

PROFORMA FOR ANNUAL REPORT 2017-18 (April 2017 to March 2018)

1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail
Krishi Vigyan Kendra, Bhadrak Ranital, Odisha-756111	06784-265825	FAX	kvkbhadrak.ouat@gmail.com kvkbhadrak.od@gov.in kvk.Bhadrak@icar.gov.in

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

Address	Telephone		E mail
	Office	FAX	
Orissa University of Agriculture and Technology, Bhubaneswar, Odisha- 751003	0674- 2397970/2397818/ 2397719/ 2397669 / 2397719 / 2397919 / 2397868	0674- 2397780	registrarouat@gmail.com vc@ouat.nic.in / vcouat@gmail.com

1.3. Name of the Programme Coordinator with phone & mobile No.

Name	Telephone / Contact		
Dr. Aurovinda Das	-	8895417939/7008211174	auroagro@gmail.com

1.4. Year of sanction of KVK: 2004

1.5. Staff Position (as on 1st April, 2017)

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	Program Coordinator	Dr. Aurovinda Das	Sr. Scientist & Head	Agronomy	15600-39100 & GP-8000, BP-28230/-	06.09.12	Permanent	Others
2	Subject Matter Specialist	Sri Ambika Prasad Nayak	Scientist	Fishery Sc	15600-39100 & GP-6000, BP-24,850/-	24.03.05	Permanent	Others
3	Subject Matter Specialist	Dr. Debiprasad Dash	Scientist	Soil Sc.	15600-39100 & GP-6000, BP- 21390/-	11.02.14	Permanent	Others
4	Subject Matter Specialist	Dr. Biswanath Sahoo	Scientist	Horticulture	15600-39100 & GP-6000, BP-23950/-	18.06.12	Permanent	Others
5	Subject Matter Specialist	Dr. Saswati Pattnaik	Scientist	Home Sc.	15600-39100 & GP-6000, BP-24850/-	05.09.14	Permanent	Others
6	Subject Matter Specialist	Dr. Tapan kumar Palai	Scientist	Animal Sc.	15600-39100 & GP-6000, BP-16920/--	17.06.15	Permanent	Others
7	Subject Matter Specialist	Vacant					Permanent	
8	Programme Assistant	Sri Gayadhar Shial	Programme Assistant	Agroforestry	9300-34,800 & GP-4200, BP-14,530/-	01.10.12	Permanent	SC
9	Computer Programmer	Sri Gopal Krushna Ojha		Computer application	9300-34,800 & GP-4200, BP-16430/-	12.08.16	Permanent	OBC
10	Farm Manager	Dr. Plabita Ray	Farm Manager		9300-34,800 & GP-4200, BP-10130/-	29.09.17	Permanent	
11	Accountant / Superintendent	Sri Somanath Mandal	Accountant / superintendent	-	9300-34,800 & GP-4600 , BP-19830/-	01.08.09	Permanent	SC
12	Stenographer	Smt Rajashree Singh	Stenographer	-	5200-20200 & GP-2400, BP-8170/-	11.10.06	Permanent	OBC
13.	Driver	Sri Bijaya Kumar Barik	Driver	-	5200-20,200 & GP-1900, BP-7680, GP-7680/-	31.07.15	Permanent	Others
14.	Driver	Sri Sradhansu Sekhar Pattnaik	Driver	-	5200-20,200 & GP-1900, BP-7130	18.06.12	Permanent	Others
15.	Supporting staff	Sri Prasanta Kumar Dalai	Supporting staff	-	4440-7440 & GP-1500, BP-6040/-	28.07.08	Permanent	OBC
16.	Supporting staff	Sri Harihara Nayak	Supporting staff	-	4440-7440 & GP-1500, BP-6500/-	17.07.13	Permanent	Others

1.6. Total land with KVK (in ha):22.4ha

S. No.	Item	Area (ha)
1.	Under Buildings	1.0
2.	Under Demonstration Units	2.5
3.	Under Crops	10.0
4.	Orchard/Agro-forestry	1.0
5.	Others with details (farm roads, waste land)	7.9
	Total	22.4

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	✓							
2.	Farmers Hostel					✓	280		RKVY
3.	Staff Quarters (6)	✓							
4.	Piggery unit	✓							
5.	Fencing	✓							
6.	Rain Water harvesting structure	✓							
7.	Threshing floor					✓		Under use	RKVY
8.	Farm godown					✓			Seed Hub project
9.	Dairy unit	✓							
10.	Poultry unit	✓							
11.	Goatery unit	✓							

12.	Mushroom Lab					✓		Under use	RKVY
13.	Mushroom production unit	✓							
14.	Shade house	✓							
15.	Soil test Lab					✓			ICAR
16.	Others, Please Specify								

* 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
Mahindra Bolero	2009	9,00,000.00	182997	Requiring frequent repair
Motor cycle	2009	54000	35200	Requiring frequent repair

C) Equipment & AV aids

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
a. Lab equipment				
Soil & water testing equipment			Need to be replaced	ICAR
Mushroom lab equipment			Auto clave not functioning	RKVY
b. Farm machinery				
Tractor	2002	335535	Condemned	OUAT
Rotavator	2017	86000	Working	Seed Hub
Scraper / leveler	2017	35000	Working	Seed Hub
Pulse thresher	2017	78000	Working	Seed Hub
MB plough	2017	23000	Working	Seed Hub
c. AV Aids				
Laptop	2017-18	41950	Working	ICAR
Laptop	2016-17	38000	Working	ICAR

Generator	2003-04		Not working	ICAR
LCD projector	2015-16	53000	Not working	ICAR
Handy Cam Sony	2011	20000	Working	ICAR
Camera, SLR	2016-17	36000	Working	ICAR

D) Farm implements

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
Rotavator	2017	86000	Working	Seed Hub
Scraper / leveler	2017	35000	Working	Seed Hub
Pulse thresher	2017	78000	Working	Seed Hub
MB plough	2017	23000	Working	Seed Hub
Tractor	2002	335535	Condemned	OUAT

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.	28.02.2017	30	<ul style="list-style-type: none"> ▪ To develop an ideal sustainable agriculture model in farmer's field and using it for demonstration. ▪ Convergence in the best way between line departments and KVK ▪ To register more numbers of farmers under KVK portal ▪ Sensitization of farm family to develop kitchen garden for nutritional security. ▪ Prepare strategy for seed production of onion var. Bhima Super so as to meet the requirement. 	<ul style="list-style-type: none"> ▪ Model will be developed in Kuanrda village ▪ Convergence with line department happening through regular monthly Research-Extension meetings ▪ In process of collection of farmers database from each villages through agriculture department 	

			<ul style="list-style-type: none"> ▪ Capacity building training to grass root level workers to make them trainers for farmers ▪ Issues of non-lifting of seeds under seed hub should be communicated to University and ATARI sincerely ▪ Promote KVK technologies through convergence with ATMA ▪ Beneficiaries under New pond excavation scheme of fishery department may be selected from KVK villages ▪ Fodder demonstration unit of KVK should include some perennial fodder trees ▪ KVK may prepare UMMB blocks and make available for promotion of technology ▪ Processing units should be developed at KVK for processing and value addition in fruits and vegetables ▪ All line departments should implement their schemes in KVK villages for best convergence of the activities 	<ul style="list-style-type: none"> ▪ More in service training proposed in 2018-19 for capacity building of extension workers ▪ Issues of non lifting of seeds communicated to OUAT and ATARI ▪ ATMA-KVK convergence program proposed in 2018-19 ▪ Perennial fodder plants will be included in fodder unit ▪ FLD proposed on UMMB and blocks will also be prepared at KVK under RF ▪ Equipment for Home science laboratory have been purchased for value addition purpose. ▪ KVK will take initiatives for ensuring implementation of schemes in KVK villages 	
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* *Salient recommendation of SAC in bullet form*

Attach a copy of SAC proceedings along with list of participants

2.a. District level data on agriculture, livestock and farming situation (2017-18)

Sl. no.	Item	Information
1	Major Farming system/enterprise	Rice-blackgram/greengram/mustard/sunflower/vegetable; Pisciculture, Dairy, Poultry
2	Agro-climatic Zone	North Eastern Coastal Plain Zone
3	Agro ecological situation	AES(3) <ul style="list-style-type: none"> • Alluvial Canal Irrigated

		<ul style="list-style-type: none"> • Low lying Flood prone • Saline soil group 			
4	Soil type	Alluvial Soil: 83209 ha, Saline Soil: 20200 ha, Sandy Soil: 19146 ha			
5	Productivity of major 2-3 crops under cereals, pulses, oilseeds, vegetables, fruits and others(q/ha)	Crop	Productivity	Crop	Productivity
		Rice	42-45	Groundnut	20.8
		Greengram	5.9	Vegetables	135
		Blackgram	6.0	Sugarcane	860
		Mustard	6.1	Chilli	6.0
		Sunflower	12.0		
6	Mean yearly temperature, rainfall, humidity of the district	1686.5 mm, Mean Max temp-32.4 and min temp-21.5			
7	Production of major livestock products like milk, egg, meat etc.	Milk:48.2 MT/year Egg: 21.65 million/year Meat:4.38 MT/year			

Note: Please give recent data only

2.b. Details of operational area / villages (2017-18)

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	Rajendra pur	Bhandaripok hari	Thaila	Rice fallow Dairy Poultry Fish	Low yield from DSR due to broadcast sowing, pest incidence, injudicious nutrient management Fish production from smaller ponds leading to low profit Low milk yield and high cost of feed in dairy Slow growth rate of desi poultry bird Opportunity for intensification small ponds with fruits and vegetables	Doubling farmers' income Rice fallow intensification ICM in DSR Nursery raising of carp spawns in small ponds Feed management in cows Backyard poultry for income generation
2	Adia	Bonth	Kuanrda	Rice fallow Dairy Poultry Fish+fruits/vegetable	Rice fallow High incidence of pests in rice Smaller pond size leading to non lucrative fish farming High cost of production of Milk Poor growth potential of Desi poultry bird	Doubling farmers' income Intensification of rice fallows Varietal evaluation in vegetable crops Remunerative pisciculture in small ponds Cost effective feed management in cows Strengthening livelihood support through poultry and duckery
3	Radhaballav pur	Dhamnagar	Solagaon	Rice fallow Rice-blackgram paira Dairy Poultry	Frequent flood affect profitability from rice No fertilizer management of blackgram paira crop resulting low yield High cost of milk production High incidence of diseases like FMD and Mastitis Low growth rate of desi poultry bird	Doubling farmers' income Varietal evaluation for flood ecology Nutrient management in Paira cropping Feed management of cows Disease management in livestock Strengthening backyard poultry Mushroom and duckery for income generation
4	Bodak	Tihidi	Orali	Rice fallow Rice-blackgram paira Dairy Poultry	Frequent flood affect profitability from rice No fertilizer management of blackgram paira crop resulting low yield High cost of milk production High incidence of diseases like FMD and Mastitis Slow growth rate of desi poultry bird Opportunity for mushroom production	Doubling farmers' income Varietal evaluation for flood ecology Nutrient management in Paira cropping Feed management of cows Disease management in livestock Strengthening backyard poultry Duckery for income generation

5	Mousudha	Chandbali	Junuda	Ricefallow Dairy Poultry	Low yield from local rice varieties High incidence of insect and diseases in rice High cost of milk production High incidence of diseases like FMD and Mastitis Poor growth potential of desi poultry bird	Paira cropping in fallows Varietal evaluation for salt affected ecology Fodder production for feed management of cows Backyard poultry variety Mushroom cultivation for income generation
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2. c. Details of village adoption programme:

Name of the villages adopted by PC and SMS (2017-18) for its development and action plan

Name of village	Block	Action taken for development
Thaila	Bhandaripokhari	ICM of mechanized direct seeded rice with STBFR Greengram /Blackgram as paira for intensification of rice fallows Nursery raising of carp spawns to frys in small backyard tanks High valued horticultural crops on dykes of backyard small ponds. Vermicompost production using locally available resources Fodder and azolla production for feed management of cow Rainbow rooster/ kegg in backyard system Multidisciplinary trainings Animal Health Camp and Awareness camp on Soil sample collection and testing Seed treatment campaign
Kuanrda	Bonth	ICM of mechanized direct seeded rice with STBFR Greengram /Blackgram as paira for intensification of rice fallows Nursery raising of carp spawns to frys in small backyard tanks High valued horticultural crops on dykes of backyard small ponds. Vermicompost production using locally available resources Fodder and azolla production for feed management of cow Rainbow rooster/ kegg in backyard system Multidisciplinary trainings Animal Health Camp and Awareness camp on Soil sample collection and testing Seed treatment campaign
Solagaon	Dhamnagar	Flood tolerant rice variety Swarna Sub1 under flash flood situation Nutrient management in rice blackgram paira cropping

		<p>Fodder and azolla production for feeding management of cattle</p> <p>Rainbow rooster/ kegg in backyard system</p> <p>Paddy straw Mushroom production for higher income</p> <p>Multidisciplinary trainings</p> <p>Animal Health Camp and Awareness camp on Soil sample collection and testing</p> <p>Seed treatment campaign</p>
Orali	Tihide	<p>Flood tolerant rice variety Swarna Sub1 under flash flood situation</p> <p>Nutrient management in rice blackgram paira cropping</p> <p>Fodder and azolla production for feeding management of cattle</p> <p>Rainbow rooster/ kegg in backyard system</p> <p>Paddy straw Mushroom production for higher income</p> <p>Multidisciplinary trainings</p>
Junuda	Chandbali	<p>Salt tolerant rice variety Luna Sampad for saline areas</p> <p>Greengram /Blackgram as paira for intensification of rice fallows</p> <p>Fodder and azolla for feeding management of cattle.</p> <p>OUAT synthetic colour poultry in backyard system</p> <p>Paddy straw Mushroom cultivation for higher income</p> <p>Multidisciplinary trainings</p>

2.1 Priority thrust areas

S. No	Thrust area
1.	Doubling farmers' income through integrated approach
2.	Integrated Crop Management of Rice including stress ecosystems
3.	Varietal evaluation in field and horticultural crops
4.	Rice fallow intensification
5.	Promotion of farm mechanization and RCT in rice based cropping system
6.	Promoting INM and IPDM approach in field and horticultural crops
7.	Vermicomposting for soil health management
8.	Scientific management practices in pisciculture
9.	Promoting pond based integrated fish farming systems and popularizing fish seed production in small backyard ponds
10.	Promotion of off farm activities and secondary agriculture for employment generation
11.	Employment generation of farm women
12.	Promotion of scientific and low cost feeding practices in livestock through fodder production
13	Promotion of Backyard poultry rearing system marginal and landless farmers

3. TECHNICAL ACHIEVEMENTS

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

OFT						FLD					
No. of technologies: 09						No. of technologies: 18					
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
10	09	65	16	61	77	18	18		52	139	191

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
87	63	2150	-	-	177 5	2673	1840	-	-	-	5360 9

Seed production (q)			Planting material (in Lakh)		
Target	Achievement		Target	Achievement	
270	213.8		0.43500	0.1420	

Livestock strains and fish fingerlings produced (in lakh)*		Soil, water, plant, manures samples tested (in lakh)	
Target	Achievement	Target	Achievement
35 lakhs spawns, 60,000 yearlings and 6000 ornamental fishes 500 nos. of 21 days brooded chicks	35 lakhs of spawns, 39,170 yearlings and 2800 ornamental fishes 330 nos of 21 days brooded chicks	1000 soil samples and 200 water samples	341 soil samples and 152 water samples

* Give no. only in case of fish fingerlings

Publication by KVKs		
Item	Number	No. circulated
Research paper	4	-
Seminar/conference/ symposia papers	2	-
Books	-	-
Bulletins	-	-
News letter	1	500
Popular Articles	4	-
Book Chapter	-	-
Extension Pamphlets/ literature	5	3500
Technical reports	100	350
Electronic Publication (CD/DVD etc)	6	24
TOTAL	122	4374

1 Achievements on technologies assessed and refined

OFT-1

1	Title of On farm Trial	Assessment of short term starvation and re-feeding on growth of IMC
2	Problem diagnosed	Heavy wastage of feed due to improper daily feeding. FCR exceeds beyond 2.5, cost involvement towards artificial feeding is very high
3	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	TO ₁ : 8 weeks continuous feeding with 2 weeks of starvation TO ₂ : 4 weeks continuous feeding with 2 weeks of starvation (Assessed)
4	Source of Technology	IIWM, 2014
5	Production system and thematic area	Small and medium ponds, Fish production and management
6	Performance of the Technology with performance indicators	ABW (at the end of 3 months), Yield (q/ha), FCR
7	Final recommendation for micro level situation	At microlevel, farmers can feed fishes for 8 weeks continuously with a feeding holiday of 2 weeks to save cost
8	Constraints identified and feedback for research	No constrains identified

9	Process of farmers participation and their reaction	Farmers participated in the whole process of experiment and realized that the feed cost can be minimized upto Rs.18000/ha of WSA/crop
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Thematic area: Fish production and management

Problem definition: Small to medium ponds, wastage and high cost involvement towards feed.

Technology assessed: Short term starvation and re-feeding for best utilization of natural feed by fishes and cost saving

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
		No. of effective tillers/hill	No. of spikelet per panicle	Test wt. (100 grain wt.)	FCR						
TO ₁	2				1.52	31.84	143866	315066	171200	2.19	
TO ₂	2				1.20	28.20	132743	282473	150000	2.13	

OFT-2

1.	Title of On farm Trial	Assessment of Ivermectin in controlling Argulosis in fish ponds
2.	Problem diagnosed	Use of pyrethroid group of pesticides which deplete zooplankton population and is a limiting factor for prawn polyculture
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	TO ₁ : Paracure I.V (Ivermectin 2% w/w with fish feed @250mg/kg feed TO ₂ : TO ₁ + Paracure B.T. @200ml/acre-m in water Assessed
4.	Source of Technology	CIIFA, 2013
5.	Production system and thematic area	Fish disease management

6.	Performance of the Technology with performance indicators	Disease incidence (%), Yield (q/ha)
7.	Final recommendation for micro level situation	Incorporation of Ivermectin in fish feed along with its application in pond water controls argulosis most effectively
8.	Constraints identified and feedback for research	No constraints
9.	Process of farmers participation and their reaction	Farmers involved in the current assessment were convinced with the results both in terms of disease management and fish yield.

Thematic area: Fish disease management

Problem definition: Major loss in FW fish production of the district (around 40 %) is due to outbreak of fish lice infestation (Argulosis)

Technology assessed: Use of Ivermectin to control Argulosis instead of Pyrethroid group of drugs

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
		No. of effective tillers/hill	No. of spikelet per panicle	Test wt. (100 grain wt.)						
TO ₁	2	-	-	-	5	28.2	125150	287850	162700	2.3
TO ₂	3	-	-	-	1	29.4	123200	295700	172500	2.4

OFT-3

1.	Title of On farm Trial	Assessment of farm made feed on milk production in cows
2.	Problem diagnosed	High cost of concentrate leading to increase cost of milk production

3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	TO ₁ : Grazing + Commercial Feed (3-4kg/cow/day) TO ₂ : Grazing + farm made low cost feed (maize and broken rice- 40%, GNOC/MOC/ SOC/Pulse bran- 25%, DORB -20%, wheat bran/chuni -10%, Mineral mix and Salt -5%)- 3-4 kg/cow/day Assessed
4.	Source of Technology	NDDB, 2012
5.	Production system and thematic area	Homestead, Livestock Production Management
6.	Performance of the Technology with performance indicators	Milk Yield (l/day) Cost saving/day
7.	Final recommendation for micro level situation	Preparation of concentrate using available ingredients decrease the feed cost upto Rs 5/kg of concentrate when compared with commercial grain. Milk production due to feeding with farm made feed was at par with that with commercial feed.
8.	Constraints identified and feedback for research	No constraints
9.	Process of farmers participation and their reaction	Farmers were convinced with the result and interested to continue

Thematic area: Livestock Production and Management

Problem definition: High cost of feed de-motivates dairy farmers for daily concentrate feeding. Low profitability due to low milk production

Technology assessed: Preparation of low cost feed using available raw materials and feeding the milch cow

Results:

Technology option	No. of trials	Yield component			Feed Cost Rs/l of milk	Milk Yield (l/yr)	Cost of cultivation (Rs./yr/cow)	Gross return (Rs./yr/cow)	Net return (Rs./yr/cow)	BC ratio
		No. of effective tillers/hill	No. of spikelet per panicle	Test wt. (100 grain wt.)						
TO ₁	4	-	-	-	8.8	1350	18440	33930	15490	1.84
TO ₂	4	-	-	-	6.4	1350	16211	33881	17670	2.09

OFT-4

1.	Title of On farm Trial	Assessment of concentrate and mineral mixture supplementation on body weight gain in goats
2.	Problem diagnosed	Slow growth rate due to imbalanced ration
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	TO ₁ : Browsing + Mineral Mix @ 10g/goat/day TO ₂ : Browsing + Concentrate @ 100g/goat/day TO ₃ : Browsing + Mineral Mix @ 10g/goat/day+ Concentrate @ 100g/goat/day
4.	Source of Technology	NIANP, 2012
5.	Production system and thematic area	Homestead, Livestock production and management
6.	Performance of the Technology with performance indicators	Body weight gain/3months
7.	Final recommendation for micro level situation	Goats fed with concentrate and mineral mix showed best result in terms of gain in body weight but feeding only concentrate gave best result interms of net income
8.	Constraints identified and feedback for research	No constraints
9.	Process of farmers participation and their reaction	Goat farmers involved in administering the technologies and obtained a good response of farmers due to faster growth rate of goats.

Thematic area: Livestock Production and Management

Problem definition: Improper feeding management in goats leading to the slower body weight gain. It is the case for all goat farmers in the district.

Technology assessed: Feeding of concentrate and mineral mix to goat on growth rate of goats

Results:

Table:

		Yield component						
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Technology option	No. of trials	No. of effective tillers/hill	No. of spikelet per panicle	Test wt. (100 grain wt.)	Disease/ insect pest incidence (%)	Avg. body weight/goat (kg/yr)	Cost of production (Rs./goat)	Gross return (Rs/goat)	Net return (Rs./goat)	BC ratio
TO ₁	20	-	-	-	-	10.2	735	2715	1980	3.7
TO ₂	20	-	-	-	-	16.6	997	4387	3390	4.4
TO ₃	20	-	-	-	-	17.8	1016	4166	3150	4.1

OFT-5

1.	Title of On farm Trial	Assessment of tomato hybrids in rice-tomato cropping system
2.	Problem diagnosed	Low tomato yield due to high incidence of wilt
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	TO ₁ : Arka Rakshak TO ₂ : Arka Samrat Assessed
4.	Source of Technology	IIHR, 2012
5.	Production system and thematic area	Rice tomato production system, Varietal evaluation
6.	Performance of the Technology with performance indicators	Wilt incidence (%), Fruit weight and yield (q/ha)
7.	Final recommendation for micro level situation	There was no incidence of ToLCV infestation in both Rakshyak and Samrat variety of tomato. Arka Samrat gave best result in terms of yield
8.	Constraints identified and feedback for research	Marketing of the product
9.	Process of farmers participation and their reaction	Trial conducted in farmers' field. Farmers have positive response

Thematic area: Varietal evaluation in vegetable

Problem definition: High incidence of ToLCV in commonly cultivated hybrids of tomato. Around 30-35% wilting complex, 20-27% blight and 10-17% ToLCV in tomato crop has been encountered.

Technology assessed: Wilt tolerant varieties Arka Rakshak and Arka Samrat

Results:

Table:

Technology option	No. of trials	Yield component			Disease/ insect pest incidence (%) ToLCV	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.)						
TO ₁	8	-	-	-	0	604.4	157396	459596	302200	2.92
TO ₂	8	-	-	-	0	652.2	164697	490797	326100	2.98

OFT-6

1.	Title of On farm Trial	Assessment of semi composting method in paddy straw mushroom
2.	Problem diagnosed	Low biological efficiency of conventional method of bed preparation for paddy straw mushroom
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	TO ₁ : Paddy straw mushroom cultivation by composting method with 1.0% spawning TO ₂ : Paddy straw mushroom cultivation by composting method with 1.5% spawning
4.	Source of Technology	DMR, 2011, CTMRT, 2016
5.	Production system and thematic area	Homestead, IGA
6.	Performance of the Technology with performance indicators	Yield/bag, Biological Efficiency (%)
7.	Final recommendation for micro level situation	Paddy straw mushroom following semicomposting method and 1% spawning gave higher yield in comparison to 1.5% spawning
8.	Constraints identified and feedback for research	Issues of sterilization of straw. Trial will be put under refinement
9.	Process of farmers participation and their reaction	Farmers whole heartedly participated the said assessment and were convinced with the findings of the experiment

Thematic area: Income generating activity

Problem definition: Increased cost of straw due to mechanization in rice system, low yield from traditional methods

Technology assessed: Paddy straw mushroom cultivation following semi-composing method with varied spawning percent

Results:

Table:

Technology option	No. of trials	Yield component			BE (%)	Yield Kg/bed	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.)						
TO ₁	5	-	-	-	13	0.92	13658	19258	5600	1.41
TO ₂	5	-	-	-	15	0.90	15294	20494	5200	1.34

OFT-7

1.	Title of On farm Trial	Assessment of seed coating of greengram with lime in rice greengram cropping system under acid soil
2.	Problem diagnosed	Acidic soil adversely affecting growth and yield of greengram
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	TO ₁ : STBF + Inoculation of Rhizobium TO ₂ : STBF+ Inoculation of Rhizobium with lime seed coating
4.	Source of Technology	OUAT, 2016
5.	Production system and thematic area	Rice-greengram, Soil management
6.	Performance of the Technology with performance indicators	Germination %, nodulation per plant, number of pods per plant, test weight, yield (q/ha)
7.	Final recommendation for micro level situation	Crop damaged due to rain

8.	Constraints identified and feedback for research	Heavy daily rain hampers the crop
9.	Process of farmers participation and their reaction	

Thematic area: Integrated Nutrient Management

Problem definition: Low yield of greengram due to acidic soil

Technology assessed: Seed coating of greengram with lime in rice greengram cropping system under acid soil

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
		No. of effective tillers/hill	No. of spikelet per panicle	Test wt. (100 grain wt.)						
TO1	6	Crop damaged due to incessant rain								
TO2	7									

OFT-8

1.	Title of On farm Trial	Assessment of vegetable based cropping sequences under protected condition
2.	Problem diagnosed	Lack of information about cropping calendar under protected cultivation
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	TO ₁ : Off season cauliflower-capsicum-spinach TO ₂ : Tomato-cucumber-French bean-coriander
4.	Source of Technology	ICAR-RCNEH, 2009

5.	Production system and thematic area	Vegetable based, Hi tech Horticulture
6.	Performance of the Technology with performance indicators	Number of fruits/plant, Avg fruit weight (g), Yield q/ha
7.	Final recommendation for micro level situation	Tomato-cucumber-French bean-coriander cropping sequence has higher return under protected cultivation
8.	Constraints identified and feedback for research	-
9.	Process of farmers participation and their reaction	The cropping sequence ² has more return in comparison to CS-1

Thematic area: Hi-tech Horticulture

Problem definition: Lack of information on cropping sequences to be followed under protected conditions

Technology assessed: Cropping sequences of vegetables in protected cultivation condition

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
		No. of fruits/plant	Wt.of fruit (g)	Yield /plant (kg)						
FP: Brinjal						389.4	53800	116820	63020	2.17
TO1: cauliflower-capsicum-spinach	03		0.9	0.9		Cauliflower: 414.2 Capsicum: 402.1	212000	603800	391800	2.84

						Spinach : 246.3				
TO 2 (Tomato- cucumber- French bean- Coriander)	03					Tomato : 678.7 Cucum ber:448 .1 Bean: 210.7 Coriand er: 44.8	371400	497900	126500	1.34

OFT-9

1.	Title of On farm Trial	Assessment of nutritional supplementation of Iron for pregnant farm women through nutritional garden
2.	Problem diagnosed	Low Hemoglobin content in farm women and unplanned crop sequence in nutritional garden
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	TO ₁ : Green leafy vegetable cultivation in nutritional garden and inclusion in diet one time/day TO ₂ : Green leafy vegetable cultivation in nutritional garden and inclusion in diet two times/day
4.	Source of Technology	ICMR, 2007
5.	Production system and thematic area	Backyard, Nutritional security
6.	Performance of the Technology with performance indicators	Hb percentage (after 4 m of diet schedule)
7.	Final recommendation for micro level situation	

8.	Constraints identified and feedback for research	
9.	Process of farmers participation and their reaction	Conducted in farmers kitchen garden

Thematic area: Nutritional security

Problem definition: Low Hemoglobin content in farm women and poor nutritional supplementation in daily diet.

Technology assessed: Inclusion of leafy vegetables in the diet to increase the Hb percentage in farm women

Results:

Table:

Technology option	No. of trials	Yield component			RDA (%)	Avg. BMI, kg/m ²	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.)						
TO1:Leafy vegetable once daily					25	18.3				
TO2:Leafy vegetable twice daily					50	19.8				

3.2 Achievements of Frontline Demonstrations

A. Details of FLDs conducted during the year

Cereals

	Total																

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

** BCR= GROSS RETURN/GROSS COST

Other crops

Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	Other parameters		*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demons Ration	Check		Demo	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Rice	ICM	Mechanized direct seeded rice with integrated crop management	30	8	40.0	38.2	4.7	Cost saving, Rs/ha 3050	Cost saving, Rs/ha 0	38050	60000	21900	1.57	41100	57300	16200	1.39
Rice	Varietal Evaluation	Flood tolerant rice var. Swarna sub 1	17	5	37.0	36.2	2.2	No.effective tillers/m ² 218	No.effective tillers/m ² 221	37100	55500	18400	1.49	36300	54300	18000	1.49
Rice	Varietal Evaluation	Salt tolerant var. Luna Sampad, Luna Suvarna	14	2	39.1	37.5	4.2	No.effective tillers/m ² 210	No.effective tillers/m ² 195	37800	58650	20850	1.55	37800	56250	18450	1.49
Rice	IPM	IPM module for management of plant hoppers in rice	10	2	46.9	41.6	12.7	BPH/hill 7.8	BPH/hill 28.8	42200	70350	28150	1.66	41500	62400	20900	1.50
Okra	ICM	Thiourea application in okra: Seed treatment with 500 ppm + foliar application+ zinc @ 5 kg ha ⁻¹	11	0.4	158.9	146.7	8.3			81530	190780	109250	2.34	81050	176690	95640	2.18

Fisheries

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Carp	Production and Management	Nursery raising of carp spawns to fry in small backyard tanks	11	11	Fish equivalent yield, q/ha 45.6	Fish equivalent yield, q/ha 15.2	66.6			159910	337410	177500	2.11	76923	156923	80000	2.04
Carp	Production and Management	'Jayanti rohu' (CIFA-IR) in place of traditional rohu in 3-species IMC culture	24	24	Fish yield, q/ha 40.85	Fish yield, q/ha 32.89	24.2			181154	416654	235500	2.3	150750	331650	180900	2.2
Total			35	35													

* 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		% change in major parameter	Other parameter		*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
Vermicompost	Demonstration of vermicompost production using available farm resources	7	7	34 q/yr	24q/yr	41.6	NPK 1.46,0.82,1.8 Composting time-75 days	NPK 0.6,0.25, 0.8 Composting time-180 days	8400	17500	9100	2.08	2500	7200	4700	2.88
Total		7	7													

* 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

Technical Feedback on the demonstrated technologies

Sl. No	Crop	Feedback
1	Rice	For mechanized DSR, seed drills are not available, herbicides may not be easily available
2	Rice	For BPH management technology, farmers not easily willing to allow skip row planting
3	Rice	Swarna sub 1 rice variety lodged when very high rainfall happened during harvest stage and also vivipary germination observed

Extension and Training activities under FLD

Sl. No.	Activity	Date	No. of activities organized	Number of participants	Remarks
1.	Field days	26/12/17, 8/1/18	2	100	One field day each on STBFR and BPH management
2.	Farmers Training	22/7/17, 23/8/17, 28/10/17, 4/1/18, 10/1/18	5	210	4 nos of training on fodder and Azolla production and 1 on Brooding and feeding management in chicks
		23/8/17, 12-14/9/17, 18/9/17, 26/12/17, 20/1/2018	5	160	3 nos of training o fish seed production and 2 nos. on Jayanti rohu production
		27/7/17, 28/8/17, 26/9/17, 09-13/10/17, 24-25/11/17, 15/12/17	6	160	Training on Vermicomposting, weed management in rice and 1 on STBFR
3.	Media coverage				
4.	Training for extension functionaries	14/07/17, 10/08/17,08/09/17, 16/12/17	5	20	Same 20 extension functionaries attended 5 days training

Performance of the demonstration under CFLD on Pulse and Oilseed Crops during Kharif2017 and Rabi 2017-18:

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	TAR M-1	7	-110	-220	500	<ul style="list-style-type: none"> ▪ Var. IPM-02-14 ▪ Line planting with seed cum fertilizer drill ▪ Soil test based fertilizer ▪ Seed treatment with Mancozeb+Car bendazim, 	111	50	3.8	0.8	1.92	Rain damaged crop and affected results		

							<i>Rhizobium</i> culture ▪ Soil application of PSB and <i>Trichoderma viridi</i> ▪ B,NPK 18:18:18 ▪ Neem based pesticides ▪ Post harvest safe storage								
2	Mustard Variety - Anuradha	M-27	6.92	-207	-270	308	<ul style="list-style-type: none"> • Var. Anuradha • Line planting using seed cum fertilizer drill • Soil test based fertilizer • <i>Trichoderma viridi</i> incubated with FYM • Seed treatment with Mancozeb+Carbendazim • Sulphate of potash, B, NPK 18:18:18 foliar spray • Neem based pesticides • Light irrigation 	25	19	10.96	7.04	8.456			49.7

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	<ul style="list-style-type: none"> ▪ Var. IPM-02-14 ▪ Line planting with seed cum fertilizer drill ▪ Soil test based fertilizer ▪ Seed treatment with Mancozeb+Carbendazim, <i>Rhizobium</i> culture ▪ Soil application of PSB and <i>Trichoderma viridi</i> ▪ B,NPK 18:18:18 ▪ Neem based pesticides ▪ Post harvest safe storage 	15057	10431	-4626						
2	Variety -Anuradha Line planting of seeds along with fertilizers using seed cum fertilizer drill Foliar application of S and B	16988	21235	4247	1.25	18565	25806	7241	1.39	

IPM (Neem oil 1500 ppm @ 1.5 l/ha at flowering stage along with pesticides, Thiomethoxam, Emamectin benzoate								
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**Greengram crop damaged due to continuous rain in April 2018*

C. Socio-economic impact parameters

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
1	Greengram , Var. IPM-02-14	9500	Not yet sold	-		-		10 MD additional
2	Mustard Variety- Anuradha	16076	640	30/	-	-	Yes, for house hold expenditure	9 MD additional

D. Pulse and Oilseed Farmers' perception of the intervention demonstrated

Sl. No.	Technologies demonstrated (with name)	Farmers' Perception parameters					
		Suitability to their farming system	Likings (Preference)	Affordability	Any negative effect	Is Technology acceptable to all in the group/village	Suggestions, for change/improvement, if any
1	<ul style="list-style-type: none"> ▪ Var. IPM-02-14 ▪ Integrated crop management with STBFR, IPM 	Yes	Yes	Yes		Yes	Establishment of processing unit for value addition
2	Mustard var. Anuradha with ICM	Yes	Yes	Seed drill can be a constraint	No	Yes	Market price is very low. Higher MSP is suggested

E. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
Variety IPM-02-14,75 days duration.	No incidence of YMV in demo crop Later part of crop growth rain damaged	No incidence of YMV in demo crop as compared to local check var.	Farmers are satisfied with the variety and technology. But due to continuous rain, they realized the crop loss and next year they will go for line sowing.
Line planting of mustard	Registered higher profitability	Higher yield as compared to local check	Positive response to line planting with neem based IPM

F. Extension activities under FLD conducted:

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
	Training on mustard	04.01.18, Sarasatia	30
	Field day on mustard	15.03.18, Sarasatia	50
	Field visit by dignitaries	15.02.18, Sarasatia	40

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



Greengram

Name of farmer	Father's name	Village	Block	M	E	GPS Coordinates (DDMMSS format)		GPS Coordinates (DDMMSS format)		Soil test in g done (Yes/No)	Recommendation based on soil test value	Brief technology intervention	Variety	Seed quantity (Kg)	Demo. Yield (q/ha)			Yield of local check q/ha	% increase		
						Latitude	Longitude	Latitude	Longitude						H	L	A				
											20:40:20		PU-31	10.34							
Trilochana Patra	Narahari	Thaila	Bhandaripokhari			N 21° 00' .177	E 086° 20' 29' 9'			Yes	20:50:25 kg/ha. N:P:K	Var. IPM-02-14(YMV tolerant) @ 20 Kg/ha	IPM-02-14	15.36			1.8	1.73	4.05		
Sudarsana Patra	Harekrushna	Thaila	Bhandaripokhari			N 21° 00' .160	E 086° 20' 27' 1'			Yes	20:50:25 kg/ha. N:P:K	Lin e	IPM-02-14	15.68			2.8	1.73	61.85		

Suren dra Das	Babaji	Thail a	Bha ndar ipok hari		N 21 ° 00 .1 50 '	E 08 6° 20. 24 9'			Y e s	20:40: 25 kg/ha. N:P:K	plan ting wit h see d cum ferti lize r	IP M - 02 - 14	1 4 . 7 2			1 . 2 73	- 30 . 6 4
Pravak ar Aruk	Balara m	Thail a	Bha ndar ipok hari		N 21 ° 00 .1 53 '	E 08 6° 20. 24 8'			Y e s	20:50: 25 kg/ha. N:P:K	drill wit h 30 cm row spa cing	IP M - 02 - 14	9 . 2 8		1 . 3 73	- 24 . 8 6	
Pramil a Majhi	W/O- Nuri	Thail a	Bha ndar ipok hari		N 21 ° 00 .1 '	E 08 6° 20. 24 8'			Y e s	20:40: 25 kg/ha. N:P:K	Soil test bas ed ferti lize r	IP M - 02 - 14	2 . 8 8		1 . 5 73	- 13 . 2 9	
Babuli Beh er a	Nakula	Thail a	Bha ndar ipok hari		N 21 ° 00 .1 49 '	E 08 6° 20. 25 7'			Y e s	20:50: 25 kg/ha. N:P:K	reco mm end atio n	IP M - 02 - 14	3 . 5 2		1 . 8 73	4. 05	
Indraji t Barik	Baikun tha	Thail a	Bha ndar ipok hari		N 21 ° 00 .1 67 '	E 08 6° 20. 29 9'			Y e s	20:40: 25 kg/ha. N:P:K	See d trea tme nt wit h Ma nco zeb +Ca rbe nda zim @ 2 g/K	IP M - 02 - 14	4 . 1 6		1 . 7 73	- 1. 73	
Payod har Sahoo	Bipin	Thail a	Bha ndar ipok hari		N 21 ° 00 .1 76 '	E 08 6° 20. 30 6'			Y e s	20:40: 25 kg/ha. N:P:K	see ds and see d inoc ulat ion wit h	IP M - 02 - 14	1 1 . 5 2		2 . 5 73	27 . 1 7	
Prahal lad Sahoo	Baidha r	Thail a	Bha ndar ipok hari		N 21 ° 00 .1 50 '	E 08 6° 20. 26 5'			Y e s	20:50: 25 kg/ha. N:P:K	<i>Rhi zobi um</i>	IP M - 02 - 14	1 1 . 5 2		2 . 5 73	44 . 5 1	
Ranga dhar Pati	Dadhi	Thail a	Bha ndar ipok hari		N 21 ° 00 .1 57 '	E 08 6° 20. 28 4'			Y e s	20:50: 25 kg/ha. N:P:K		IP M - 02 - 14	6 . 7 2		3 . 73	73 . 4 1	

Ramakanta Barik	Sanatan	Thaila	Bhandaripokhari		N 21° 00' .158'	E 08 6° 20.292'			Yes	20:50:25 kg/ha. N:P:K	culture @ 200g per 10 Kg seeds	IPM - 02 - 14	12.16			2.7	1.73	56.07
Basant Majhi	Lokanath	Thaila	Bhandaripokhari		N 21° 00' .151'	E 08 6° 20.251'			Yes	20:50:25 kg/ha. N:P:K	Soil application of PSB @ 5 Kg/ha and Trichoderma viridi @ 3 lit/ha	IPM - 02 - 14	7.36			1.5	1.73	13.29
Kailash Parida	Amulya	Thaila	Bhandaripokhari		N 21° 00' .174'	E 08 6° 20.297'			Yes	20:50:25 kg/ha. N:P:K	at the time of sowing incubated with FYM for 1 week.	IPM - 02 - 14	15.04			2.4	1.73	38.73
Nakula Behera	Purna Chandra	Thaila	Bhandaripokhari		N 21° 00' .154'	E 08 6° 20.250'			Yes	20:50:25 kg/ha. N:P:K	on application at 30 DAS and 45 DA	IPM - 02 - 14	13.44			1.4	1.73	19.08
Abhiram Barik	Sanatan	Thaila	Bhandaripokhari		N 21° 00' .167'	E 08 6° 20.307'			Yes	20:50:25 kg/ha. N:P:K		IPM - 02 - 14	12.16			2.7	1.73	15.61
Damodar Mallick	Banshidhar	Bansore, Kalyani	Dhannagar		N 20° 55' .991'	E 08 6° 29.184'	N 20° 55' .859'	E 086° 29' .104'	Yes	20:40:25 kg/ha. N:P:K		IPM - 02 - 14	3.84			3.2	1.73	84.97
Hrudananda Mallick	Damodar	Bansore, Kalyani	Dhannagar		N 20° 55' .883'	E 08 6° 29.198'	N 20° 55' .991'	E 086° 29' .184'	Yes	20:40:25 kg/ha. N:P:K		IPM - 02 - 14	7.04			2.9	1.73	67.63
Milan Mallick	Laxmidhar	Bansore, Kalyani	Dhannagar		N 20° 55' .947'	E 08 6° 29.154'	N 20° 55' .883'	E 086° 29' .198'	Yes	20:40:25 kg/ha. N:P:K		IPM - 02 - 14	12.16			1.6	1.73	7.51

Laxmi dhar Mallick	Dasaratha	Bansore, Kalyani	Dharmnagar			N 20° 55.947'	E 08° 29.154'	N 20° 55.883'	E 086° 29.198'	Yes	20:40:25 kg/ha. N:P:K	S @ 1.5 g/lit . Of water	IPM - 02 - 14	10.24			2.16	1.73	50.29
Gangadhar Mallick	Banshidhar	Bansore, Kalyani	Dharmnagar			N 20° 55.07'	E 08° 29.162'	N 20° 55.910'	E 086° 29.147'	Yes	20:40:25 kg/ha. N:P:K	■ Spray of 18:18:18 @ 1% during 30 and 45 DAS	IPM - 02 - 14	12.16			1.7	1.73	-1.73
Parvati Mallick	W/O-Late Lambo dhar	Bansore, Kalyani	Dharmnagar			N 20° 55.10'	E 08° 29.147'	N 20° 55.947'	E 086° 29.154'	Yes	20:40:25 kg/ha. N:P:K	■ Use of neem based pesti- cides along with need based pesti- cides for insect pest	IPM - 02 - 14	6.72			1.1	1.73	-36.42
Nrusingha Puhani	Ekadasi	Bansore, Kalyani	Dharmnagar			N 20° 55.74'	E 08° 29.061'	N 20° 55.689'	E 086° 29.109'	Yes	20:40:25 kg/ha. N:P:K	■ Post harvest safe storage of seeds using ITK (neem or mustard oil).	IPM - 02 - 14	8			1.2	1.73	-30.64
Sridhar Mallick	Banshidhar	Bansore, Kalyani	Dharmnagar			N 20° 55.07'	E 08° 29.162'	N 20° 55.910'	E 086° 29.147'	Yes	20:40:25 kg/ha. N:P:K		IPM - 02 - 14	9.6			1.5	1.73	-13.29
Paramananda Sahoo	Muralidhar	Bansore, Kalyani	Dharmnagar			N 20° 55.33'	E 08° 29.109'	N 20° 56.005'	E 086° 29.203'	Yes	20:40:25 kg/ha. N:P:K		IPM - 02 - 14	8			1.8	1.73	4.05
Jadunath Sahoo	Udhaba	Bansore, Kalyani	Dharmnagar			N 20° 55.04'	E 08° 29.117'	N 20° 55.915'	E 086° 29.099'	Yes	20:40:25 kg/ha. N:P:K		IPM - 02 - 14	13.44			1.6	1.73	-7.51
Brajakishore Nayak	Bangali	Bansore, Kalyani	Dharmnagar			N 20° 55.10'	E 08° 29.147'	N 20° 55.947'	E 086° 29.154'	Yes	20:40:25 kg/ha. N:P:K		IPM - 02 - 14	8.32			1.6	1.73	-7.51

Shyam sundar Sahoo	Kanhu Chara n	Bans ore, Kaly ani	Dha mna gar			N 20 ° 55 .9 54 '	E 08 6° 29. 15 7'	N 20° 55. 918 '	E 086 ° 29. 134 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	1 5 . 0 4			1 . 1. 73	- . 36 .4 2
Purna Chand ra Das	Sukad eb	Bans ore, Kaly ani	Dha mna gar			N 20 ° 55 .8 83 '	E 08 6° 29. 19 8'	N 20° 55. 991 '	E 086 ° 29. 184 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	6 . 4			0 . 1. 73	- . 47 .9 8
Srikan ta Mallic k	Bhikari	Bans ore, Kaly ani	Dha mna gar			N 20 ° 55 .9 33 '	E 08 6° 29. 10 9'	N 20° 56. 005 '	E 086 ° 29. 203 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	3 . 8 4			2 . 1. 73	44 . 5 1
Saras wati Sahoo	W/O- Jadun ath	Bans ore, Kaly ani	Dha mna gar			N 20 ° 55 .9 15 '	E 08 6° 29. 09 9'	N 20° 55. 933 '	E 086 ° 29. 109 '	Y e s	20:50: 25 kg/ha. N:P:K	IP M - 02 - 14	7 . 0 4			2 . 1. 73	15 . 6 1
Mada n Moha n Sahoo	Shyam a Sunda r	Bans ore, Kaly ani	Dha mna gar			N 20 ° 55 .6 89 '	E 08 6° 29. 10 9'	N 20° 55. 904 '	E 086 ° 29. 117 '	Y e s	20:50: 25 kg/ha. N:P:K	IP M - 02 - 14	1 0 . 2 4			1 . 1. 73	- . 24 .8 6
Gokul anand a Dalai	Chem ei	Bans ore, Kaly ani	Dha mna gar			N 20 ° 55 .7 74 '	E 08 6° 29. 06 1'	N 20° 55. 689 '	E 086 ° 29. 109 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14				1 . 1. 73	- . 1. 73
Daitari Sahoo	Anam	Bans ore, Kaly ani	Dha mna gar			N 20 ° 55 .6 90 '	E 08 6° 29. 29 6'	N 20° 55. 895 '	E 086 ° 29. 182 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	1 2			2 . 1. 73	15 . 6 1
Bhagir athi Dalai	Chem ei	Bans ore, Kaly ani	Dha mna gar			N 20 ° 55 .6 89 '	E 08 6° 29. 10 9'	N 20° 55. 904 '	E 086 ° 29. 117 '	Y e s	20:50: 25 kg/ha. N:P:K	IP M - 02 - 14	7 . 0 4			1 . 1. 73	- . 42 .2 0

Barun Samal	Ramesh	Bansore, Kalyani	Dharmnagar			N 20° 55.859'	E 08° 29.104'	N 20° 55.774'	E 086° 29.061'	Yes	20:40:25 kg/ha. N:P:K	IPM - 02 - 14	8 . 6 4			2 . 3	1 . 73	32 . 9 5
Ajay Sahoo	Panchanana	Bansore, Kalyani	Dharmnagar			N 20° 55.904'	E 08° 29.117'	N 20° 55.915'	E 086° 29.099'	Yes	20:40:25 kg/ha. N:P:K	IPM - 02 - 14	9 . 6			1 . 3	1 . 73	24 . 8 6
Purna Chandra Sahoo	Jagannath	Bansore, Kalyani	Dharmnagar			N 20° 55.895'	E 08° 29.182'	N 20° 55.954'	E 086° 29.157'	Yes	20:50:25 kg/ha. N:P:K	IPM - 02 - 14	8 . 9 6			2 . 1	1 . 73	21 . 3 9
Nanda kishore Sahoo	Gobinda	Bansore, Kalyani	Dharmnagar			N 20° 55.774'	E 08° 29.061'	N 20° 55.689'	E 086° 29.109'	Yes	20:40:25 kg/ha. N:P:K	IPM - 02 - 14	1 5 . 3 6			2 . 3	1 . 73	32 . 9 5
Sudipta Mallick	Purusottam	Bansore, Kalyani	Dharmnagar			N 20° 55.907'	E 08° 29.162'	N 20° 55.910'	E 086° 29.147'	Yes	20:40:25 kg/ha. N:P:K	IPM - 02 - 14	7 . 6 8			1 . 8	1 . 73	4 . 0 5
Lata Sahoo	Amulya	Bansore, Kalyani	Dharmnagar			N 20° 55.883'	E 08° 29.198'	N 20° 55.991'	E 086° 29.184'	Yes	20:40:25 kg/ha. N:P:K	IPM - 02 - 14	6 . 7 2			1 . 4	1 . 73	19 . 0 8
Gadadhar Sahoo	Batakrushna	Bansore, Kalyani	Dharmnagar			N 20° 55.991'	E 08° 29.184'	N 20° 55.859'	E 086° 29.104'	Yes	20:40:25 kg/ha. N:P:K	IPM - 02 - 14	8 . 6 4			1 . 1	1 . 73	42 . 2 0
Biranchi Padhi	Kanhu Charan	Bansore, Kalyani	Dharmnagar			N 20° 55.690'	E 08° 29.296'	N 20° 55.895'	E 086° 29.182'	Yes	20:40:25 kg/ha. N:P:K	IPM - 02 - 14	1 1 . 2			1 . 4	1 . 73	19 . 0 8

Deben dra Padhi	Bhaba grahi	Bans ore, Kaly ani	Dha mna gar			N 20 ° 55 .6 90 '	E 08 6° 29. 29 6'	N 20° 55. 895 '	E 086 ° 29. 182 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	9 .2 8			1 .1 5	73	- 13 .2 9
Suren dra Samal	Banshi dhar	Bans ore, Kaly ani	Dha mna gar			N 20 ° 55 .9 33 '	E 08 6° 29. 10 9'	N 20° 56. 005 '	E 086 ° 29. 203 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	1 1 .8 4			1 .1 4	73	- 19 .0 8
Damo dar Sahoo	Kanhu	Bans ore, Kaly ani	Dha mna gar			N 20 ° 55 .6 90 '	E 08 6° 29. 29 6'	N 20° 55. 895 '	E 086 ° 29. 182 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	7 .0 4			2 .1 7	73	56 .0 7
Ranjit Jena	Bijay	Bans ore, Kaly ani	Dha mna gar			N 20 ° 55 .6 90 '	E 08 6° 29. 29 6'	N 20° 55. 895 '	E 086 ° 29. 182 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	1 1 .2			1 73		- 42 .2 0
Pravak ar Samal	Bhims en	Bans ore, Kaly ani	Dha mna gar			N 20 ° 55 .6 90 '	E 08 6° 29. 29 6'	N 20° 55. 895 '	E 086 ° 29. 182 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	5 .7 6			0 .9	73	- 47 .9 8
Naren dra Mallic k	Bharat	Bans ore, Kaly ani	Dha mna gar			N 20 ° 55 .8 95 '	E 08 6° 29. 18 2'	N 20° 55. 954 '	E 086 ° 29. 157 '	Y e s	20:50: 25 kg/ha. N:P:K	IP M - 02 - 14	4 .1 6			1 .8	73	4. 05
Babaji Sahu	Late Baraju	Uch adih a	Dha mna gar			N 20 ° 55 .6 78 '	E 08 6° 28. 22 8'	N 20° 55. 652 '	E 086 ° 28. 239 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	8			3 .8	73	11 9. 65
						N 20 ° 55 .5 96 '	E 08 6° 28. 18 0'	N 20° 55. 576 '	E 086 ° 28. 309 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	5 .7 6			0 0		0. 00

Sanyasi Sahoo	Late Babaji	Uchadaha	Dhannagar			N 20° 55.7 14'	E 08° 28.23 6'	N 20° 55.545	E 086° 28.218	Yes	20:50: 25 kg/ha. N:P:K	IP M - 02 - 14					1. 6	1. 73	- 7. 51
						N 20° 55.6 63'	E 08° 28.20 8'	N 20° 55.596	E 086° 28.180	Yes	20:50: 25 kg/ha. N:P:K	IP M - 02 - 14	8						0. 00
Acyutanda Kuanr	Raghu nath	Uchadaha	Dhannagar			N 20° 55.6 63'	E 08° 28.20 8'	N 20° 55.596	E 086° 28.180	Yes	20:50: 25 kg/ha. N:P:K	IP M - 02 - 14	8				3. 1	1. 73	79. 19
Bibhuti Sahoo	Sanyasi	Uchadaha	Dhannagar			N 20° 55.5 96'	E 08° 28.18 0'	N 20° 55.576	E 086° 28.309	Yes	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	5. 4				3. 8	1. 73	11. 965
Muralidhar Behera	Late Binod	Uchadaha	Dhannagar			N 20° 55.5 28'	E 08° 28.20 2'	N 20° 55.639	E 086° 28.272	Yes	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	8				2. 3	1. 73	32. 95
Binod Sahoo	Late Bharat	Uchadaha	Dhannagar			N 20° 55.6 52'	E 08° 28.23 9'	N 20° 55.721	E 086° 28.238	Yes	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	15. 04				1. 2	1. 73	- 30. 64
Ramesh Barik	Late Duryodhan	Uchadaha	Dhannagar			N 20° 55.6 27'	E 08° 28.32 3'	N 20° 55.668	E 086° 28.312	Yes	20:50: 25 kg/ha. N:P:K	IP M - 02 - 14	57. 14				0. 8	1. 73	- 53. 76
Bhimsen Nayak	Late Ghanshyam	Uchadaha	Dhannagar			N 20° 55.7 53'	E 08° 28.24 3'	N 20° 55.678	E 086° 28.228	Yes	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	4				3. 3	1. 73	90. 75

						N 20° 55' .7 14	E 08° 28' 23 6'	N 20° 55' 545	E 086° 28' 218	Y e s	20:50: 25 kg/ha. N:P:K	IP M - 02 - 14	8 . 3 2				0 0	0 00
						N 20° 55' .6 39	E 08° 28' 33 8'	N 20° 55' 593	E 086° 28' 132	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	3 . 2			0 0	0 00	
Brund aban Kuanr	Late Dhane swar	Uch adiah	Dha mna gar			N 20° 55' .6 63	E 08° 28' 20 8'	N 20° 55' 596	E 086° 28' 180	Y e s	20:50: 25 kg/ha. N:P:K	IP M - 02 - 14	3 . 8 4		3 . 6	1 73	10 8. 09	
Bhaga ban Kuanr	Late Dhane swar	Uch adiah	Dha mna gar			N 20° 55' .6 63	E 08° 28' 20 8'	N 20° 55' 596	E 086° 28' 180	Y e s	20:50: 25 kg/ha. N:P:K	IP M - 02 - 14	1 . 9 2		1 73	1 73	- 42 .2 0	
Binod Beher a	Late Sudha kar	Uch adiah	Dha mna gar			N 20° 55' .5 22	E 08° 28' 24 8'	N 20° 55' 559	E 086° 28' 288	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	8		1 7	1 73	- 1. 73	
Rabin dra Sahoo	Late Bhanu	Uch adiah	Dha mna gar			N 20° 55' .6 85	E 08° 28' 28 0'	N 20° 55' 717	E 086° 28' 270	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	1 2		2 4	1 73	38 .7 3	
Golak Ch. Nayak	Late Pahali	Uch adiah	Dha mna gar			N 20° 55' .6 52	E 08° 28' 23 9'	N 20° 55' 721	E 086° 28' 238	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	4		3 2	1 73	84 .9 7	
Prakas h Ch. Barik	Late Bhaba grahi	Uch adiah	Dha mna gar			N 20° 55' .6 39	E 08° 28' 33 8'	N 20° 55' 593	E 086° 28' 132	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	1 5 . 3 6		1 6	1 73	- 7. 51	

Ashok Barik	Late Bhabagrahi	Uchadhia	Dhannagar			N 20° 55.639'	E 08° 28.338'	N 20° 55.593'	E 08° 28.132'	Yes	20:40:25 kg/ha. N:P:K	IPM - 02 - 14	15.68			1.8	1.73	4.05
Babaji Sahu	Late Sadhu	Uchadhia	Dhannagar			N 20° 55.96'	E 08° 28.180'	N 20° 55.576'	E 08° 28.309'	Yes	20:40:25 kg/ha. N:P:K	IPM - 02 - 14	5.76			1.2	1.73	30.64
Baidyanath Sahoo	Sri Babaji	Uchadhia	Dhannagar			N 20° 55.93'	E 08° 28.132'	N 20° 55.663'	E 08° 28.208'	Yes	20:50:25 kg/ha. N:P:K	IPM - 02 - 14	4			1.1	1.73	36.42
Pradip Das	Late Murali	Uchadhia	Dhannagar			N 20° 55.717'	E 08° 28.270'	N 20° 55.690'	E 08° 28.290'	Yes	20:40:25 kg/ha. N:P:K	IPM - 02 - 14	5.76			3.3	1.73	73.41
Muktikanta Mallick	Late Bharat	Uchadhia	Dhannagar			N 20° 55.22'	E 08° 28.248'	N 20° 55.559'	E 08° 28.288'	Yes	20:40:25 kg/ha. N:P:K	IPM - 02 - 14	8			3.6	1.73	108.09
						N 20° 55.690'	E 08° 28.290'	N 20° 55.528'	E 08° 28.202'	Yes	20:40:25 kg/ha. N:P:K	IPM - 02 - 14	4			0.0	0.00	0.00
Ram Chandra Das	Late Arjun	Uchadhia	Dhannagar			N 20° 55.678'	E 08° 28.228'	N 20° 55.652'	E 08° 28.239'	Yes	20:40:25 kg/ha. N:P:K	IPM - 02 - 14	9.28			1.1	1.73	42.20
Niranjan Kuanr	Late Dhanswar	Uchadhia	Dhannagar			N 20° 55.63'	E 08° 28.208'	N 20° 55.596'	E 08° 28.180'	Yes	20:50:25 kg/ha. N:P:K	IPM - 02 - 14	3.84			1.6	1.73	7.51

Nrusin gha Mallic k	Late Bhaga bat	Uch adih a	Dha mna gar			N 20 ° 55 .5 76 '	E 08 6° 28. 30 9'	N 20° 55. 522 '	E 086 ° 28. 248 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	3 . 8 4			3 . 5	1. 73	10 2. 31
Akhay a Sahu	Late Anand a	Uch adih a	Dha mna gar			N 20 ° 55 .6 78 '	E 08 6° 28. 22 8'	N 20° 55. 652 '	E 086 ° 28. 239 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14				0 . 8	1. 73	- 53 .7 6
Purna Chand ra Sethi	Late Nishak ar	Uch adih a	Dha mna gar			N 20 ° 55 .5 96 '	E 08 6° 28. 18 0'	N 20° 55. 576 '	E 086 ° 28. 309 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	1 2 . 4 8			1 . 2	1. 73	- 30 .6 4
Sangra m Beher a	Late Kailas h	Uch adih a	Dha mna gar			N 20 ° 55 .6 78 '	E 08 6° 28. 22 8'	N 20° 55. 652 '	E 086 ° 28. 239 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	5 . 1 2			1 . 73		- 42 .2 0
Santos h Barik	Late Surya mani	Uch adih a	Dha mna gar			N 20 ° 55 .5 76 '	E 08 6° 28. 30 9'	N 20° 55. 522 '	E 086 ° 28. 248 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	1 3 . 4 4			1 . 8	1. 73	4. 05
Ajay Moh anty	Late Ganga dhar	Uch adih a	Dha mna gar			N 20 ° 55 .5 93 '	E 08 6° 28. 13 2'	N 20° 55. 663 '	E 086 ° 28. 208 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14				2 . 5	1. 73	44 .5 1
Bijay Moh anty	Late Ganga dhar	Uch adih a	Dha mna gar			N 20 ° 55 .5 93 '	E 08 6° 28. 13 2'	N 20° 55. 663 '	E 086 ° 28. 208 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	4 . 8			3 . 73		73 .4 1
Jaladh ar Padhi	Late Golek h	Uch adih a	Dha mna gar			N 20 ° 55 .6 68 '	E 08 6° 28. 31 2'	N 20° 55. 685 '	E 086 ° 28. 280 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	8 . 6 4			3 . 3	1. 73	90 .7 5

Nilamani Nayak	Late Narayan	Uchadhia	Dharmagar			N 20° 55' .678	E 08° 28' 22	N 20° 55' 652	E 086° 28' 239	Yes	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	1 1 . 84			1 . 4	1. 73	- 19 . 08
Chakradhar Pallai	Late Birabhadra	Uchadhia	Dharmagar			N 20° 55' .576	E 08° 28' 30	N 20° 55' 522	E 086° 28' 248	Yes	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	5 . 12			1 . 2	1. 73	- 30 . 64
Santosh Sahoo	Sri Babaji	Uchadhia	Dharmagar			N 20° 55' .575	E 08° 28' 17	N 20° 55' 639	E 086° 28' 338	Yes	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	1 . 6			0 . 8	1. 73	- 53 . 76
Jitendra Das	Late Dibakar	Uchadhia	Dharmagar			N 20° 55' .717	E 08° 28' 27	N 20° 55' 690	E 086° 28' 290	Yes	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	1 1 . 84			1 . 9	1. 73	9. 83
Rebati Sethi	W/O-Late Kailash	Uchadhia	Dharmagar			N 20° 55' .581	E 08° 28' 25	N 20° 55' 714	E 086° 28' 236	Yes	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	8 . 32			1 . 1	1. 73	- 42 . 20
Shaktiveda Mallick	Late Ganesh	Uchadhia	Dharmagar			N 20° 55' .45	E 08° 28' 21	N 20° 55' 575	E 086° 28' 175	Yes	20:50: 25 kg/ha. N:P:K	IP M - 02 - 14	5 . 76			1 . 9	1. 73	9. 83
Ranjan Kumar Mohanty	Sri Dhanswar	Uchadhia	Dharmagar			N 20° 55' .581	E 08° 28' 25	N 20° 55' 714	E 086° 28' 236	Yes	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	1 1 . 84			2 . 3	1. 73	32 . 95
Jitendra Mallick	Sri Biswanath	Uchadhia	Dharmagar			N 20° 55' .96	E 08° 28' 18	N 20° 55' 576	E 086° 28' 309	Yes	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	9 . 28			1 . 3	1. 73	- 24 . 86

Rabin dra Beher a	Late Kailas h	Uch adih a	Dha mna gar			N 20 ° 55 .7 17 '	E 08 6° 28. 27 0'	N 20° 55. 690 '	E 086 ° 28. 290 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14					1 .1 6 73	- 7. 51
Akha y a Ku Jena	Sri Dhatal i	Uch adih a	Dha mna gar			N 20 ° 55 .7 17 '	E 08 6° 28. 27 0'	N 20° 55. 690 '	E 086 ° 28. 290 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14					1 73	- 42 .2 0
Bana mali Sahoo	Late Baraju	Uch adih a	Dha mna gar			N 20 ° 55 .6 85 '	E 08 6° 28. 28 0'	N 20° 55. 717 '	E 086 ° 28. 270 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	5 .7 6				2 .1 5 73	44 .5 1
Chakr adhar Sahoo	Late Krush na	Uch adih a	Dha mna gar			N 20 ° 55 .6 52 '	E 08 6° 28. 23 9'	N 20° 55. 721 '	E 086 ° 28. 238 '	Y e s	20:50: 25 kg/ha. N:P:K	IP M - 02 - 14	1 1 .8 4				1 .1 5 73	- 13 .2 9
Ratna kar Sahoo	Sri Ranjan	Uch adih a	Dha mna gar			N 20 ° 55 .6 27 '	E 08 6° 28. 32 3'	N 20° 55. 668 '	E 086 ° 28. 312 '	Y e s	20:50: 25 kg/ha. N:P:K	IP M - 02 - 14					2 73	15 .6 1
Sambi t Nayak	Late Sarat	Uch adih a	Dha mna gar			N 20 ° 55 .6 85 '	E 08 6° 28. 28 0'	N 20° 55. 717 '	E 086 ° 28. 270 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	1 0 .5 6				1 .1 4 73	- 19 .0 8
Chand raman i Sahoo	Sri Anand a	Uch adih a	Dha mna gar			N 20 ° 55 .5 75 '	E 08 6° 28. 17 5'	N 20° 55. 639 '	E 086 ° 28. 338 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	5 .7 6				0 .1 9 73	- 47 .9 8
Rabin dra Mallic k	Late Chaita nya	Uch adih a	Dha mna gar			N 20 ° 55 .5 75 '	E 08 6° 28. 17 5'	N 20° 55. 639 '	E 086 ° 28. 338 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	1 2 .1 6				2 73	15 .6 1

Susant Ku Das	Late Parikhi ta	Uch adih a	Dha mna gar			N 20 ° 55 .7 17 '	E 08 6° 28. 27 0'	N 20° 55. 690 '	E 086 ° 28. 290 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	1 . 9 2			2 . 9 73	1. 73	67 .6 3
Ketaki Sahoo	W/O Late Sudha kar	Uch adih a	Dha mna gar			N 20 ° 55 .6 52 '	E 08 6° 28. 23 9'	N 20° 55. 721 '	E 086 ° 28. 238 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	7 . 6 8			1 . 3 73	1. 73	- 24 .8 6
Kailas h Barik	Late Dhuri	Uch adih a	Dha mna gar			N 20 ° 55 .5 59 '	E 08 6° 28. 28 8'	N 20° 55. 627 '	E 086 ° 28. 323 '	Y e s	20:50: 25 kg/ha. N:P:K	IP M - 02 - 14	3 . 8 4			2 . 2 73	1. 73	27 .1 7
Bidyad har Sahoo	Sri Sanyas i	Uch adih a	Dha mna gar			N 20 ° 55 .6 85 '	E 08 6° 28. 28 0'	N 20° 55. 717 '	E 086 ° 28. 270 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	7 . 0 4			1 . 73	1. 73	- 42 .2 0
Kaland i Mohanty	Late Ganga dhar	Uch adih a	Dha mna gar			N 20 ° 55 .5 93 '	E 08 6° 28. 13 2'	N 20° 55. 663 '	E 086 ° 28. 208 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	8 . 3 2			0 . 9 73	1. 73	- 47 .9 8
Mina Kumar i Nayak	W/O- Sri Bhima sen	Uch adih a	Dha mna gar			N 20 ° 55 .6 68 '	E 08 6° 28. 31 2'	N 20° 55. 685 '	E 086 ° 28. 280 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	5 . 7 6			3 . 4 73	1. 73	96 .5 3
Ashala ta Mallick	W/O- Rabin dra	Uch adih a	Dha mna gar			N 20 ° 55 .7 21 '	E 08 6° 28. 23 8'	N 20° 55. 581 '	E 086 ° 28. 253 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	1 5 . 0 4			2 . 6 73	1. 73	50 .2 9
Manoj Mohanty	Sri Mada n moha n	Uch adih a	Dha mna gar			N 20 ° 55 .6 85 '	E 08 6° 28. 28 0'	N 20° 55. 717 '	E 086 ° 28. 270 '	Y e s	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	5 . 7 6			3 . 4 73	1. 73	96 .5 3

Hemanta Khillar	Late Kasinath	Uchadhia	Dharmnagar			N 20° 55' 28'	E 08° 28' 20'	N 20° 55' 639'	E 086° 28' 272'	Yes	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	8 . 3 2			2 . 8	1. 73	61 . 8 5
Rabin Das	Late Pandab	Uchadhia	Dharmnagar			N 20° 55' 21'	E 08° 28' 23' 8'	N 20° 55' 581'	E 086° 28' 253'	Yes	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	8			2 . 2	1. 73	27 . 1 7
Sebati Samal	W/O-Sanatan	Uchadhia	Dharmnagar			N 20° 55' 21'	E 08° 28' 23' 8'	N 20° 55' 581'	E 086° 28' 253'	Yes	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	1 2 . 1 6			1 . 4	1. 73	- 19 . 0 8
Dhirendra Samal	Late Laxmidhar	Uchadhia	Dharmnagar			N 20° 55' 45'	E 08° 28' 21' 8'	N 20° 55' 575'	E 086° 28' 175'	Yes	20:50: 25 kg/ha. N:P:K	IP M - 02 - 14	1 5 . 3 6			2 . 8	1. 73	61 . 8 5
Purna Chandra Samal	Late Chemei	Uchadhia	Dharmnagar			N 20° 55' 14'	E 08° 28' 23' 6'	N 20° 55' 545'	E 086° 28' 218'	Yes	20:50: 25 kg/ha. N:P:K	IP M - 02 - 14	8			1 . 4	1. 73	- 19 . 0 8
Pravakar Jena	Late Ganesh	Uchadhia	Dharmnagar			N 20° 55' 45'	E 08° 28' 21' 8'	N 20° 55' 575'	E 086° 28' 175'	Yes	20:50: 25 kg/ha. N:P:K	IP M - 02 - 14	1 0 . 8 8			1 . 73	- 42 . 2 0	
Abhimanyu Kuanr	Late Dhanswar	Uchadhia	Dharmnagar			N 20° 55' 53'	E 08° 28' 24' 3'	N 20° 55' 678'	E 086° 28' 228'	Yes	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	1 5 . 0 4			4 . 73	1. 73	13 . 1 21
Udaykar Nayak	Late Ghanshyam	Uchadhia	Dharmnagar			N 20° 55' 28'	E 08° 28' 20' 2'	N 20° 55' 639'	E 086° 28' 272'	Yes	20:40: 25 kg/ha. N:P:K	IP M - 02 - 14	1 1 . 8 4			2 . 8	1. 73	61 . 8 5

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			
Rejuvenation of old orchards													
Export potential fruits													
Micro irrigation systems of orchards													
Plant propagation techniques													
Others, if any(INM)													
c) Ornamental Plants													
Nursery Management													
Management of potted plants													
Export potential of ornamental plants													
Propagation techniques of Ornamental Plants													
Others, if any													
d) Plantation crops													
Production and Management technology													
Processing and value addition													
Others, if any													
e) Tuber crops													
Production and Management technology													
Processing and value addition													
Others, if any													
f) Spices													
Production and Management technology													
Processing and value addition													
Others, if any													
g) Medicinal and Aromatic Plants													
Nursery management													
Production and management technology													
Post harvest technology and value addition													
Others, if any													
III. Soil Health and Fertility Management													
Soil fertility management													
Soil and Water Conservation													
Integrated Nutrient Management													
Production and use of organic inputs													
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency													
Soil and Water Testing													
Others, if any													
IV. Livestock Production and Management													
Dairy Management													
Poultry Management													
Piggery Management													
Rabbit Management													
Disease Management													
Feed management													
Production of quality animal products													
Others, if any Goat farming													

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				
Repair and maintenance of farm machinery and implements														
Nursery Management of Horticulture crops	1	16		16	4		4				20		20	
Training and pruning of orchards														
Value addition														
Production of quality animal products														
Dairying														
Sheep and goat rearing	1	15		15	5		5				20		20	
Quail farming														
Piggery														
Rabbit farming														
Poultry production	2	9	16	25	10	4	14	1		1	20	20	40	
Ornamental fisheries														
Enterprise development	1	9	5	14	1		1				10	5	15	
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	1	13		13	7		7				20		20	
Small scale processing														
Post Harvest Technology														
Tailoring and Stitching														
Rural Crafts	1		14	14		5	5		1	1		20	20	
TOTAL	7												140	

C) Extension Personnel (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				
Productivity enhancement in field crops														
Value addition														
Integrated Pest Management														
Integrated Nutrient management	2	18	20	-	-	-	-	2	-	-	20	20	40	

Soil test campaigns	2	3 4	6	40	4	3	-	3	37	6	40
Farm Science Club Conveners meet											
Self Help Group Conveners meetings											
MahilaMandals Conveners meetings											
Agricultural Education Day	1	5 6	4 4	80	5	-	-	-	56	44	80
Sankalp Se Siddhi	1	2 8 1	5 4	33 5	11	9	8	17	290	62	352
Swatchta Hi Sewa	3	4 0	2 0	60	8	-	-	-	40	20	60
MahilaKisan Divas	1	-	4 0	40	5	2	2	4	2	42	40
World Food Day	1	3 8	1 2	50	4	-	-	-	38	12	50
Women in Agriculture Day	1	-	4 0	40	5	-	-	-	-	40	40
Any Other (Specify)											
Total	1840										53609

11.. Other Extension activities

Nature of Extension Activity	No. of activities
Newspaper coverage	32
Radio talks	15
TV talks	07
Popular articles	06
Extension Literature	02
Other, if any	

11.15. a. Production and supply of Technological products

Village seed

Crop	Variety	Quantity of seed (q)	Value (Rs)	No. of farmers involved in village seed production	Number of farmers to whom seed provided
Greengram	IPM 2-14	6.32	71036.8	23	6
Blackgram	PU-32	10.6	108650	117	9
Total					

KVK farm

Crop	Variety	Quantity of seed (q)	Value (Rs)	Number of farmers to whom seed provided
Paddy	Swarna Sub-I	141.8	363008	Stock in hand
Paddy	MTU-1075	72	180720	Stock in hand
Grand Total		213.8	543728	

Production of planting materials by the KVKs

Crop	Variety	No. of planting materials	Value (Rs)	Number of farmers to whom planting material provided
Vegetable seedlings				
Cauliflower				
Cabbage				
Tomato				
Brinjal	Improved	2000	240	10
Chilli	Improved	2000	240	10
Onion				
Others				
Fruits				
Mango				
Guava				
Lime				
Papaya				
Banana				
Others				
Ornamental plants				
Medicinal and Aromatic Plantation				
Spices				
Turmeric				
Tuber				
Elephant yams				
Fodder crop saplings				
Forest Species		1420	14200	
Others, pl.specify				
Total		4000	480	20

Production of Bio-Products

Name of product	Quantity	Value (Rs.)	No. of Farmers benefitted
	Kg		
Bio-fertilizers (Vermicompost)	31.6q	15800	22
Bio-pesticide			
Bio-fungicide			
Bio-agents			
Others, please specify (Vermiculture)	5	2500	8

Total		18300	30
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Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers benefitted
Dairy animals				
Cows				
Buffaloes				
Calves				
Others (Pl. specify)				
Small ruminants				
Sheep				
Goat				
Other, please specify				
Poultry				
Broilers				
Layers				
Duals (broiler and layer)	Rainbow rooster	330	15510	17
Japanese Quail				
Turkey				
Emu				
Ducks				
Others (Pl. specify)				
Piggery				
Piglet				
Others (Pl. specify)				
Fisheries				
Indian carp				
Exotic carp				
Mixed carp				
Fish fingerlings	AFL/SFL/SYL	39170	36260	28
Spawn	Mixed Carp Spawn	35 Lakhs	21500	11
Others (Pl. specify) Color Fishes	Live bearer	2800	7345	42
Grand Total				

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

i) Name of Seed Hub Centre:

Name of Nodal Officer :	Dr. Arovinda Das
Address :	Krishi Vigyan Kendra, Bhadrak Ranital, Odisha-756111
e-mail :	kvkbhadrak.ouat@gmail.com
Phone No. :	06784-265825
Mobile :	08895417939

ii) Quality Seed Production Reports

Season	Crop	Variety	Production (q)
--------	------	---------	----------------

			Target	Area sown (ha)	Production	Category of Seed (F/S, C/S)
Kharif 2017						
Rabi 2017-18	Green gram	IPM-2-14	256	36	Harvesting is continuing	C/S
	Black gram	PU-31	100	57		C/S
Summer/Spring 2018						

iii) Financial Progress

Fund received (2016-17 and 2017-18)	Expenditure (Rs. In lakhs)		Unspent balance (Rs. In lakhs)	Remarks
	Infrastructure	Revolving fund		
2016-17 (85.02 Lakh)	5.158	35.0	29.84	
2017-18	-	15.54	14.29	No fund received

iv) Infrastructure Development

Item	Progress
Seed processing unit	Installation of machinery is completed and electrification is process is going on
Seed storage structure	

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

Item	Title	Author's name	Number	Circulation
Research paper				
Seminar/conference/symposia papers				
Books				
Bulletins				
News letter				
Popular Articles				
Book Chapter				
Extension Pamphlets/ literature	Kharadina Muga Biri Chaasa	Dr. A.Das and Dr. U.S.Nayak	500	500
	Bigyan Sammata Pranaali re Go-Paalana	Dr. T.K.Palai	500	500

Technical reports	SAC Report, RE Reports, Project reports	KVK, Bhadrak	100	100
Electronic Publication (CD/DVD etc)	Zero tillage in mustard	A.Das	7	6
	Bheema Super Onion	B.Sahoo	6	5
	Fish Diseases and MGMT	A.P.Nayak	8	7
	Summer management in Cow	T.K.Palai	7	6
	Bed preparation for mushroom cultivation	S.Pattanaik	7	6
	Nutritional Garden	G.Shial	5	4
TOTAL				

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

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

Sl. No.	Name of programme	Name of course	Name of KVK personnel and designation	Date and Duration	Organized by
1.	Training	Principles and practices of management	Dr. A. Das, Sr. Scientist & Head	5-9 Jan 2018	OUAT
2	Training	Awareness and training on Geo spatial technologies	Dr A Das, Sr Scientist & Head	10-14 Oct. 2017	OUAT
3	Winter School/Short course	Cutting edge technology on horticultural crops	Dr. B. Sahoo, Scientist (Horticulture)	02.11.17 (3days)	DEE, OUAT
4	Refresher course cum Workshop	Fishery Science	Sri A. P. Nayak, Scientist (Fishery Sc.)	3.2.18 (1day)	ATARI, KolKata
5	Refresher course cum Workshop	Soil Science	Dr. D. Dash, Scientist (Soil Sc)	30.1.18 (1day)	ATARI, KolKata
6	Refresher course cum Workshop	Horticulture	Dr. B. Sahoo, Scientist (Horticulture)	1.2.18 (1day)	ATARI, KolKata
7	Refresher course cum Workshop	Animal Science	Dr. T. K. Palai, Scientist (Animal Sc.)	3.2.18 (1day)	ATARI, KolKata
8	National Seminar	Agriculture for Nutrition	Dr. S. Pattanaik, Scientist (Home Sc.)	23-24.6.17	ICAR-Shilong
9	Refresher course cum Workshop	Home Science	Dr. S. Pattanaik, Scientist (Home Sc.)	6.2.18 (1day)	ATARI, KolKata
10	Review cum Workshop	Cluster FLD	Dr. D. Dash, Scientist (Soil Sc)	24.2.18 (1day)	ATARI, KolKata
11	National Seminar cum Workshop	Increasing livelihood of farmers through agriculture and aquaculture	Dr. T. K. Palai, Scientist (Animal Sc.)	5-7.1.18 (3days)	ICAR-CIFA, Bhubaneswar

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

Case I

Name of farmer	Aziz Saha
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Address	S/O- Tajmool Saha, At- Kazibazar, PO-Bhadrak, Block- Bhadrak
Contact details (Phone, mobile, email Id)	9238579001
Landholding (in ha.)	Land less (lease land 2 acre)
Name and description of the farm/ enterprise	Goatery Fodder, Azolla Cultivation Hydroponics
Economic impact	Annual income to Rs 2.5 lakh
Social impact	-He helped farmers of neighboring village in preventing inbreeding through buck exchange -His farm is identified by KVK as visiting place for other farmers and visitors -He is uploading technological video in youtube for benefit of viewers -Used to counsel the beginners through mobile
Environmental impact	-Goat droppings used as fertilizer in fodder cultivation and as goats are stall fed with a paddock there is no loss of foliage or any crops
Horizontal/ Vertical spread	-Around 40 farmers of the district motivated for goatery by seeing the farm Many farmers adopted the technologies like fodder production and hydroponics by following the technological videos uploaded by him on youtube

Case II

Name of farmer	Pabitra Uchhayat
Address	S/O- Upendra Uchhayat, At- Kshirasahi, PO-Attu, Block- Bhadrak
Contact details (Phone, mobile, email Id)	9238917446
Landholding (in ha.)	
Name and description of the farm/ enterprise	Integrated farming – Rice-mustard-greengram, Rice-vegetable, oilpalm, dairy, farm machinery for custom hiring HYV & hybrid rice, mechanized line transplanting, Zero till sowing of mustard, line planting of greengram/blackgram using seed-cum-ferti drill, broad bed and furrow method of pointed gourd cultivation during rainy season, INM & IPM
Economic impact	Annual income to Rs 4.0 lakh
Social impact	-Service provider for mechanized line transplanting, master trainer for zero till and line planting of mustard, green/blackgram, sunflower, weeding

	-provides pointed gourd planting materials to farmers of Bhadrak and its nearby district
Environmental impact	
Horizontal/ Vertical spread	He has 76 popularized KVK promoted technologies like zero till, mechanical line planting, supplying planting materials of pointed gourd to other farmers, acting as change agent

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

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

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

b. Give details of organic farming practiced by the farmer

Sl. No.	Crop / Enterprise	Area (ha)/ No. covered	Production	No. of farmers involved	Market available (Y/N)
1	Vegetable	4	1010q	23	No

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

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

Sl. No	Name of the Equipment	Qty.
1	Spectrophotometer	1
2	Nitrogen analyzer	1
3	pH meter	1
4	EC meter	1
5	Flame photometer	1
6	Physical Balance	1
7	Digital balance	1
8	Mechanical shaker	1
9	MRIDAPARIKSHAK	2

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			
341	-	341	562	28	1705

3.11.c. Details on World Soil Day

Sl. No.	Activity	No. of Participants	No. of VIPs	Name (s) of VIP(s)	Number of Soil Health Cards distributed	No. of farmers benefitted
1	Celebration of World Soil Day	297	8	Sri Dwijabara Rout President ZillaParisad Dr. S. S. Mahapatra, Assoc. Director of Research, RRTTS Sj. Tankadhar, Behera, Deputy Director of Agriculture, Bhadrak Sj. Bimal Kumar Ray, Representative MLA Basudevpur Sj. Dushasanjena Executive Engineer, OLIC Division, Bhadrak Dr.Dilip Kumar Das, OIC, AICRP (R & M)	100	250

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

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

3.13. Technology week celebration

Type of activities	No. of activities	Number of participants	Related crop/livestock technology
F/FW Training programes	2	65	Post stocking management in fish tanks Value addition in tomato

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

No of student trained	No of days stayed
22	65

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
11.11.2017	Dr. S. S. Singh, Director ATARI, Kolkata	To review the activities of KVK
05.12.17	Sri Dwijabar Rout, President, Zilla parishad	To attend World soil Day

13.12.17	Dr. V. P. Chahal, ADG, Ag. Extension, ICAR	To review the activities of KVK
15.02.18	Dr. Virendra Singh, Director DRD, Patna	Monitoring Seed Hub and CFLD
21.02.18	Dr. Virendra Singh Pahil, National Consultant, Govt of India	Monitoring CFLD, Seed Hub
16.09.2017	Sj. Gyana Das, Collector cum Dist Magistrate	Visit to KVK
28.02.2018	Sj. Gyana Das, Collector cum Dist Magistrate	To attend 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)

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
Swarna sub 1 for flood affected areas	In the district about 4000 ha is under this variety
Intercropping of minor and medium carps in 3 species IMC culture	32 villages involving about 142 farmers
Multiple cropping pattern in Pisciculture	Technology spread to 331 villages covering 1623 farmers in Bhadrak
Biological control of aquatic weeds	Technology is expanded to 214 villages with 448 farmers

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	Technology	Output	Impact and spread of the technology
1	Mechanized Direct seeded rice	Decrease in cost of cultivation by Rs.4500 per ha	Along with farmers of KVK villages other farmers are also adopting this technology
2	Nutrient management strategy in Rice-black gram paira cropping	Increase in yield up to 50% with nutrient management	Farmers of KVK villages are adopting this technology

3	Swarna sub 1 for flood affected areas	In flood years the yield advantage is 35% over the farmers practice	Adopted villages of KVK and other 10 villages
4	Off season paddy straw mushroom cultivation in winter under low cost poly house	Mushroom production per bed 800 g as compared to 450 g in farmers' practice.	The technology has been spreaded to 6 villages of the district
5	Fodder and Azolla cultivation and feeding to milch cows	Feed cost is minimized upto Rs 40/day/cow	KVK villages adopted the said technology and has been spread to other 7 villages of the district
6	Vermicomposting	Yield increase upto 40%	Well adopted by KVK villages and also spread to 4 more villages of the district
7	Jayanti Rohu cultivation in ponds	Yield increase upto 20%	Adopted in 7 villages of the district during the year

4.4. Details of innovations recorded by the KVK

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

4.5. Details of entrepreneurship development

Entrepreneurship development	
Name of the enterprise	Fishery
Name & complete address of the entrepreneur	Sri Purnachandra Majhi Thaila, Bhandaripokhari, Bhadrak
Role of KVK with quantitative data support:	Capacity building in fish seed production through training, demonstrations
Timeline of the entrepreneurship development	2005: Came in contact with KVK and attended a vocational training at KVK Dec 2005: Earned 1 lakh profit in 4 months by fish seed production 2006-2014: Leased in village tanks and engaged in fish seed production: earned a profit on Rs 27 lakhs per year; provided employment to 14 rural youth.
Technical Components of the Enterprise	Quality fish seed production following scientific pisciculture

Status of entrepreneur before and after the enterprise	He was a landless farmer and now he has a asset of Rs.70 lakhs
Present working condition of enterprise in terms of raw materials availability, labour availability, consumer preference, marketing the product etc. (Economic viability of the enterprise):	His business is going well without any constraints of marketing or labour availability
Horizontal spread of enterprise	Fish farmers of nearby villages are inspired to take up fish seed production

4.6. Any other initiative taken by the KVK

Resource Conservation technology

RCT such as zero till planting of mustard and greengram has been promoted by KVK in collaboration with CSISA in KVK adopted and other villages of the district. Rice-mustard cropping system is constrained with late planting of mustard leading to low yield, which was well taken care by introduction of zero till mustard. Residual soil moisture is used for planting of mustard under zero till condition saving about 15-20 days which not only increased production but also minimized the cost of production.

Soil health improvement

- Collection of soil samples from all KVK adopted villages, representative samples from all the 7 blocks of the district
- Preparation of GIS map for judicious recommendation of fertilizer for crop production
- Site specific nutrient recommendation through use of RCM app of IRRI
- Special focus on promotion of vermicompost as organic source of nutrients through training, demonstration and awareness programme.
- Soil test campaign for creating awareness for soil health management
- Publication of extension literature on soil sampling procedure and management with the use of micronutrients.

Conservation of biodiversity in fruits

One Heritage garden is developed in KVK campus for sensitising the people about conservation of traditional underutilised fruit species. 20 such species have been planted in that garden and maintained. Few among them are aonla, ber, bael, ramphal, sitaphal, wood apple, rose apple, stone apple etc.

To develop an organic Village

Most of the farmers of the Kuanrda village, one of the adopted village of KVK, opting vermicompost as fertilizer during vegetable cultivation and also preferring fodder and azolla over concentrate feed in case of milch cow

5. LINKAGES

5.1. Functional linkage with different organizations

Name of organization	Nature of linkage
CSISA	Participatory Research Trial- Research trials were conducted by KVK addressing the researchable issues in rice based cropping system of Bhadrak
CSISA	Dissemination of mechanized DSR- Large scale promotion of MDSR technology was undertaken with CSISA

IRRI-OUAT Collaborative project	Head to Head trials on Stress tolerant rice varieties- Conducting demonstrations at farmers field on stress tolerant rice varieties. Comparison made with the farmers' comparable rice varieties
Agriculture Department	BGREI, NFSM, RKVY- Technical backstopping, monitoring activities by KVK scientists
Fishery Dept.,	Beneficiaries from KVK villages availed feed, fish seed from Govt. Schemes
ARD Dept.	Active support both interms of man power and inputs during organization of Animal Health camp

5.2. List of special programmes undertaken during 2017-18 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.)
Sankalp se Siddhi	Make awareness about doubling farmers income	30 August 2017	ICAR	78800
World Soil Day	Awareness about soil health management	5 December 2017	ICAR	80000
Exhibition	Development of exhibits	6 February 2018	ATMA	10000

6. PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl. No.	Name of demo Unit	Year of estt.	Area (Sq. mt)	Details of production			Amount (Rs.)		Remarks
				Variety/breed	Produce	Qty.	Cost of inputs	Gross income	
1.	Mushroom spawn lab	2009	-	Paddy straw & Oyster	spawn	9650	13510		
2.									
3.									
4.									
5.									
6.									
7.									
	Total								

6.2. Performance of Instructional Farm (Crops)

Name Of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.(q)	Cost of inputs	Gross income	
Paddy	07.07.17	20.12.17	5	Swarna sub1	FS	141.8	223131	363008	
Paddy	20.07.17	15.01.18	4	MTU1075	CS	72	149009	180720	

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	31.6q	10005	18075	
2	Vermiculture	5kg			

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.	Poultry-Chicks	Rainbow rooster	21day old chicks	330no.	19800	17490	
2.	Fish	IMC	Spawn	35lakh	6000	27500	
3.	Fish	IMC	FL/YL	39170no	14000	50400	
4.	Fish	Live bearer	-	2800no.	1500	8845	

6.5. Utilization of hostel facilities NO

Accommodation available (No. of beds)

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
Total :			

(For whole of the year)

6.6. Utilization of staff quarters

Whether staff quarters has been completed: NO

No. of staffquarters:

Date of completion:

Occupancy details:

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

7. FINANCIAL PERFORMANCE

7.1. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
Contingency Account	SBI	Bhadrak	11403397791
Revolving fund account	SBI	Charampa	30530545584
Pulse Seed Hub account	SBI	Charampa	36055571236

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

Item	Released by ICAR		Expenditure		Unspent balance as on -
	Kharif	Rabi	Kharif	Rabi	
Mustard	-	90,000	-	1,14,000	-24,000

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

Item	Released by ICAR		Expenditure		Unspent balance as on 1 st April 2013
	Kharif	Rabi	Kharif	Rabi	
Pulse (Summer)	-	0	-	3,37,500	-3,37,500

7.4. Utilization of KVK funds during the year 2017-18(Not audited)

Sl. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	Data available with Comptroller, OUAT, Bhubaneswar		
2	Traveling allowances	1,60,000	1,60,000	1,60,000
3	Contingencies			
A	Stationary, telephone, postage and other office charges			2,61,552.50
B	POL, repair of vehicle, tractor & equipments			1,47,390
C	Training of farmers			
D	Training materials			
E	Training of extension functionaries			
F	Training of rural youths	11,58,800	11,58,800	567708.50
G	Front Line Demonstrations			121307
H	On Farm Testing			60842
I	Soil & Water testing lab			
J	Swatchta Expenditure			
K	Maintenance of Buildings			
	TOTAL (A)	13,18,800	13,18,800	13,18,800
B. Non-Recurring Contingencies				
1	Equipment (Office equipment)	3,00,000	3,00,000	299587
	TOTAL (B)			
C. REVOLVING FUND				
	GRAND TOTAL (A+B+C)	16,18,800	16,18,800	16,18,387

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	4,53,061	2,61,365	4,67,893	243885
2016-17	2,46,533	5,17,134	4,16,782	3,46,885 (3,43,885 deposited at DEE, OUAT vide cheque No. 086229 dt. 31.03.17 + 3000 C. B.)
2017-18	3,000	2,00,000(from DEE, OUAT) + 4,63,629 =6.66,629	4,21,179	45450 (2,00,000 deposited at DEE, OUAT vide cheque No. 427019dt. 31.03.18 + 45,450 C. B.)

7.6. (i) Number of SHGs formed by KVKs: No

(ii) Association of KVKs with SHGs formed by other organizations indicating the area of SHG activities

Maa Tarinin SHG, Kuanrda- Paddy production

Mahadeba Krushaka Sangha-Paddy Seed Production

Mahavir SHG, Bandhagaon- Dairy production

Bayananaa Krushaka Club, Gopali-Pulse production

Maa Mangala SHG, Thaila, Paddy production

Maa Durga SHG- Paddy production

(iii) Details of marketing channels created for the SHGs

7.7. Joint activity carried out with line departments and ATMA

Name of activity	Number of activity	Season	With line department	With ATMA	With both
Season long training on farm mechanization in paddy	5	Kharif and Rabi	✓		
Animal Health Camp	3	Rabi	✓		
Training on Fishery Sc.	3	Kharif			✓
Extension Functionary and RY Training on Animal Sc.	3	Kharif and Rabi	✓		
BGREI patch monitoring	9	Kharif	✓		
BPH management in paddy	11	Rabi	✓		

8. Other information

8.1. Prevalent pest and diseases in Crops

Name of the disease	Crop	Date of outbreak	Area affected (in ha)	% Commodity loss	Preventive measures taken for area (in ha)
BPH	Rice	1 st wk of Nov	1000	30	Diagnostic visits made and advisory issued directly and also through mobile text messages

Neck blast	Rice	Last wk of October	300	15	Diagnostic visits made and advisory issued directly and also through mobile text messages
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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)
Hemorrhagic Septicemia	Buffalo		78	472	

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. mKisanPortal (National Farmers' Portal/ SMSPortal)

Type of message	No. of messages	No. of farmers covered
Crop	23	10,59,380
Livestock	8	3,68,184
Fishery		
Weather	1	46,069
Marketing		
Awareness	2	92,000
Training information		
Other	2	92,000
Total	36	16,57,633

9.4. KVK Portal and Mobile App

Sl. No.	Particulars	Description
1.	No. of visitors visited the portal	12017
2.	No. of farmers registered in the portal	No

3.	Mobile Apps developed by KVK	No
4.	Name of the App	No
5.	Language of the App	No
6.	Meant for crop/ livestock/ fishery/ others	No
7.	No. of times downloaded	No

9.5. a. Observation of Swacha Bharat Programme

Date of Observation	Activities undertaken
-	-

b. Details of Swachhta activities with expenditure

Activities	Number	Expenditure (in Rs.)
1. Digitization of office records/ e-office		
2. Basic maintenance		
3. Sanitation and SBM		
4. Cleaning and beautification of surrounding areas	0.01 acre	30,000
5. Vermicomposting/ Composting of biodegradable waste management & other activities on generate of wealth for waste		20,000
6. Used water for agriculture/ horticulture application	9 ha	11,200
7. Swachhta Awareness at local level		
8. Swachhta Workshops	1	800
9. Swachhta Pledge		
10. Display and Banner	2	
11. Foster healthy competition		
12. Involvement of print and electronic media		
13. Involving the farmers, farm women and village youth in the adopted villages (no of adopted village)	5	
14. No of Staff members involved in the activities	16	
15. No of VIP/VVIPs involved in the activities		
16. Any other specific activity (in details)		

Total		64,800
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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

Give good quality 1-2 photograph(s)

9.9. Details of 'Sankalp Se Siddhi' Programme

Date of programme	No. of Union Ministers attended the programme	No. of Hon'ble MPs (Loksabha/Rajyasabha) participated	No. of State Govt. Ministers	Participants (No.)						Coverage by Door Darsan (Yes/No)	Coverage by other channels (Number)	
				MLAs Attended the programme	Chairman ZilaPan chayat	Distt. Collector/ DM	Bank Officials	Farmers	Govt. Officials, PRI members etc.			Total
30.08.2017	-	-	-	-	-	-	5	352	12		Yes	4

9.10. Details of Swachhta Hi Sewa programme organized

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

9.11. Details of Mahila Kisan Divas programme organized

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

1	Celebration of Mahila Kisan Divas	1	50	-	-
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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	Abhimanyu Aicha	Village: Kuanrda, Bonth, Bhadrak 7539025406	Pond based farming system, use of organics in vegetable crops
2	Kamalkanta	Village: Biridi, Agarpada, Bhadrak, 8342864670	Pointed gourd and ivy gourd planting material production, agro shed net house
3	Digbalay Mallik,	Bagmara, Bhadrak 9937023145	Pond based farming system, goatery

9.13.HRD programmes attended by KVK person

Training programme/ Seminar/ Symposia/ Workshop etc attended	Duration	Name of the participants	Designation	Organizer of the training Programme
		Dr. A. Das, Sr. Scientist & Head		
		Dr. D. Dash, Scientist (Soil Sc)		
		Dr. B. Sahoo, Scientist (Horticulture)		
		Dr. T. K. Palai, Scientist (Animal Sc.)		
		Sri A. P. Nayak, Scientist (Fishery Sc.)		
		Dr. S. Pattanaik, Scientist (Home Sc.)		

9.14. Revenue generation

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

9.15. Resource Generation:

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

9.16. Performance of Automatic Weather Station in KVK

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

9.17. 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	Bhadrk	Crop production	1	35	Unseasonal rain in November damaged rice, farmers advised to go for early paira cropping with blackgram

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

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

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

Natural Resource Management

Name of intervention undertaken	Numbers under taken	No of units	Area (ha)	No of farmers covered / benefitted	Remarks

Crop Management

Name of intervention undertaken	Area (ha)	No of farmers covered / benefitted	Remarks

Livestock and fisheries

Name of intervention undertaken	Number of animal covered	Number of units	Area (ha)	No of farmers covered / benefitted	Remarks

Institutional interventions

Name of intervention undertaken	No of units	Area (ha)	No of farmers covered / benefitted	Remarks

Capacity building

Thematic area	No. of Courses	No. of beneficiaries		
		Males	Females	Total

Extension activities

Thematic area	No. of activities	No. of beneficiaries		
		Males	Females	Total

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
1	Pandit Deendayal Upadhyaya Krishi Vigyan Prosthahan Puraskar (Zonal Award)	2017	ICAR	225000	Best KVK of the Zone -V

Award received by Farmers from the KVK district

Sl. No.	Name of the Award	Name of the Farmer	Year	Conferring Authority	Amount	Purpose
1	State level award	Abhimanyu Aich	2017-18	Govt. of Odisha	10000	Innovative Farmer
2	State level award	Purna Ch. Majhi	2017-18	Govt. of Odisha	10000	Best Fish Farmer

3	District Level Award	Aziz Saha	2017	ARD, Bhadrak	1000	Innovative goatery farmer
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14. Any significant achievement of the KVK with facts and figures as well as quality photograph

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

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

16. Integrated Farming System (IFS)

Details of KVK Demo. Unit

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

17. Technologies for Doubling Farmers' Income

Sl. No.	Name of the Technology	Brief Details of Technology (3-5 bullet points)	Net Return to the farmer (Rs.) per ha per year due to the technology	No. of farmers adopted the technology in the district	One high resolution 'Photo' in 'jpg' format for each technology
1	Flood tolerant rice variety Swarna Sub1 under flash flood situation	<ul style="list-style-type: none"> ▪ Flood tolerant variety Swarna Sub 1 ▪ STBFR 	18400		
2	IPM modules for plant hoppers management in rice	<ul style="list-style-type: none"> -Skip row planting (after 3 m) -Installation of spider trap @ 25/ ha. -Alternate spraying of Flonicamid 150 g/ ha and Dichlorvos @ 750 ml/ ha 	15753		
	Fodder and Azolla cultivation for	Azolla-1 kg/cow/day	23700/cow/yr	31	

	feeding of milch cows	Fodder (HN)-25kg/cow/day			
	Nursery raising of carp spawns to frys in small backyard tanks	Stocking of mixed carp spawns @ 75 Lakhs per ha and reared for 21days, Stocking of small ponds	177500/ha of WSA	16	
	Jayanti Rohu in IMCs replacing traditional rohu	Stocking of grow-out ponds with catla: Jayanti rohu: mrigal fingerlings:: 3000:4000:3000 nos. per ha. respectively	235500/ha of WSA	19	

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)	824	8237	08.02.18	Dr. A. Das, Sr. Scientist & Head, A. P. Nayak, Scientist, Dr. T. K. Palai, Scientist, Dr. D. Dash, Scientist, Dr. B. Sahoo, Scientist, G. K. Ojha, Prog. Asst.(Comp)	
II (up-to 24.04.218)	31	312			
Total					

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

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