural crops	Mr. Sanat Kumar Meher, Scientist (Horticulture)	04.04.18-06.06.18 (3 DAYS)	IIHR, Bangaluru
6	Summer school prog.	“ New innovation in improvement of vegetable crops”	Mr. Sanat Kumar Meher, Scientist (Horticulture)	05.09.18-25.09.18 (21 DAYS)	Dr. YS. Parmar University of Horticulture & Forestry, Nauni-Solan
7	Workshop on “Farmers First for conserving Soil & water resources in Eastern Region”	Poster presentation on” A study on storage life of green gram by farmwomen of Bargarh district ”	Ms. Rukeiya Begum, Scientist (Plant science)	.06.02.19-08.02.19 (3DAYS)	ICAR-IISWC, Koraput, Odisha
8	Winter school	Entrepreneurship Development through value addition of underutilized crops	Mr. Tarak Ch. Panda, Scientist (Agril. Engg.)	15.11.18-05.12.18 (21 DAYS)	CAET, OUAT, BBSR
9	Orientation Training Prog	Operational Modalities for KVKs	Mr. Alok Kumar Sahoo, SMS (Agril. Extension)	25.03.18-27.03.18 (3 DAYS)	DEE, OUAT, BBSR,

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 : Tomato “Arka Rakshak” – A boon for farmers

Name of farmer	Sri Srimukha Sahu
Address	At- Baulasingha, Block- Bhatli, Dist- Bargarh
Contact details (Phone, mobile, email Id)	Mobile No.- 93480 00243
Landholding (in ha.)	1
Name and description of the farm/ enterprise	<ul style="list-style-type: none"> • Sri Srimukha Sahu is a young diligent farmer. • He is growing Paddy, Greengram, Vegetables such as Tomato, Cabbage, Cauliflower for sustaining his livelihood. • He never used to miss tomato crop in his crop plan in his entire farming practices. • Since last two year he was depressed due to more expenses towards controlling the multiple diseases in tomato such as wilt and early blight. • So he contacted KVK, Bargarh for getting rid out of the problem.
KVK intervention	<ul style="list-style-type: none"> • KVK, Scientists advised him to go for the IIHR released triple disease resistant (BW, TOLCV, EB) Tomato variety “Arka Rakshak”. • He was supplied with 2000 nos. of seedlings for planting at a spacing of 2.5 ft. X 2.5 ft. • He followed other techniques such as proper INM management, timely weed management with adequate irrigation. • He was encouraged to go for proper staking during the field visit.
Economic Impact:	<ul style="list-style-type: none"> • He could able to harvest 55 q. of tomato in 0.30 acre of land. • By selling it @ Rs.10 /kg he earned a net profit of Rs. 32000 in a BC ratio of 1:8 . • It also helped him to reduce the financial loss in use of chemicals.
Social impact	<ul style="list-style-type: none"> • The attractive deep red colored firm fruit with good keeping quality attracted more consumer in the market. • This gave him a unique recognition as a “Good Tomato Grower”.
Environmental impact	<ul style="list-style-type: none"> • As “Arka Rakshak” is a triple disease resistant variety, it helps to control the environmental pollution caused by the use of chemical pesticide in Tomato.
Horizontal/ Vertical spread	<ul style="list-style-type: none"> • Impressed by his control over multiple diseases in tomato, the tomato growers of the nearby 5 Blocks are now rushing to KVK for this tomato variety.



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	Farmers Problem solved by Whatsapp	Mr.A.K.sahoo, SMS (Ag. Extension)	Farmers are directly post their problem image in the group & concerned scientist can solve their problem accordingly

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	Paddy	Mixing of 10 kg. of mustard oil cake & 1 lit. of kerosene oil in sand. Then dusting of the above mixture in 1 ac. of paddy land	To control BPH in paddy

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	140	4300q	245	Y
2	Pulse	310	810 q	540	Y
3	vegetable	160	800q	1250	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's, Survey, Field visit	To identify the problem of Farmers & Farm women
2	Group meetings, Farmers scientist interaction	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	MridaParikshyakSoilTesting 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			
113	0	113	113	32	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"> • Seminar on soil health management • Soil health card distribution • Exhibition on soil health management 	50	1	Mrs. Rita Sahu, Chaiman , Panchayat Samiti, Attabira	35	45

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
Awareness on Soil test	1	30	Collection of soil samples
Seed treatment campaign	1	40	Seed treatment with bio agents
Awareness on BPH management in paddy	1	30	Transplanting & spraying techniques
Film show	2	50	Organic farming, IFS
Demonstration on Pulse thresher	1	20	Threshing of Greengram
Swachhata Campaign	1	80	Recycling of agricultural wastes

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

No of student trained	No of days stayed
18	-

ARS trainees trained	No of days stayed

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

Date	Name of the person	Purpose of visit
12.07.2018	Dr. Aravind Kumar, STO, DRD, Patna	Review the progress of CFLD & Seed Hub
29.08.2018	Mrs. Snehangini Chhuria, Hon'ble Minister of Handlooms, Textiles & Handicraft, Govt. of Odisha	Chief Guest of a training Prog. For Panchayatiraj members by Dept. of Hort., Bargarh at KVK Campus
30.08.2018	Dr. M.P. Nayak, JDE (Information), Dee, OUAT, BBSR	Monitoring of KVK activities
31.08.2018	Dr. M. Muthukumar, IAS, Director Agriculture, Govt. of Odisha	Review of BGREI activities
18.09.2018	Dr. Sumit Mishra, Joint Director Dr. A.K. Singh, Asst. Director, DRD, GOI, Patna	Monitoring of Seed Hub activities
20.12.2018	Prof. B.C.Sahoo, Dept. of SWCE, CAET, OUAT, BBSR	Attending awareness prog. On Water Use Efficiency
16.01.2019	Dr. Biswanath Sarangi, Emeritus Scientist, ICAR-CIWA	To collect information on collaboration work of KVK-ATMA on Gender Sensitization
15.03.2019	Dr. B. K. Mohapatra, JDE, DEE, OUAT, BBSR	Participated in the SAC Meeting

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)
Application of post emergence herbicide Bispyribac Sodium @ 25 g ai/ha in transplanted rice within 25 days	250	94	15000/ha	20000/ha
Application of eco-friendly insecticide Spinosad 45% SC @1ml/4lit for control of shoot and Fruit borer in brinjal	140	85	60000/ha	97000/ha
Application of Borax @ 3 gm/lt. at 30, 40, 50 DAT in cauliflower to avoid brown rot	120	88	42000/ha	66000/ha
Transplanting of paddy by self-propelled rice transplanter	60	40	17000/ha	22000/ha
Supplementation of vitamin-mineral mixture @ 30gm / day improve the milk yield of cows	110	84	21000/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
Cultivation Technology of drought tolerant groundnut Var. Devi in rainfed uplands	Spread in 24 villages of 2 blocks

Name of farmer	Sri Jagatram Khamari
Address	AT:Balijuri, PO;Nuagarh, Block:Bhatli, Dist-Baragarh,Odisha
Contact details (Phone, mobile, email Id)	Mob:08018166284
Landholding (in ha.)	1.4
Name and description of the farm/ enterprise	He is usually growing Greengram in upland area during 80ember Which often gives very less profit due to poor yield as low as 2q/ha. One day he came into contacted with KVK scientist in a farmers training programme in the village where emphasis was laid on cultivation of drought tolerant groundnut in rainfed uplands. By observing his interest, he was supplied with shorter duration variety – <i>Devi</i> . Which was treated with Vitavax Power @ 2.5g/kg seed and then with Trichoderma viridae @5g/kg seed after 10 days and sown after application of 10 cartloads of compost/acre with balanced dose of fertilizers. <i>Phospho-Gypsum</i> @ 100kg/acre was applied during time of hoeing and earthing up for better pod development. Timely irrigation with need based spraying of pesticide- <i>Profenphos 50EC</i> @ 2ml/ltr was done at 40 DAS for controlling <i>Spodoptralitura</i> . He was suggested for application of post emergence herbicide <i>Imazethapyr 7% SL</i> @ 400 gm. /acre at 20 DAS. The crop was inspected at monthly interval and spraying of Carbendazim 12% plus Mancozeb 63% @3gm /Lit of water was done to control leaf spot diseases. He was trained to harvest the crop when the leaves turned yellow & pods were fully matured.
Economic impact	. The number of pods /plant has been amazingly increased due to cultivation of draught tolerant variety – <i>Devi</i> . The farmers harvested av. Of 25pods/plant against 12-15/plant from local variety. The pod filling was better in 80ember 80r-gypsum applied plots. It resulted 5% higher shelling percentage and fetched more price and preferred by local traders. He was also suggested to sale the matured raw pods at the time of demand in the local market, which normally fetches same price as that of dried pods He earned a net profit of Rs. 24,400as against earlier income of Rs. 11,040 from 2 ac. Of land
Social impact	.He in now able to buy a smart mobile phone for updating his knowledge through effective communication.
Environmental impact	Soil fertility increases due to nitrogen fixation by groundnut cultivation. Less weed menace due to full land coverage.
Horizontal/ Vertical spread	Spread in 24 villages of 2 blocks

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
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1	Popularization of Flubendiamide 240 SC + Thiacloprid 240 SC for management of leaf folder in 81ember paddy	Timely control of leaf folder More no. of effective tillers More grains per panicles	Increase in yield by 8 q/ha
2	Popularization of Triple Disease Resistance tomato Hybrid “ Arka Rakshak”	Low seedling mortality Better plant growth More fruits per plant	Ripen fruits are available in market for more than 2 months
3	Application of pre-emergence weedicide (Pendimethalin 30EC @ 2000 ml/ha) within 3 rd day and post-emergence (Quizalofop-Ethyl 5% Ec @ 1000 ml/ha at 20DAS for weed management in greengram	Increase on knowledge & skill in weedicide & its application Timely weed control Prolific vegetative growth & pod formation Less incidence of pest & diseases	Reduction in cost of weeding by Rs. 3000/ha & increase in yield by 1.6 q/ha
4	Demonstration on Power Weeder for weeding in Brinjal	Increase in skill on weeder operation Timely weed control Less no. of mandays required	Cost of weeding reduced by Rs. 5000/ha
5	Replacement of “Jayanti” rohu fingerlings with normal rohu in the pond based culture system	Increase in productivity Availability of more no. of table size fish Better acceptance	Increase in yield by 500kg/ac
6	production of Paddy straw mushroom with threshed straw (5kg straw, Pulse powder 3%, Soaking period 5hr)	Better utilization of threshed straw Increase in skill of mushroom production with loose straw Labour & time saved	Net profit increased by Rs.100/100bed

4.4 Details of innovations recorded by the KVK

Thematic area	Farm Mechanization
Name of the Innovation	Groundnut Stripper
Details of Innovator	Mr. Sadananda Budhia, At/P.O-Sarakanda, Block-Sohela
Back ground of innovation	He is a groundnut cultivator. He cultivates 2 ha. Of groundnut in every year. Stripping is the most labour consuming post-harvest operations. So he thought up for an alternate methods to combat over this problem.
Technology details	He constructed manual sitting type heavy groundnut stripper. He made this stripper by fixing 25 nos. of iron rods in a horizontal manner with a rectangular frame having iron legs as stand purpose
Practical utility of innovation	Two women can stripe the pods from the plants with the help of one hand comfortably.

4.5. Details of entrepreneurship development

Entrepreneurship development	
Name of the enterprise	Floriculture
Name & complete address of the entrepreneur	Mrs .MirabaiDanasena, At/P.O- Bhatli, Block-Bhatl
Role of KVK with quantitative data support:	She was promoted to go for Ceracole var. of marigold instead of local variety. So she was supplied with 1000 nos. of marigold seedlings. She was trained on seedling treatment with bavistin @ 2gm/lit & planting at a distance of 60cmx 45cm.She was suggested to go for application of FYM &balanced dose of fertilizer for more attractive flower. She sprayed Imidacloprid 17.8 SL @ 1 ml/4lt of water to minimize the attack of sucking pests such as aphids & Thrips. She also trained for nipping of the plant at knee height to get more branches with maximum flowers. For observing her interest towards floriculture She has been also supplied with 600nos. of Arkaprajwal var. of tuberose bulbs and guided her to grow tuberose with scientific package of practices.
Timeline of the entrepreneurship development	2015-16-she diverted from local var. of marigold to caracole var. of marigold with nipping practices in rabi season 2016-17- Trained on developing stem cuttings by using rootex hormone 2017-18- Promoted for cultivating marigold for 8 months in 0.40 ac of land 2018-19- cultivating marigold for 8 months & tuberose for 4 months to enable her for marketing of flowers throughout the year
Technical Components of the Enterprise	Ceracole marigold seedlings, cycle weeder, tuberose bulb, Imidacloprid, Rootex
Status of entrepreneur before and after the enterprise	Earlier she was disappointed with the poor quality of marigold yield & lower price from selling it due to less consumer preference. Also she was not able to earn money from floriculturein Kharif. She is now happy with the flower production & income throughout the year. Her achievement in marigold production was telecasted in DoorDarshan.
Present working condition of enterprise in terms of raw materials availability, labour availability, consumer preference, marketing the product etc. (Economic viability of the enterprise):	She is now able to develop the seedlings from stem cuttings & preserve the tuberose bulb for the next year. She is managed to reduce the labour cost by using cycle weeder. She is now able to earn Rs. 60000/annum by selling the flowers in the market. Her flowers gain popularity day by day for its attractive colour, size & keeping quality.
Horizontal spread of enterprise	20 farmers of nearby 4 blocks are following the floriculture enterprise throughout the year.

4.6. Any other initiative taken by the KVK

5. LINKAGES

5.1. Functional linkage with different organizations

Name of organization	Nature of linkage
Dept. of Agriculture, Bargarh	Creating awareness for BPH control, 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
Watershed Mission	Participated in Exhibition organized by the Watershed Dept.
District Administration, Bargarh	For taking up initiative measures to control pest & disease incidence
Odisha state seed corporation, Bargarh	Production of foundation & certified seed under instructional farm
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

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.)
Farmers Science Interaction	Solve the queries of farmers	06.11.2018	ATMA	20000
Head to Head trial of IRRI rice varieties	To assess the performance of stress tolerant rice varieties	14.12.2018	IRRI	15000

6. PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl. No.	Name of demo Unit	Year of estt.	Area (Sq.m)	Details of production			Amount (Rs.)		Remarks
				Variety/breed	Produce	Qty (Kg)	Cost of inputs	Gross income	
1	Vermicompost	2010	80.4	Eisenia Foetida	vermin	12	3750	6000	Sold to farmer & nearby KK
2	Nutritional Garden	2017	400	Local	Vegetable	217	485	1085	Public sale
3	Horticultural Demo Unit	2015-16	400	Hybrid	Vegetable	200	515	100	Public Sale
4	Mango Orchard	2004-05		Hyv	Fruits	1500	5000	7500	Public Sale
	Total					1929	9750	14685	

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	22.06.2018	20.11.2018	8	Swarna sub -1	FS	342.2	504,000	10,37,208	To be sold to OSSC
Pigeonpea	23.06.2018	04.01.2018	0.5	PRG 176	FS	0.2	1000	2400	To be used for upcoming season

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	2920	30206	39200	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 & Jayanti Rohu	Fingerlings	6500	19000	26000	For OFT & FLD purpose

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)
December	25	2	-
Total :			

(For whole of the year)

Utilization of staff quarters

Whether staff quarters has been completed: Yes Only One

No. of staff quarters: One

Date of completion: 2002

Occupancy details:

Months	Q I	Q II	Q III	Q IV	Q V	Q VI
April,2018-March,2019	Yes					

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)

Item	Released by ICAR		Expenditure		Unspent balance as on – 01.04.2019 Kharif
	Kharif	Summer	Kharif	Summer	
Ground nut	240000	240000	168147	114453	197400

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

Item	Released by ICAR		Expenditure		Unspent balance as on 1 st April 2019
	Kharif	Rabi	Kharif	Rabi	
Green Gram & Pigeon Pea	450000	450000	422498	376335	101167

7.4 Utilization of KVK funds during the year 2018-19 (Not audited)

Sl. No.	Particulars	Sanctioned	Released	Expenditure
1	2	3	4	5
(A)	RECURRING CONTINGENCIES (REVENUE)			
1.	Pay and allowances			
2.	Travelling allowances	75,000	75,000	75,000
3.	Contingency			
a.	Stationary, telephone, postage & other exp. On office running publication of newsletters	3,20,000	3,20,000	3,19,926
b.	POLs, repair of vehicles, tractor & equipments			
c.	Training of farmers (Melas / refreshment of trainees)	2,40,000	2,40,000	2,39,964
d.	Training materials (need based material and equipments for conducting the training)			
e.	Training on extension functionaries			
f.	Training on Rural Youth			
g.	Frontline Demonstration	1,60,000	1,60,000	1,60,069
h.	On-farm testing (on need based location specific and newly generated information of the major production systems of the area.	80,000	80,000	79,955
i.	Soil & Water testing & issue of soil Health cards	0	0	0
j.	Maintenance of buildings	0	0	0
k.	SCSP Contingencies	2,00,000	2,00,000	2,00,086
	TOTAL (A)	10,75,000	10,75,000	10,75,000
(B)	NON-RECURRING CONTINGENCIES (CAPITAL)			
a.	Equipments & Furnitures			
	i) Office automation			
	ii) Furniture & fixtures			
b.	Works			
	i) Repairing & Renovation	7,40,000	0	0
c.	Vehicle			
d.	Library (purchase of assets like books & journals back volume)			
	TOTAL (B)	7,40,000	0	0
I	REVOLVING FUND	0	0	0
	Grand TOTAL (A+B+C)	18,15,000	10,75,000	10,75,000

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

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance in hand as on 1 st April of each year (Kind + cash)
2015-16	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

- 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- 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 paddy straw mushroom has been channelized to near byBargarh &Attabira NAC market.

7.7. Joint activity carried out with line departments and ATMA

Nameof activity	Number of activity	Season	With line department	With ATMA	With both
Research-Extension linkage meeting	8	Kharif & Rabi	-	-	Both
Celebration of special days (World Soil Day, Krishak Diwas, World Food Day etc.)	5	Kharif & Rabi	-	-	-Both
Field visit	213	Kharif & Rabi	-	-	Both
Dist. Level Farmers Fair	1	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)
Blast	Paddy	27.09.2018	400	90	1100
Stem borer	Paddy	17.03.2019	200	70	700

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	Rain bow rooster	29.10.2018	90	400	3000
EUS	Rohu	28.12.2018	80	12 ponds	20 ponds

9.1. Nehru YuvaKendra(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	20	80,000
Livestock	2	80,000
Fishery	2	80,000
Weather	1	80,000
Marketing	2	80,000
Awareness	2	80,000
Training information	1	80,000
Other	3	80,000
Total	33	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 KVK	-
4.	Name of the App	-
5.	Language of the App	-
6.	Meant for crop/ livestock/ fishery/ others	-
7.	No. of times downloaded	-

9.5. a. Observation of Swachh Bharat Programme

Date/ Duration of Observation	Activities undertaken
12.08.2018	Vermicompost production from crop residues
20.09.2018	Segregation of bio degradable from non-biodegradable
30.09.2018	Making wall painting on swachhata
01.10.2018	school Rally to generate awareness on Swachhata
02.10.2018	Debate & discussion on awareness regarding swachhata,
23.12.2018	Awareness on swachhata on Kisan Divas

b. Details of Swachhta activities with expenditure

Activities	Number	Expenditure (in Rs.)
1. Digitization of office records/ e-office	8	-
2. Basic maintenance	98	27440
3. Sanitation and SBM	30	8400
4. Cleaning and beautification of surrounding areas	44	12320
5. Vermicomposting/ Composting of biodegradable waste management & other activities on generate of wealth for waste	24	6720
6. Used water for agriculture/ horticulture application	12	3360
7. Swachhta Awareness at local level	20	5600
8. Swachhta Workshops	1	500
9. Swachhta Pledge	1	

10. Display and Banner	5	1000
11. Foster healthy competition	1	3000
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)	1450	15612
14. No of Staff members involved in the activities	16	-
15. No of VIP/VVIPs involved in the activities		
16. Any other specific activity (in details)		
Total	1711	83952

9.6. Observation of National Science day

Date of Observation	Activities undertaken

9.7. Programme with SeemaSurakshaBal/ 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
Gambharipali U.P School	01.10.2018	Swachhata activities, Vermicompost production, plantation	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 (Lok Sabha/Rajyasabha) participated	No. of State Govt. Ministers	Participants (No.)							Coverage by Door Darshan (Yes/No)	Coverage by other channels (Number)
				MLAs Attended the programme	Chairman ZilaPanchayat	Distt. Collector/DM	Bank Officials	Farmers	Govt. Officials, PRI & member etc.	Total		

9.10. Details of Swachhta Hi Sewaprogramme 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"> • Awareness camp • Debate competition • Road show 	34	1231	-	-

- Village Rally
- CD show on Vermicompost production

9.11. Details of MahilaKisan 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"> • PromotingSHG activity • Rangoli competition on agricultural activities • Felicitation to best SHG 	1	60	1	Mrs. HemaKanti Bhue

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	Sri Pruthiraj Sahoo	Saplahar, Paikamal,9777638700	Pigeonpea seed production
2	Sri Jagatram Khamari	Balijuri, Bhatli ,8594902488	Groundnut Cultivation
3	Sri Prassna Patel	Tal, Padampur,9777232795	Commercial horticulture
4	Sri Srimukha Sahoo	Baulasinga, Bhatli,9348000243	Farm Mechanization in vegetables
5	Sri jagadishPardia	Gambharipali, Attabira, 8658949317	Fish production
6	Smt. Mita Sahu	Lebidi, Sohela, 9777191101	Vermicompost 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	40	Promotion of Green manuring in paddy to increase water

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
					holding capacity through FYM
		IPM	2	75	Proper spraying techniques & drainage of standing water for BPH management in paddy
		INM	3	100	Foliar Sparying of Boron in cauliflower to avoid cracking
		IWM	2	50	Spraying of 1% kaolinite clay to restrict transpiration loss in green gram & blackgram
		HOF	1	20	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 2017-18

Programmes	Physical achievements
Asset creation (Number; Sprayer, ridge maker, pump set, weeder etc.)	
On-farm trials (Number)	
Frontline demonstrations (Number)	
Farmers training (in lakh)	
Extension personnel training (in lakh)	
Participants in extension activities (in lakh)	
Seed production (in tonnes)	

Planting material production (in lakh)	
Livestock strains and fingerlings production (in lakh)	
Soil, water, plant, manures samples testing (in lakh)	
Provision of mobile agro – advisory to farmers (in lakh)	
No. of other programmes (Swachha Bharat Abhiyaan, Agriculture knowledge in rural school, Planting material distribution, Vaccination camp etc.)	

b. Fund received under TSP in 2017-18 (Rs. In lakh):

c. Achievements of physical outcome under TSP during 2017-18

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

d. Location and Beneficiary Details during 2017-18

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

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

Natural Resource Management

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	

Institutional interventions

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

Capacity building

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

Extension activities

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

Detailed report should be provided in the circulated Performa

13. Awards/Recognition received by the KVK

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

Award received by Farmers from the KVK district

Sl. No.	Name of the Award	Name of the Farmer	Year	Conferring Authority	Amount	Purpose
1	Best progressive farmer award	Mr. Sudam Sahoo	2018	OUAT, Bhubaneswar	-	Innovation on Bio-pesticides

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

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






Sl. No.	Name of the organization/ Society	Trust Deed No. & date	Date of Trust Registration Address	Proposed Activity	Commodity Identified	No. of Members	Financial position (Rupees in lakh)	Success indicator
1	Bodasambar Dal & Vegetable Producer Company Ltd., 2015-16	U01403OR2016PTC019845 & 28.01.2016	28.01.2016 At/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	812	3.0	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 finger millet

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

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

17. Technologies for Doubling Farmers' Income

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

			year due to adoption of the technology	in the district	
1	INM in groundnut	<ul style="list-style-type: none"> Seed treatment with Rhizobium culture @ 20gm/kg seed Gypsum application @ 2.5 q/ha in groundnut 	22500	3000	
2	BPH management in Kharif paddy	<ul style="list-style-type: none"> Varietal replacement with Pratikshya Line transplanting 	25200	400	
3	Cultivation of High value vegetables	<ul style="list-style-type: none"> Replacement of Cucurbits with watermelon Var. Patengra INM in watermelon 	100800	320	
4	Management of sucking pest in greengram	<ul style="list-style-type: none"> Green gram var. IPM 02-14 Spraying of Imidachloprid 17.8 SL @ 1ml/4lit 	14820	600	
5	Rearing management of dual purpose poultry	<ul style="list-style-type: none"> Breed-Rainbow Rooster Timely vaccination Supplementation with growth promoter or Vimeral @ 1 ml/1 lit/10 birds/day 	9560/20 birds	240	

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

Phase	Database prepared/ covered for		KVK level Committee		Various activity conducted for farmers
	Total no. of villages	Total no. of farmers	Date of formation	Name of members	
I (up-to 15.03.2018)	5	50	08.02.2018	Dr. Anil Kumar Swain (SS&H) Mr. Sanat Kumar Meher	Field visit, Advisory services, Demonstration, Training, Awareness camp
II (up-to 24.04.218)	308	3077			
III (Upto-19.05.2018)	703	7028			
Total	1016	10155			

				Scientist (Horticulture) Mr. Sanat Kumar Meher (Prog. Asst. Computer)
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19. Information on Visit of Ministers to KVKs, if any

Date of Visit	Name of Hon'ble Minister	Name of Ministry	Salient points in his/ her observation (2-3 bulleted points)
29.08.2018	Mrs. Snehangini Chhuria.	Hon'ble Minister of Handlooms, Textiles & Handicraft, Govt. of Odisha.	<ul style="list-style-type: none"> Appreciated the effort of KVK in high yielding seed production & plant protection measures. Showed interested for kadaknath breed of poultry. Planted Mulberry plant in the Demo unit

20. a) Information on **ASCI** Skill Development Training Programme, if undertaken during 2017-18 and 2018-19

Year	Name of the Job role	Name of the certified Trainer of KVK for the Job role	Date of start of training	Date of completion of training	No. of participants	Whether uploaded to SDMS Portal (Y/N)	Fund utilized for the training (Rs.)
2016-17							
2017-18							
2018-19							

b) Information on Skill Development Training Programme (**Other than ASCI or less than 200 hrs.**, if any) if undertaken during 2018-19

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

21. Information on NARI Project(if applicable)

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

D. Other activities

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

Krishi Kalyan Abhiyan- III

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

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

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

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

Agenda – 3: Achievements made by KVK-

The Senior Scientist & Head presented in PPT the overall achievements of 2018-19 KVK activities with results. The summary of the activities is as follows:

Category	Achievement (No.)	Number of beneficiaries
OFT	12	80
FLD	20	200
Training	53	1175
Extension Activities	213	88933
Total	298	90388

Agenda – 4: Action Plan-

The Senior Scientist & Head briefed that the action plan for 2019-20 will be prepared by the recommendation of the SAC meeting, Best OFT and FLD of the year 2018-19, RE meeting feedback of extension personnel, Problems identified by the scientists during the Field visit, ZREAC meeting of Agro-climatic zone, SLREC meeting of the state, Zonal workshop of ICAR-ATARI, Zone -V, Kolkata. The KVK has planned to conduct 12 OFTs, 24 FLDs, 49 nos. of training for farmer and farm women, 13 nos. of training for Rural youths, 7 nos. of training for Extension functionaries and 7 nos. of vocational training for rural youths and 120 extension activities such as World Food Day, Mahila Kisan Divas, Women in Agriculture Day, World Soil Day, Field day, Kisan Mela, Kishan Gosthi, Exhibition, Method Demonstration, Farm Advisory Services, Scientist Visit to Farmers Field, Diagnostic Visit, Ex-Trainees Sammelan, SHG Convenors meet, Soil Test Campaign etc.

Agenda – 5 Constraint of the KVK

1. Non availability of Staff Quarter
2. Reclamation of Swampy land into Pond
3. Repairing of farmers' hostel

Agenda – 6

SAC Recommendation

Discussions were made on the activities of KVK, Bargarh and following suggestions were made.

1. Technological Dissemination of pigeon pea var. PRG 176 with nipping practice.
2. Popularisation of vegetable production during Kharif season.
3. Production of Tomato seedling var: Arka Rakshak for line departments.
4. Demonstration of sunhemp as green manuring.
5. Performance evaluation of millets through farm mechanisation.
6. Studies on performance of Kadaknath poultry in backyard.
7. A trial for BPH management in paddy through ITK.
8. Popularisation of floating feed in fisheries.

15/02/2019
Sr. Scientist & Head
KVK Bargarh

Senior Scientist & Head
KRISHI VIGYAN KENDRA
OUAT, Bargarh- 768102

Joint Director
DEE, OUAT, Bhubaneswar

Dean
DEE, OUAT, Bhubaneswar

Annexure – I

Sl. No.	Name	Designation & Address	Member / Invitee
1.	Dr. B.K. Mohapatra	Joint Director Extension, OUAT, Bhubaneswar	Chairman
2.	Dr. A K Mohanty	ADR, RRTTS, OUAT, Chiplima	Member
3.	Mr. D. Gandhi	Dy Director of Agriculture, Bargarh	Member
4.	Mr S K Seth	Asst Director of Horticulture, Bargarh	Member
5.	Mr P K Pattnaik	Add. Fishery Officer, Bargarh	Member
6.	Mr J S Pradhan	Asst Soil Conservation Officer, Bargarh	Member
7.	Mr Anil Dahanga	DPC, MS, DSWO, Baragarh	Member
8.	Mr N N Ray	Watershed , Bargarh	Member
9.	Mr Firoz Ku Sahu	Progressive farmer, Bhatli, Bargarh	Member
10.	Mrs Diptimayee Pradhan	Progressive farm women, Attabira, Bargarh	Member
11.	Sri Uddhaba Bhoi	Progressive farmer, Bheden, Bargarh	Member
12.	Mr N C Barik	Scientist (PP), KVK Bargarh (Nominated)	Member
13.	Mr Sudam Sahu	Representative of NGO	Member
14.	Mr. Santanu Das	Representative of NGO	Member
15.	Dr. A.K. Swain	Sr. Scientist & Head, KVK, Bargarh	Member
16.	Dr R K Pattnaik	Associate Dean, C A, OUAT, Chiplima	Invitee
17.	Mr Himansu Pradhan	Progressive farmer, Attabira, Bargarh	Invitee
18.	Dr. J. Sen	Sr. Scientist & Head, KVK, Sonapur	Invitee
19.	Dr J. Udgata	Sr. Scientist & Head, KVK, Jharsuguda	Invitee
20.	Dr. S. Pattnaik	Sr. Scientist & Head, KVK, Sambalpur	Invitee
21.	Mrs. S. Sahu	Scientist (H. Science)	Invitee
22.	Miss. R. Begum	Scientist (P. Science)	Invitee
23.	Er. T.C.Panda	Scientist (Ag. Eng)	Invitee
24.	Mr. Alok Ku Sahoo	SMS (Ag. Extension)	Invitee
25.	Mr. Dipankar Jena	Programme Asst (Seed Sc.)	Invitee


Sr. Scientist & Head,
KVK Bargarh
 Senior Scientist & Head
 KRISHI VIGYAN KENDRA
 OUAT, Bargarh- 768102



**Assessment of BPH resistant variety
“HASANTA”**



**Assessment of plant growth promoter
“SEEDPRO” against *Fusarium* wilt of
Tomato.**



**Assessment of Cauliflower Production in
Kharif Season**



**Assessment the performance of different
pigeon pea varieties**



**Assessment on performance of green
gram var. IPM 02-14 with different date
of sowing**



**Assessment on Performance of Tractor
drawn Happy Seeder for Sowing Green
Gram**



Assessment of Power Pulse Thresher



Assessment the performance of Amur carp in composite carp culture



Assessment of different substrates in vermicompost production



Demonstration of Integrated weed management in greengram



Demonstration on "Grain pro super bag" for storage of greengram seed



Popularization of Triple Disease Resistance tomato Hybrid "Arka Rakshak"



Demonstration of plastic mulching in new mango orchard



Demonstration of backyard poultry (Rainbow rooster)



Demonstration on Power Weeder for weeding in Brinjal



Popularization of Nano Solar Pump for irrigation in Kitchen Garden



Demonstration of tractor drawn seed cum fertiliser drill for sowing of finger millet



Supplementary feeding management (Floating feed) in pisciculture



Demonstration on production of Paddy straw mushroom with threshed straw



Azolla Demonstration at KVK



**Cluster Demonstration, PULSE (2018-19)
: Line sown Greengram crop at village:
Jharmunda, Block: Shohella, Bargarh**



**Cluster Demonstration, PULSE (2018-19)
: Pigeon pea Crop at peak vegetative
stage at village: Charpali, Block:
Bijepur, Bargarh**



**Cluster Demonstration, PULSE (2018-19)
Field day At-Kanheipali , Block-
Ambabhona,
Dist-Bargarh, Dt. 29.01.2019**



**Cluster Demonstration OILSEED (2018-
19)
Visit of Dr. Arbindo Kumar, DRR, Patna
to Vill: Kharmunda, Block: Bijepur,
Bargarh**



**Cluster Demonstration OILSEED
(2018-19)
Weeding Summer Groundnut at village-
Singhenpali, Block-Bheden, Bargarh**



**SEED HUB - Infrastructure Development
Visit of Dr. Arvind Kumar, STO, DRD
Patna for Pulse Seed Processing Unit**



**SEED HUB - Infrastructure Development
Building work under progress**



**Celebration of Women in Agriculture,
At-Jogipali, Block-Attabira**



**Celebration of World Soil Day, At-KVK
Campus**



Celebration of Kisan Day



Celebration of World Food Day



**Monitoring of seed hub activities by
DRD, Patna**



**Exhibition on 14th National Agril. Science
Congress, IARI, Delhi**



Live Web telecast of interaction of SHG



**Inspection of Seed production activities
DRD, Patna**



**Visit of Hon'ble Minister of Handloom &
Textiles, Govt. of Odisha**



**Visit of Dr. M. Muthukumar, IAS,
Director of Agriculture & Food
production**



**Visit of Hon'ble Vice-Chancellor, OUAT,
and Collector and District Magistrate,
Bargarh.**



**Visit of Dr. M.P. Nayak, Joint Director,
DEE, OUAT to Mulberry Plantation**



Visitor to KVK – Farmers



Visitor to KVK – Farmers



Visitor to KVK – Farmers



**Swachhta Hi Sewa activities
(Dt. 22.09.2018 to 02.10.2018)**



**Swachhta Hi Sewa activities
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(Dt. 22.09.2018 to 02.10.2018)**



**Swachhta Hi Sewa activities
(Dt. 22.09.2018 to 02.10.2018)**



Felicitation to Mr Sudam Sahu, Innovative farmer of the district.



Sri Jasobanta Sahu, Village : Sarkanda, Block - Sobela has awarded Farmer Innovator 2018 (Wheel Cycle R weeder) from Hon'ble Vice Chancellor, OUAT, BBSR on 24th August 2018 (57th OUAT Foundation)



Technology intervened farmer Mr. Firoz Sahu, village Baulsingha, Block - Bhatti, Dist-Bargarh rice from Hon'ble Agriculture Minister of India at Bihar Agricultural University, Bhabalpur, Bihar



Zonal Level 2nd prize in Agricultural Exhibition at Bihar Agricultural University, Bhabalpur, Bihar



Publications : News Letter April-June 2018

Publications : News Letter July - December 2018



Publications: Newspaper "PRAMEYA"



Publications: Poster presentation



Publications: Research Paper



Swachhata National Award (2nd Prize) for KVK Barghar
