PROFORMA FOR ANNUAL REPORT 2020 (January 2020 to March 2021)

1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail
	Office	FAX	
Krishi Vigyan Kendra, Kandhamal At-Srirampada Po-G. Udayagiri Dist-Kandhamal Pin-762100 (Odisha)	06847-260707		kvkkandhamal.ouat@gmail.com

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

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

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Debasis Mishra	-	9438357962	demishra74@gmail.com

1.4. Year of sanction of KVK: 1993

1.5. Staff Position (**as on 1st Jan, 2021)**

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline/	Pay Scale with present basic	Date of joining	Permanent/ Temporary	Category (SC/ST/ OBC/ Others)
1	Senior Scientist& Head	Dr. Debasis Mishra	Sr. Scientist & Head	Plant Pathology	15600-39100 (AGP 8000)/ 24170+8000	01.01.2010	Permanent	Other
2	Subject Matter Specialist	Dr. Sidhartha Kar	Scientist	Horticulture	15600-39100 (AGP 6000)/ 23070+6000	01.10.2009	Permanent	Other
3	Subject Matter Specialist	Sri Sujit Kumar Mukhi	Scientist	Soil Science	15600-39100 (AGP 6000)/ 23950+66000	23.10.2009	Permanent	Other
4	Subject Matter Specialist	Ms Sripali Pradhan	SMS	Agronomy	15600-39100 (AGP 5400)/ 16880+5400	13.06.2018	Permanent	ST
5	Subject Matter Specialist	Ms Sanghamitra Biswal	SMS	Agricultural Engineering	15600-39100 (AGP 5400)/ 16880+5400	06.12.2018	Permanent	Other
6	Subject Matter Specialist	-	-	-	-	-	-	-
7	Subject Matter Specialist	-	-	-	-	-	-	-
8	Programme Assistant	Ms Sumitra Hembram	P.A. (Tech.)	Home Science	9300-34800 (GP 4200)/ 10130+4200	09.08.2018	Permanent	ST
9	Computer Programmer	Sri Raghunath Soren	P.A. (Computer)	Information & Technology	9300-34800 (GP 4200)/ 11470-4200	16.06.2015	Permanent	ST
10	Farm Manager	Ms Sushree Sibanee Sardar	Farm Manager	Plant Breeding & Genetics	9300-34800 (GP 4200)/ 10130-4200	08.02.2019	Permanent	Other
11	Accountant / Superintendent	-	-	-	-	-	-	-
12	Stenographer	Sri Pabitra Mohan Pradhan	Jr. Steno-cum-Computer Operator	-	5200-20200 (GP-2400)/ 6430+2400	29.07.2015	Permanent	ST
13.	Driver	Sri Maheswar Pradhan	Driver-cum-Mechanic	-	5200-20200 (GP 1900)/ 6860+1900	13.02.2014	Permanent	Other
14.	Driver	Sri Gopal Pradhan	Driver-cum-Mechanic	-	5200-20200 (GP 1900)/ 6350+1900	20.07.2015	Permanent	ST
15.	Supporting staff	Sri Aparti Chhatoi	Peon-cum-Watchman	-	4750-14680 (GP 1700)/ 6780+1700	28.07.2008	Permanent	Other
16.	Supporting staff	Sri Arjuni Charan Swain	Peon-cum-Watchman	-	4750-14680 (GP 1700)/ 6780+1700	02.08.2008	Permanent	Other

1.6. Total land with KVK (in ha)

:

S. No.	Item	Area (ha)
1	Under Buildings	0.28
2.	Under Demonstration Units	0.04
3.	Under Crops	6.76
4.	Orchard/Agro-forestry	2.86
5.	Others with details	
	RWHS/Agriculture	0.94
	Waste Land, Road	6.24
	Total	**17.12**

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					√		Use	
2.	Farmers Hostel					√		Use	RKVY
3.	Staff Quarters (6)								
4.	Piggery unit								
5	Fencing					√		Use	RKVY
6	Rain Water harvesting structure								
7	Threshing floor					√		Use	ICAR
8	Farm godown								
9.	Dairy unit								
10.	Poultry unit					√		Use	RKVY
11.	Goatary unit								
12.	Mushroom Lab					√		Use	RKVY
13.	Mushroom production unit								
14.	Shade house								
15.	Soil test Lab					√		Use	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 (As on 31.03.2021)	Present status
Bolero (Mahindra Di Turbo)	2010-11	5,52,236/-	1,35,210	Running
Tractor (Mahindra 475 DI – Bhumiputra)	2004-05	3,74,223/-	-	Running
Bike (Hero Honda Passion Pro)	2009-10	49,965/-	47,572	Running

C) Equipment & AV aids

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
a. Lab equipment				
Soil Testing Laboratory	2004-05	8,56,808.00	Working condition	ICAR
Mushroom Spawn Production Unit	2010-11	2,50,000.00	Working condition	RKVY
b. Farm machinery				
Agrimate power mist blower	2016-17	8,400	Working condition	ICAR
Hydraulic Trolley	2016-17	1,30,000	Working condition	ICAR
Land Leveler	2016-17	15,480	Working condition	ICAR

Hedge cutter	2016-17	15,835	Working condition	ICAR
Power Tiller	2016-17	1,93,000	Working condition	ICAR
Power weeder	2020-21	50,000	Working condition	Biotech KISAN
Poultry Hatcher	2020-21	78,800	Working condition	Biotech KISAN
c. AV Aids				
Ahuja Conference Audio System	2017-18	92,135	Functioning	ICAR
Panasonic LED TV (42')	2018-19	42,000	Functioning	ICAR

D) Farm implements

Name of equipment	Year of purchase	Cost (Rs.)	Present status	Source of fund
MB plough	2016-17	25,000	Working condition	ICAR
Soil Auger	2016-17	48,300	Working condition	ICAR
Seed cum fertilizer drill	2016-17	55,000	Working condition	ICAR
Battery operated sprayer(2nos.)	2015-16	10,650	Working condition	ICAR
Cultivator	2006-07	5,630	Working condition	ICAR
Rotavator	2006-07		Working condition	ICAR

1.8. Details of SAC meeting* conducted in the year

Sl. No.	Date	Number of Participants	Salient Recommendations	Action taken	If not conducted, state reason
1.	20.01.2021	31	A documentation on ITK-based technologies should be made in the form of a booklet for circulation among tribal farmers in the district	A leaflet on "*Non-chemical pest & disease management in various crops*" depicting different ITKs was published by the KVK	
			Short duration black rice varieties to be popularized in the district in Rain-fed upland rice ecosystem	A promising local land race of black rice – Kala Maalati having a duration of 100 – 110 days was tested in the KVK instructional farm during Kharif 2020 and a total of 150 kg seed was produced for distribution among farmers during Kharif 2021	
			KVK to establish a commercial vermicompost production unit at KVK campus	A vermicompost production unit having a production potential of 200 qtls was established in the KVK. In addition to that, a project proposal of Rs. 2.31 crs. on "Establishment of Vermi-tech Learning centers & Vermi-tech Hub in Kandhamala District was submitted to RKVY this year	
			A model demonstration unit for displaying various farm implements for entrepreneurs and visiting farmers.	The demonstration unit in the form of a gallery was established in the KVK campus for the visiting farmers displaying manual/hand operated farm implements used for drudgery reduction	
			To take a trial on Single Line Trellis System (SLTS) in Raikia bean or other crops for increasing the yield.	An FLD on SLTS in Raikia bean during Rabi 2019-20 and another on SLTS in Bitter gourd during Rabi 2020-21 were conducted	
			FLD on organic rice and millet cultivation taking the technology from DLAP, OUAT should be conducted	Two FLDs on Organic Cultivation of Aromatic rice var. Nua Kalaajeera & Finger millet var. Kalua were conducted during Kharif 2020-21	
			Mustard varieties of IARI and other institutes should be tested in the KVK	5 varieties of Toria developed by OUAT are being tested this year Rabi season for assessing their performances	
			KVK to undertake Small and Large Animal Health Camps in collaboration with the ARD department of the district in different blocks	KVK in collaboration with ARD Deptt. of the district has been conducting vaccination for FMD & PPR and performed AI in all the 12 blocks under KKA	

** Salient recommendation of SAC in bullet form*

PROCEEDINGS OF THE SCIENTIFIC ADVISORY COMMITTEE MEETING OF KVK KANDHAMAL, G.UDAYAGIRI

The 25th Scientific Advisory Committee meeting of KVK, Kandhamal was held on 20.01.21 at 10.30 am in the training hall of KVK, Kandhamal by Online-Offline mode. The meeting was conducted under the Chairmanship of Dr. Pawan Kumar Agarwal, Hon'ble Vice Chancellor, OUAT, Bhubaneswar. Dignitaries like Dr. S. K. Roy, Director, ICAR-ATARI, Zone-V, Kolkata, Prof. Lalit Mohan Garnayak, Dean, and Prof. Prasannajit Mishra, Joint Director, Extension Education, OUAT, were also present in this meeting. The other members present in the meeting are annexed herewith.

At the outset, Dr. Debasis Mishra, Senior Scientist and Head, KVK, Kandhamal after a brief welcome to the Hon'ble members requested the Chairman and other dignitaries to inaugurate & conduct the SAC meeting. After a brief introducing remark, the Chairman asked the Senior Scientist and Head, KVK, Kandhamal to start the proceedings as per the agenda.

AGENDA -1- APPROVAL OF THE PROCEEDING OF LAST SAC MEETING

The Senior Scientist and Head appraised that the proceeding of the last SAC meeting was circulated vide letter No. 09/KVK, dt.07.01.2021 to all the members. He also presented the proceedings in brief. The Chairman approved the proceeding after taking consent of the members.

AGENDA 2 – ACTION TAKEN ON THE PROCEEDING OF LAST SAC MEETING HELD ON 23.11.2019

S. No.	Recommendations	Activities taken
1	A documentation on ITK-based technologies should be made in the form of a booklet for circulation among tribal farmers in the district	A leaflet on "*Non-chemical pest & disease management in various crops*" depicting different ITKs was published by the KVK
2	Short duration black rice varieties to be popularized in the district in Rain-fed upland rice ecosystem	A promising local land race of black rice – Kala Maalati having a duration of 100 – 110 days was tested in the KVK instructional farm during Kharif 2020 and a total of 150 kg seed was produced for distribution among farmers during Kharif 2021
3	KVK to establish a commercial vermicompost production unit at KVK campus	A vermicompost production unit having a production potential of 200 qtls was established in the KVK. In addition to that, a project proposal of Rs. 2.31 crs. on "Establishment of Vermi-tech Learning centers & Vermi-tech Hub in Kandhamala District was submitted to RKVY this year
4	A model demonstration unit for displaying various farm implements for entrepreneurs and visiting farmers.	The demonstration unit in the form of a gallery was established in the KVK campus for the visiting farmers displaying manual/hand operated farm implements used for drudgery reduction
5	To take a trial on Single Line Trellis System (SLTS) in Raikia bean or other crops for increasing the yield.	An FLD on SLTS in Raikia bean during Rabi 2019-20 and another on SLTS in Bitter gourd during Rabi 2020-21 were conducted
6	FLD on organic rice and millet cultivation taking the technology from DLAP, OUAT should be conducted	Two FLDs on Organic Cultivation of Aromatic rice var. Nua Kalaajeera & Finger millet var. Kalua were conducted during Kharif 2020-21
7	Mustard varieties of IARI and other institutes should be tested in the KVK	5 varieties of Toria developed by OUAT are being tested this year Rabi season for assessing their performances
8	KVK to undertake Small and Large Animal Health Camps in collaboration with the ARD	KVK in collaboration with ARD Deptt. of the district has been conducting vaccination for FMD & PPR and

	department of the district in different blocks	performed AI in all the 12 blocks under KKA

AGENDA 3 – ACHIEVEMENT MADE BY THE KVK

The Senior Scientist and Head presented the overall achievement made by KVK, Kandhamal during the year 2019-20.

1. **Training** – KVK has conducted 55 training programme for 1650 numbers of practicing farmers and farm women, 08 for Rural youths involving 160 participants & 05 nos of sponsored trainings involving 360 participants during 2019-20.
2. **Front Line Demonstration** – KVK has conducted 23 numbers of Front Line Demonstrations during 2019-20 on the thematic areas of INM, IPM, IDM, IWM, Organic farming, Varietal evaluation, Optimum land utilization methods, Farm implements & machineries, Drudgery reduction, Nutritional security and Small-scale income generation activities in 15.2 ha area involving 217 beneficiary farmers/farm women. A total of three (03) FLDs under Oil Seed and Pulse crops have been undertaken on Mustard, Black gram and Horse gram covering an area of 110 ha involving 298 beneficiaries. Under Tribal Sub-Plan (TSP), KVK has conducted three (03) numbers of FLDs on ICM of Cabbage, Cauliflower and Garden Pea covering a total area of 10 ha.
3. **On Farm Trial**: A total of 11 nos. of On Farm Trials (OFTs) were conducted during 2019-20 on the thematic areas of INM, Varietal evaluation, IWM, Crop establishment method, IDM, IPM, Farm implements & machineries and Small-scale income generation activities involving 75 numbers of practicing farmer beneficiaries.
4. **Extension Activities**: KVK has also conducted various extension activities such as 11 numbers of field days, 01 Kissan Melas, 02 Exhibitions, 14 CD Film shows, 02 Ex-trainees meet and several other activities like Diagnostic Field Visits & KMAS, publication of literature & news-letters, 02 numbers of Soil health campaigns, Celebration of special days like Agril. Education Day, Jai Kisan Jai Vigyan, Mahila Kisan Divas, Women in Agriculture Day, World Food Day, World Meteorological Day, World Soil Day and 02 numbers of farmers-scientist interactions etc.

AGENDA 4 – PRESENTATION OF ACTION PLAN FOR 2020-21

The Senior Scientist and Head presented the detailed Action Plan developed by KVK for the year 2020-21 based on the Survey analysis, secondary information available**,** recommendation from the R-E linkage meetings and suggestions from the previous SAC meeting**.**

1. **Training** – KVK has proposed to conduct 72 numbers of training programmes for 2160 practicing farmers and farm women, 13 trainings for Rural youths involving 220 participants, 06 numbers of trainings for 150 numbers of extension functionaries and 03 numbers of vocational trainings for 50 numbers of participants during 2020-21.
2. **Front Line Demonstration** – KVK has planned for conducting 23 numbers of Front Line Demonstrations during 2020-21 on the thematic areas of INM, ICM, IWM, IPDM, Crop establishment methods, Varietal substitution, Drudgery reduction, Use of farm machineries, Small scale income generation activities and Value addition. A total of four (04) CFLDs under Oil Seed and Pulse crops have been proposed on Mustard, Horse gram and Field pea covering an area of 110 ha. Under Tribal Sub-Plan (TSP), KVK has proposed three (03) numbers of FLDs on ICM of Cauliflower, Cabbage and Garden Pea covering a total area of 10 ha.
3. **On Farm Trial**: A total of 11 nos. of On Farm Trials (OFTs) were proposed to be conducted during 2020-21 on INM in chilli and garden pea, varietal evaluation of Ragi varieties, IWM in garden pea, pro-tray nursery technique, varietal evaluation of Bell pepper varieties, IDM of collar rot in groundnut, fall army worm management in maize, performance of bullock-drawn puddler in rice and

bullock-drawn seed-cum-fertilizer drill in maize and yield performance of different species of oyster mushroom involving 77 numbers of practicing farmer/farm women beneficiaries.

4. **Extension Activities**: KVK has also proposed various extension activities such as 13 numbers of field days, 02 Kissan Melas, 04 Exhibitions, 40 CD Film shows, 02 Ex-trainees meet and several other activities like Diagnostic Field Visits & KMAS, publication of literature & news letter, soil health campaigning, special days celebration, farmers-scientist interactions etc.

AGENDA -5: CONSTRAINTS OF KVK

The Senior Scientist and Head presented the constraints of the KVK and drawn kind attention of the chairman & member of the house. He emphasized the following constraints to be resolved for smooth functioning of the KVK.

1. Construction of new training hall
2. Construction of storage godowns
3. Insufficient staff quarters
4. Lack of Irrigation channels in the farm area
5. Requirement of an LI point at the extreme east side boundary of the KVK farm

AGENDA - 6: SUGGESTIONS OF THE MEMBERS

The chairman requested the members to comment upon the action plan & invited suggestions. The suggestions were made by the members as listed below.

1. The Dean Extension Education, OUAT suggested that, KVK should demonstrate and popularize the technologies developed by DLAP, Phulbani in consultation with the Chief Scientist, DLAP.

2. The JDE, DEE, OUAT suggested that, more number of black rice varieties for various rice ecosystems to be assessed and popularized in the district. The vermicompost produced by the KVK should be marketed in the brand name of OUAT as KALINGA.

3. The Director, ICAR-ATARI, Zone-V, Kolkata emphasized to publish a booklet on the recommended use of vermicompost for different crops. He also reiterated that, as Kandhamal is one of the aspirational districts of the country, the farmer beneficiaries of KKA programme need to be included in various activities of KVK.

4. The DFO, Kandhamal suggested that, KVK should initiate the production of fish fingerlings in its campus in collaboration with district fishery department.

5. The Chief Scientist, DLAP suggested that, intercropping with various crops should be popularized by following different proven technologies developed by DLAP, Phulbani. He also advised to spread the technologies developed by DLAP, Phulbani by the KVK through various activities. He also suggested to include technologies related to *Optimum land utilization* and *Enhancing water use efficiency through organic mulching* in the action plan.

6. The JDE, DEE, OUAT again mentioned that, quality parameters and other bio-chemical analysis of processed turmeric should be done for comparative study between the use of turmeric boiler and traditional boiling practice. He also emphasized to study the impact analysis of demonstrations related to small farm implements.

7. The CDVO, Kandhamal emphasized on popularizing Ghumusar goat breed in collaboration with the ARD department of the district in different blocks. He also suggested that, diary development work and other animal husbandry activities should be included in the KVK action plan.

8. The ADR, RRTTS, G. Udayagiri suggested that, KVK needs to emphasize on mushroom spawn production by developing more numbers of entrepreneurs rather than only mushroom production.

9. The DDH, Kandhamal suggested that, bushy type black pepper variety should be collected from Kerala and its performance needs to be assessed by the KVK.

10. The JDE, DEE, OUAT again suggested that, macro-propagation techniques in various fruit crops need to be incorporated in the next year's action plan.

CHAIRMAN'S REMARKS

- The work of KVK, Kandhamal in the areas of vermicompost and mushroom spawn production is praiseworthy.
- Complete utilization of released fund must be ensured by each KVK.
- FPOs on organic products should be formed on priority basis.
- Every KVK should have a small poultry hatchery unit, biofloc and goatery demonstration units.
- Branding of vermicompost in the name of OUAT KALINGA should be ensured.

The meeting was ended at 2.00 PM with the vote of thanks given by Mr. Sujit Kumar Mukhi, Scientist (Soil Science).

ANNEXURE-I

S.No	NAME	DESIGNATION	REMARK
1	Dr. Pawan Kumar Agarwal	Hon'ble Vice Chancellor, OUAT, BBSR	Chairman
2	Dr. S. K. Roy	Principal Scientist, ICAR-ATARI, Kolkata	Co-Chairman
3	Prof. Lalit Mohan Garnayak	Dean Extension Education, OUAT, BBSR	Member
4	Prof. Prasannajit Mishra	Joint Director of Extension, DEE, OUAT, BBSR	Member
5	Dr. Dillip Kumar Bastia	Chief Scientist, DLAP, OUAT, Phulbani	Member
6	Dr. Debendra Ku Debata	ADR, RRTTS, G.Udayagiri	Member
7	Mr. P. K. Satapathy	CDAO, Kandhamal	Member
8	Mr. Manoj Kumar Dash	DDH, Kandhamal	Member
9	Mr. P.K. Tripathy	PD, Watershed, Kandhamal	Member
10	Dr. G. C. Sahu	CDVO, Kandhamal	Member
11	Ms. Ranchilata Mandangi	Asst. Fishery Officer, G. Udayagiri (Representative of DFO, Kandhamal)	Member
12	Ms. Meenakshi Kumara	Forest Range Officer, G. Udayagiri	Invitee
13	Mr. A.K Sethy	Scientist, RRTTS, Kandhamal	Member
14	Mr. Sujit Kumar Mukhi	Scientist (Soil Sc.),KVK,Kandhamal	Member
15	Mr. Sidhartha Kar	Scientist (Horticulture),KVK,Kandhamal	Member
16	Ms. Sripali Pradhan	SMS (Agronomy), KVK, Kandhamal	Member
17	Ms. Sanghamitra Biswal	SMS (Ag. Engineering), KVK, Kandhamal	Member
18	Ms. Sumitra Hembram	PA (Home Science), KVK, Kandhamal	Member
19	Mr. Kuna Pattnaik	Farmer representative	Member
20	Mr. Baladev pradhan	Farmer representative	Member
21	Mrs. Sarojini Pradhan	Farm-woman representative	Member
22	Mrs. Sunanti Pradhan	Farm-woman representative	Member
23	Dr. Subrat Ku. Behera	Senior Scientist, DLAP, Phulbani	Invitee
24	Dr. Swagatika Sahu	SS&H, KVK, Ganjam-1	Invitee
25	Dr. Sutanu Satapathy	SS&H, KVK, Boudh	Invitee
26	Dr. Suryanarayan Mishra	SS&H, KVK, Kendrapada	Invitee

27	Dr. (Mrs) Susmita Mohanty	SS&H, KVK, Ganjam-II	Invitee
28	Mr. Sanjit Pattnaik	Secy, KASAM, Kandhamal	Invitee
29	Mr. Jyoti Ranjan Pradhan	AAO, G. Udayagiri	Invitee
30	Mr. Sujit Kumar Padhy	AAO, Tikabali	Invitee
31	Dr. Debasis Mishra	Senior Scientist & Head, KVK, Kandhamal	Member Secretary

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

Sl. no.	Item	Information
1	Major Farming system/enterprise	Rice-pulses, Vegetable-vegetable, Turmeric -fallow
2	Agro-climatic Zone	North-Eastern Ghat Zone
3	Agro ecological situation	• Brown Forest Soil, High rainfall (1300 to 1500 mm), High Elevation (500 to 1000 m), rained • Red & Yellow Soil, Moderate rainfall (1100 to 1300 mm), Moderate Irrigation
4	Soil type	Red lateritic & yellowish brown forest soil
5	Productivity of major 2-3 crops under cereals, pulses, oilseeds, vegetables, fruits and others	**Crop** – **Productivity (kg/ha)** Rice – 2447 Maize – 1706 Blackgram – 242 Arhar – 961 Field Pea – 633 Groundnut – 1507 Niger – 312 Mustard – 305 Turmeric – 9710 Ginger – 10526 Kulthi – 358 Cabbage – 18000 Tomato – 20800 Potato – 18500
6	Mean yearly temperature, rainfall, humidity of the district	Mean yearly temperature – Min- 8° C and Max.- 38° C Rainfall – 1427.9 mm Humidity – 38 to 94 %
7	Production of major livestock products like milk, egg, meat etc.	Milk – 17.32 TMT; Eggs – 21.52 Million Broiler – 0.452 TMT; Meat – 0.399 TMT

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

Sl. No.	Name of Taluk	Name of the block	Name of the villages	Major crops & enterprises	Major problems identified (crop-wise)	Identified Thrust Areas
1	G. Udayagiri	G. Udayagiri	Katadaganda Kilakia Gotamaha Dakedi Bearpanga	Turmeric, Paddy, Maize, Groundnut, Off-season Vegetables like Cauliflower & Tomato, Cabbage, Goatary, Poultry, Mushroom	Turmeric – Low yield due to application of lower dose of organic inputs and improper crop management practices Paddy – Heavy weed infestation Maize – Low yield due to soil acidity, inadequate nutrient management and cultivation of local degenerated varieties Groundnut – Heavy weed infestation Vegetable- Low yield due to cultivation of local variety, inadequate nutrient management, soil acidity and heavy pest & disease incidence Goatary – Poor growth of goats due to local breed and improper feed management Poultry – Poor growth and egg	Organic Farming Weed Management Soil Health & Fertility Management Pest & Disease Management Backyard Poultry and Animal Production Non-land enterprises

					production due to rearing of local breed without vaccination Mushroom – Low production due to traditional cultivation	
2	Tikabali	Tikabali	Penala, Burbinaju, Paburia	Turmeric, Paddy, Maize, Groundnut, Off-season Vegetables like Cauliflower & Tomato, Cabbage, Goatary, Poultry, Mushroom	Turmeric – Low yield due to application of lower dose of organic inputs and improper crop management practices Paddy – Heavy weed infestation Maize – Low yield due to soil acidity, inadequate nutrient management and cultivation of local degenerated varieties Groundnut – Heavy weed infestation Vegetable- Low yield due to cultivation of local variety, inadequate nutrient management, soil acidity and heavy pest & disease incidence Goatary – Poor growth of goats due to local breed and improper feed management Poultry – Poor growth and egg production due to rearing of local breed without vaccination Mushroom – Low production due to traditional cultivation	Organic Farming Weed Management Soil Health & Fertility Management Pest & Disease Management Backyard Poultry and Animal Production Non-land enterprises
3	Raikia	Raikia	Raikia, Sugadabadi, Kambarikia	Paddy, Maize, Niger, Off-season Vegetables like Cauliflower & Tomato, Raikia Bean, Cabbage, Goatary, Poultry, Mushroom	Paddy – Heavy weed infestation Maize – Low yield due to soil acidity, inadequate nutrient management and cultivation of local degenerated varieties Groundnut – Heavy weed infestation Niger – Low yield due to inadequate nutrient management & heavy cuscutta infestation Vegetable- Low yield due to cultivation of local variety, inadequate nutrient management, soil acidity and heavy pest & disease incidence Goatary – Poor growth of goats due to local breed and improper feed management Poultry – Poor growth and egg production due to rearing of local breed without vaccination Mushroom – Low production due to traditional cultivation	Weed Management Crop substitution Fruit & Vegetable Cultivation Soil Health & Fertility Management Pest & Disease Management Backyard Poultry and Animal Production Non-land enterprises Low Cost Production Techniques
4	K. Nuagaon	K. Nuagaon	Bandaguda, Gunjigaon, Gindapanga	Paddy, Maize, Niger, Off-season Vegetables like Cauliflower & Tomato, Raikia Bean, Cabbage, Goatary, Poultry, Mushroom	Paddy – Heavy weed infestation Maize – Low yield due to soil acidity, inadequate nutrient management and cultivation of local degenerated varieties Groundnut – Heavy weed infestation Niger – Low yield due to inadequate nutrient management & heavy cuscutta infestation Vegetable- Low yield due to cultivation of local variety, inadequate nutrient management, soil acidity and heavy pest & disease incidence Goatary – Poor growth of goats due to local breed and improper feed management Poultry – Poor growth and egg production due to rearing of local breed without vaccination Mushroom – Low production due to traditional cultivation	Weed Management Crop substitution Fruit & Vegetable Cultivation Soil Health & Fertility Management Pest & Disease Management Backyard Poultry and Animal Production Non-land enterprises Low Cost Production Techniques
5	Daringibadi	Daringibadi	Ladamaha,	Turmeric,	Turmeric – Low yield due to application	Organic Farming

			Daringibadi, Simanbadi	Ginger, Paddy, Maize, Niger, Groundnut, Off-season Vegetables like Cauliflower & Tomato, Cabbage, Goatary, Poultry, Mushroom	of lower dose of organic inputs and improper crop management practices Ginger – Low yield due to rhizome rot Paddy – Heavy weed infestation Maize – Low yield due to soil acidity, inadequate nutrient management and cultivation of local degenerated varieties Groundnut – Heavy weed infestation Niger – Low yield due to inadequate nutrient management & heavy cuscutta infestation Vegetable- Low yield due to cultivation of local variety, inadequate nutrient management, soil acidity and heavy pest & disease incidence Goatary – Poor growth of goats due to local breed and improper feed management Poultry – Poor growth and egg production due to rearing of local breed without vaccination Mushroom – Low production due to traditional cultivation	Weed Management Soil Health & Fertility Management Pest & Disease Management Backyard Poultry and Animal Production Non-land enterprises Marketing Awareness Farm Mechanisation

2. c. Details of village adoption programme:

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

Name of village	**Block**	**Action taken for development**
Burbinaju	Tikabali	FLD, OFT, CFLD, Training, Soil Testing, Diagnostic Field Visit, Convergence programme with Line Departments
Katadaganda	G. Udayagiri	FLD, OFT, CFLD, Training, Soil Testing, Diagnostic Field Visit, Convergence programme with Line Departments
Bandaguda	K. Nuagaon	FLD, OFT, CFLD, Training, Soil Testing, Diagnostic Field Visit, Convergence programme with Line Departments
Ladamaha	Daringibadi	FLD, OFT, CFLD, Training, Soil Testing, Diagnostic Field Visit, Convergence programme with Line Departments
Sugadabadi	Raikia	FLD, OFT, CFLD, Training, Soil Testing, Diagnostic Field Visit, Convergence programme with Line Departments

Achievements on technologies assessed and refined

OFT-1

1.	Title of On farm Trial	**Assessment of INM in chilli during Kharif 2020**
2.	Problem diagnosed	Poor plant growth, less flower and fruit formation due to improper nutrient management practices
3.	Details of technologies selected for assessment/refinement	**FP** Application of 1t FYM /ha and fertilizer application @ 20-20-30 kg N-$P_2O_5K_2O$/ha **TO_1** STBFR based N:P2O5:K2O + FYM @ 5 t / ha **TO_2** STBFR + Vermi-compost @ 5 t ha-1 **TO_3** TO 2 + Bio-fertilizer (Diazotroph , PSB, 1:1:1 @ 4 kg each per ha
4.	Source of Technology	AINP on Soil Bio-diversity - Bio-fertilizers, OUAT-2014
5.	Production system and thematic area	Integrated Nutrient Management in Commercial Vegetable Production System
6.	Performance of the Technology with performance indicators	Fresh fruit yield (q/ha) Net return (Rs/ha), B:C ratio
7.	Final recommendation for micro level situation	▪ Biofertilizers increases the availability of N & P ▪ Vermi-compost not only improves the physical, chemical and biological properties but also improves the moisture holding capacity of soil ▪ Judicious use of organic and inorganic sources is essential to maintain the soil health and sustainable productivity
8.	Constraints identified and feedback for research	-
9.	Process of farmers participation and their reaction	Farmers are happy due to higher yield and return and show their interest for adoption of the technology

Thematic area: Integrated Nutrient Management

Problem definition: Poor plant growth, less flower and fruit formation due to improper nutrient management practices

Technology assessed:

FP Application of 1t FYM /ha and fertilizer application @ 20-20-30 kg N-$P_2O_5K_2O$/ha

TO_1 STBFR based N:P2O5:K2O + FYM @ 5 t / ha

TO_2 STBFR + Vermi-compost @ 5 t ha-1

TO_3 TO_2 + Bio-fertilizer (Diazotroph , PSB, 1:1:1 @ 4 kg each per ha

Table:

Technology option	No. of trials	Yield component				Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Plant height (cm)	Fruit yield (g) /plant	No. of Fruits/plant	Fruit diameter (cm)					
FP	5	75.1	163.2	72.4	1.47	94.3	84200	330050	245850	3.9
TO_1	5	80.4	179.15	80.6	1.86	112.3	89400	393050	303650	4.4
TO_2	5	85.3	186.34	84.3	2.04	129.1	97800	451850	354050	4.6
TO_3	5	92.8	201.9	97.3	2.22	136.1	99400	476350	376950	4.8

Results: STBFR, Vermi-compost @ 5 t ha-1 and Bio-fertilizer (Diazotroph), PSB, 1:1:1 @ 4 kg each per ha enhanced the fruit yield of chilli by 44.3 % over farmers practice and an amount of Rs.376950/- as net profit per ha with a BC ratio of 4.8 were achieved from this technological option

OFT-2

1.	Title of On farm Trial	**Assessment of INM in Garden pea during Rabi season**
2.	Problem diagnosed	Poor plant growth, less branch & pod formation due to inadequate nutrient management practices
3.	Details of technologies selected for assessment/refinement	**FP**: Application of 1t FYM /ha and fertilizer application @ 30-40-30 kg $N-P_2O_5K_2O$/ha **TO_1**: STBFR + FYM @ 5 t / ha **TO_2**: TO_1 + *Rhizobium* seed inoculation @ 20 gm/kg seed **TO_3**: TO_2 + Lime @ 0.2 LR at the time of final ploughing
4.	Source of Technology	AINP on Soil Bio-diversity - Bio-fertilizers, OUAT-2014
5.	Production system and thematic area	Integrated Nutrient Management in Commercial Vegetable Production System
6.	Performance of the Technology with performance indicators	Green pod yield (q/ha), Net return (Rs/ha) and BC ratio
7.	Final recommendation for micro level situation	▪ *Rhizobium* application maintains soil fertility through biological nitrogen fixation prevalenting root nodules ▪ Biofertilizers increases the availability of N & P ▪ Combined application of biofertilizer, FYM, NPK with lime increases the growth, yield attributes and yield of garden pea
8.	Constraints identified and feedback for research	-
9.	Process of farmers participation and their reaction	Farmers are happy due to higher yield and return and show their interest for adoption of the technology

Thematic area: Integrated Nutrient Management

Problem definition: Poor plant growth, less branch & pod formation due to inadequate nutrient management practices

Technology assessed:

FP Application of 1t FYM /ha and fertilizer application @ 30-40-30 kg N-$P_2O_5K_2O$/ha

TO_1 STBFR + FYM @ 5 t / ha

TO_2 TO_1 + *Rhizobium* seed inoculation @ 20 gm/kg seed

TO_3 TO_2 + Lime @ 0.2 LR at the time of final ploughing

Table:

Technology option	No. of trials	Yield component				Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Plant height (cm)	No. of Pods/Plant	No. of branches/plant	No. of seeds/pod					
FP	5	63.1	13.8	19.6	7.6	82.4	60300	140080	79780	2.3
TO_1	5	70.8	17.8	21.3	8.0	101.2	64900	172040	107140	2.7
TO_2	5	74.0	20.2	22.8	8.4	106.8	65500	181560	116060	2.8
TO_3	5	79.8	22.4	24.2	9.2	125.4	69300	213180	143880	3.1

Results: The technological option – 3 which includes STBFR + FYM @ 5 t / ha + *Rhizobium* seed inoculation @ 20 gm/kg seed + Lime @ 0.2 LR at the time of final ploughing gave highest yield (125.4 q/ha), net return (Rs.143880/- per ha) and BC ratio of 3.1

OFT-3

1.	Title of On farm Trial	**Assessment on the performances of improved Ragi varieties during Kharif**
2.	Problem diagnosed	Low yield from existing Ragi variety (sana mandia)
3.	Details of technologies selected for assessment/refinement	**FP**: Cultivation of local variety Sana mandia of 130 days duration **TO_1**: Arjun (OEB-526) **TO_2**: Kalua (OEB-532)
4.	Source of Technology	Annual Report, OUAT, 2015-16
5.	Production system and thematic area	Varietal Evaluation in Commercial Production System
6.	Performance of the Technology with performance indicators	Yield (q/ha), Net return (Rs/ha) and BC ratio
7.	Final recommendation for micro level situation	▪ Arjuna (126 days) is moderately resistant to leaf blast, finger blast, neck blast and brown seed. It has high yield potential (20.7 q/ha)

		▪ Kalua (110 days) and the yield potential is 17.6q/ha, moderately resistant to leaf, neck and finger blast and brown seed. Can tolerate dry spell of 10-12 days at vegetative and 6-8 days at reproductive stages
8.	Constraints identified and feedback for research	-
9.	Process of farmers participation and their reaction	Farmers are happy due to higher yield and return and show their interest for adoption of the technology

Thematic area: **Varietal Evaluation**

Problem definition: Low yield from existing Ragi variety (sana mandia)

Technology assessed:

FP Cultivation of local variety Sana mandia of 130 days duration

TO_1 Arjun (OEB-526)

TO_2 Kalua (OEB-532)

Table:

Technology option	No. of trials	Yield component			Disease/ insect pest incidence (%)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		No. of effective tillers/hill	No. of spikelet per panicle	Test wt. (100 grain wt.)						
FP	7	3.5	4	1.6	62	8.36	18200	33440	15240	1.8
TO_1	7	5.8	5.6	2.4	27	11.56	18200	46240	28040	2.5
TO_2	7	6.2	7.2	2.7	22	12.43	18200	49720	31520	2.7

Results:

OFT-4

1.	Title of On farm Trial	**Assessment on weed management in garden pea**
2.	Problem diagnosed	Low productivity due to heavy weed infestation, labour intensive
3.	Details of technologies selected for assessment/refinement	**FP**: One hand weeding at 20 DAS **TO_1**: Two hand weeding at 20 & 45 DAS **TO_2**: Pre-emergence application of pendimethalin @ 2.5 lit/ha within 3 days after sowing

		TO_3 Post-emergence application of Imazethapyr (10% SL) @ 750ml/ha at 20-30 DAS
4.	Source of Technology	IARI, New Delhi, Year : 2014
5.	Production system and thematic area	Integrated Weed Management in Commercial Vegetable Production System
6.	Performance of the Technology with performance indicators	Green pod yield (q/ha), Net return (Rs/ha) and BC ratio
7.	Final recommendation for micro level situation	Weed management practices reduces weed flora and increases the yield of garden pea
8.	Constraints identified and feedback for research	-
9.	Process of farmers participation and their reaction	Farmers are happy due to less labour use, higher yield and return and show their interest for adoption of the technology

Thematic area: Integrated weed management

Problem definition: Low productivity due to heavy weed infestation, labour intensive

Technology assessed:

FP One hand weeding at 20 DAS

TO_1 Two hand weeding at 20 & 45 DAS

TO_2 Pre-emergence application of Pendimethalin @ 2.5 lit/ha within 3 days after sowing

TO_3 Post-emergence application of Imazethapyr (10% SL) @ 750ml/ha at 20-30 DAS

Table:

Technology option	No. of trials	Yield component		Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		No. of pods/ plant	No. of seeds/ pod					
FP	5	14.8	5.2	72.4	47800	144800	9700	3.0
TO_1	5	16.6	6.1	98.8	56300	192400	136100	3.4
TO_2	5	18.4	6.8	98.2	37600	196400	158800	5.2
TO_3	5	20.6	7.2	102.6	38000	205200	167200	5.4

Results: Post-emergence application of Imazethapyr (10% SL) @ 750ml/ha at 20-30 DAS has given the highest yield of 102.6 q/ha and was superior over all the other technology options.

OFT-5

1.	Title of On farm Trial	**Assessment of Bullock drawn puddler for puddling in Rice during Kharif**
2.	Problem diagnosed	High labour cost and time involved in puddling
3.	Details of technologies selected for assessment/refinement	**FP** Puddling with desi plough **TO_1** Puddling with bullock drawn OUAT MB plough **TO_2** Puddling with bullock drawn OUAT puddler
4.	Source of Technology	AICRP on UAE, OUAT , 2015
5.	Production system and thematic area	Farm Machinery & Power in Commercial Production System
6.	Performance of the Technology with performance indicators	Cost of intervention. Additional income over additional investment, Yield (q/ha), B:C ratio
7.	Final recommendation for micro level situation	MB plough – suitable for small size bullocks of Odisha. Working width of 100 mm, weight of 4.8 kg without beam, draft requirement of 40-48 kg Bullock drawn puddler- suitable for small & medium size bullocks, working width of 760 mm, weight of 41 kg, draft requirement of 50-55 kg
8.	Constraints identified and feedback for research	-
9.	Process of farmers participation and their reaction	Farmers are happy due to saving in time and less drudgery involved and show their interest for adoption of the technology

Thematic area: *Farm Machinery & Power*

Problem definition: High labour cost and time involved in puddling

Technology assessed:

FP Puddling with desi plough

TO_1 Puddling with bullock drawn OUAT MB plough

TO_2 Puddling with bullock drawn OUAT puddler

Table:

Technology option	No. of trials	Yield	% of change in yield	Labour required (Mandays/ ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
FP	7	32.1	-	6	35200	56817	21617	1.61
TO_1	7	32.9	2.4	3.5	34500	58233	23733	1.68
TO_2	7	33.9	5.6	2	34080	60003	25923	1.76

Results: Puddling with bullock drawn OUAT puddler has resulted in lowest labour involvement and highest BC ratio of 1.76

OFT-6

1.	Title of On farm Trial	**Assessment of Bullock drawn seed cum fertilizer drill in Maize during Rabi**
2.	Problem diagnosed	Intensive labour, high cost of cultivation
3.	Details of technologies selected for assessment/refinement	**FP** Sowing behind the plough **TO_1** Single row seed cum fertilizer drill **TO_2** 5 row seed cum fertilizer drill
4.	Source of Technology	AICRP on UAE, CAET, OUAT, 2014
5.	Production system and thematic area	Farm Machinery & Power in Traditional Production System
6.	Performance of the Technology with performance indicators	Cost of intervention, Yield (q/ha), B:C ratio
7.	Final recommendation for micro level situation	▪ OUAT single row Seed cum fertilizer drill has inclined plate type metering mechanism ▪ 5 row seed cum fertilizer drill- row to row adjustable, available with 7 sets of roller, suitable for small to bold seeds, working width – up to 1.5 m, vertical roller type metering mechanism
8.	Constraints identified and feedback for research	-
9.	Process of farmers participation and their reaction	Farmers are happy due to saving in time and less drudgery involved and show their interest for adoption of the technology

Thematic area: *Farm Machinery & Power*

Problem definition: Intensive labour, high cost of cultivation

Technology assessed:

FP Sowing behind the plough

TO_1 Single row seed cum fertilizer drill

TO_2 5 row seed cum fertilizer drill

Table:

Technology option	No. of trials	Performance indicators		No. of cobs/ ha	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Field capacity (ha/ hr)	Labour required (MD/ha)					
FP	7	0.016	8	51280	39820	170933	131113	4.29
TO_1	7	0.031	4	53890	38700	179633	140933	4.64
TO_2	7	0.16	3	55120	38420	183733	145313	4.78

Results: Using a 5 row seed cum fertilizer drill has given highest BC ratio of 4.78 with an yield of 55120 cobs/ha and found to be superior over other technologies tested.

OFT-7

1.	Title of On farm Trial	**Assessment of yield performance of different varieties of oyster mushroom during Rabi season**
2.	Problem diagnosed	Low yield of oyster mushroom due to low temperature
3.	Details of technologies selected for assessment/refinement	**FP** Cultivation of oyster mushroom *var. Pleurotus sajorcaju* **TO_1** Cultivation of oyster mushroom *var. Pleurotus ostreatus* **TO_2** Cultivation of oyster mushroom *var. Hypsizygus ulmarius*
4.	Source of Technology	CTMRT, OUAT 2011
5.	Production system and thematic area	Mushroom Production in Commercial Production System
6.	Performance of the Technology with performance indicators	Cost of intervention. Additional income over additional investment Yield (q/ha), B:C ratio
7.	Final recommendation for micro level situation	Pearl oyster mushroom has better aroma, yield and excellent shelf life, temperature for cultivation is 10-24 degree centigrade biological efficiency 70% Large and fleshy appearance , better yield, shelf life of 32-40 days , 10-18 degree centigrade biological efficiency 80%
8.	Constraints identified and feedback for research	-
9.	Process of farmers participation and their reaction	Farmers are happy due to more yield & better consumer acceptance and show their interest for adoption of the technology

Thematic area: *Mushroom Production*

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

Technology assessed:

FP Cultivation of oyster mushroom *var. Pleurotus sajorcaju*

TO_1 Cultivation of oyster mushroom *var. Pleurotus ostreatus*

TO_2 Cultivation of oyster mushroom *var. Hypsizygus ulmarius*

Table:

Technology option	No. of trials	Yield component			Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Pin head appearance	Days to 1st harvest	Biological efficiency (%)					
FP	7	20	24	75	1.5	40	160	120	4
TO_1	7	18	23	80	1.8	40	180	140	4.5
TO_2	7	17	24	105	2.2	40	220	180	5.5

Results: Oyster mushroom *var. Hypsizygus ulmarius* was found to be superior in biological efficiency (105 %), yield (2.2 kg/bed) and highest BC ratio of 5.5.

OFT-8

1.	Title of On farm Trial	**Assessment of collar rot disease management in Groundnut during Kharif**
2.	Problem diagnosed	High incidence of collar rot disease
3.	Details of technologies selected for assessment/refinement	**FP**: Using inappropriate chemicals or no suitable management measures followed **TO_1**: Seed treatment with Carboxin 37.5% + Thiram 37.5 % (Vitavax power) @ 2.5 gm/kg seeds during sowing and need-based spraying of Chlorothalonil 75% WP @ 1.5 gm/lt. and Carbendazim @ 2 gm/lt alternatively at 15 days interval **TO_2**: Seed treatment with Tebuconazole @ 1.5 g/kg followed by furrow application of *T. viride* @ 4kg incubated in 50 kg FYM/ha at sowing, broadcasting of *T. viride* @ 4kg incubated in 250kg FYM/ha at 40 DAS & 2 sprays of Tebuconazole @ 1ml/lit. starting from initiation of the diseases and after 15 days
4.	Source of Technology	OUAT, 2016
5.	Production system and thematic area	Integrated Disease Management in Commercial Vegetable Production System
6.	Performance of the Technology with performance indicators	Yield (Q/ha); Net return (Rs/ha) and BC ratio
7.	Final recommendation for micro level situation	▪ Seed treatment eliminates the seed-borne pathogen and spraying with systemic fungicides protects the plant from primary infection ▪ Seed treatment eliminates the seed-borne pathogen and spraying with systemic fungicides protects the plant from primary infection
8.	Constraints identified and feedback for research	-
9.	Process of farmers participation and their reaction	Farmers are very much accepting the integrated disease management practice

Thematic area: *Integrated Disease Management*

Problem definition: High incidence of collar rot disease in groundnut

Technology assessed:

FP Using inappropriate chemicals or no suitable management measures followed

TO_1 Seed treatment with Carboxin 37.5% + Thiram 37.5 % (Vitavax power) @ 2.5 gm/kg seeds during sowing and need-based spraying of Chlorothalonil 75% WP @ 1.5 gm/lt. and Carbendazim @ 2 gm/lt alternatively at 15 days interval

TO_2 Seed treatment with Tebuconazole @ 1.5 g/kg followed by furrow application of *T. viride* @ 4kg incubated in 50 kg FYM/ha at sowing, broadcasting of *T. viride* @ 4kg incubated in 250kg FYM/ha at 40 DAS & 2 sprays of Tebuconazole @ 1ml/lit. starting from initiation of the diseases and after 15 days

Table:

Technology option	No. of trials	No. of pods/ plant	Disease incidence (%)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
FP	7	8.6	19.6	8.2	25650	41000	14,000	1.6
TO_1	7	10.5	7.1	10.1	28900	50500	20,500	1.7
TO_2	7	11.1	2.8	10.7	28160	53500	23,500	1.9

Results: Seed treatment with Tebuconazole @ 1.5 g/kg followed by furrow application of *T. viride* @ 4kg incubated in 50 kg FYM/ha at sowing, broadcasting of *T. viride* @ 4kg incubated in 250kg FYM/ha at 40 DAS & 2 sprays of Tebuconazole @ 1ml/lit. starting from initiation of the diseases and after 15 days was found to be a superior technological option for the farmers to manage collar rot of groundnut with 1.9 BC ratio.

OFT-9

1.	Title of On farm Trial	**Assessment of Fall Army Worm management in maize**
2.	Problem diagnosed	Low yield due to high incidence of Fall Army Worm
3.	Details of technologies selected for assessment/refinement	**FP**: Using inappropriate chemicals or no suitable management measures **TO_1**: Erection of bird perches @ 10 /acre during early stage of the crop, hand picking and destruction of egg masses and neonate larvae and spraying of 1500 ppm Azatirachtin at the initiation of damage **TO_2**: Spraying of Chlorantraniliprole 18.5 % SC @ 0.4 ml /lit at the initiation of the infestation followed by a spraying of Emamectin Benzoate @ 5% SG after 15 days
4.	Source of Technology	ICAR-RC for NEHR, Meghalaya, 2019
5.	Production system and thematic area	Integrated Pest Management in Commercial Production System

6.	Performance of the Technology with performance indicators	Yield (Q/ha); Net return (Rs/ha) and BC ratio
7.	Final recommendation for micro level situation	▪ Birds feed extensively the egg mass and the larva, Azatirachtin repels the pest and entomophagus fungi manages the feeding larva ▪ The chemicals kill the pest primarily by ingestion and secondarly by contact
8.	Constraints identified and feedback for research	-
9.	Process of farmers participation and their reaction	Farmers are very much accepting the integrated pest management practice

Thematic area: *Integrated Pest Management*

Problem definition: Low yield due to high incidence of Fall Army Worm

Technology assessed:

FP Using inappropriate chemicals or no suitable management measures

TO_1 Erection of bird perches @ 10 /acre during early stage of the crop, hand picking and destruction of egg masses and neonate larvae and spraying of 1500 ppm Azatirachtin at the initiation of damage

TO_2 Spraying of Chlorantraniliprole 18.5 % SC @ 0.4 ml /lit at the initiation of the infestation followed by a spraying of Emamectin Benzoate @ 5% SG after 15 days

Table:

Technology option	No. of trials	Pest incidence (%)	Yield (Pest free cobs/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
FP	7	24.6	41280	39000	123840	84840	3.2
TO_1	7	9.2	50110	39700	150330	110630	3.8
TO_2	7	4.8	54080	42200	163240	121040	3.9

Results: Spraying of Chlorantraniliprole 18.5 % SC @ 0.4 ml /lit at the initiation of the infestation followed by a spraying of Emamectin Benzoate @ 5% SG after 15 days has resulted highest BC ratio (3.9) and yield (54080 healthy cobs/ha).

OFT-10

1.	Title of On farm Trial	**Assessment on Pro tray Nursery Techniques**
2.	Problem diagnosed	High damage of vegetable seedlings due to rain, high disease and insect pest incidence during monsoon, less survival rate of seedling, high labour and follow up management cost

3.	Details of technologies selected for assessment/refinement	**FP** Raising of seedling in open condition **TO_1** Raising of seedling in low cost poly tunnel **TO_2** Raising of seedling in pro tray with sterilise potting mixture by coco peat @ 300 kg with 5 kg Neem cake along with Azospirillum and phosphobacteria each @ 1 kg
4.	Source of Technology	**TNAU, COIMBATOR**
5.	Production system and thematic area	Nursery Management in Commercial Vegetable Production System
6.	Performance of the Technology with performance indicators	Gross cost, Gross return, Net return (Rs/ha), B:C ratio
7.	Final recommendation for micro level situation	▪ Raising of seedling in pro tray with sterilise potting mixture by coco peat @ 300 kg with 5 kg Neem cake along with Azospirillum and phosphobacteria each @ 1 kg. ▪ Survival percentage increases by raising of seedling in pro-tray ▪ Low production cost
8.	Constraints identified and feedback for research	-
9.	Process of farmers participation and their reaction	Farmers are very much appreciating the technology

Thematic area: *Nursery Management*

Problem definition: High damage of vegetable seedlings due to rain, high disease and insect pest incidence during monsoon, less survival rate of seedling, high labour and follow up management cost

Technology assessed:

FP Raising of seedling in open condition

TO_1 Raising of seedling in low cost poly tunnel

TO_2 Raising of seedling in pro tray with sterilized potting mixture by coco peat @ 300 kg with 5 kg Neem cake along with Azospirillum and phosphobacteria each @ 1 kg

Table:

Technology option	No. of trials	Yield component			Disease/ insect pest incidence (%)	Survival rate (%) (Healthy Seedling)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
		Days to Germinate	Seedling height (cm) 9 DAS	Germination (%)						
FP	06	03	4.68	98.08	29.33	68.75	110000	315689	205689	2.86
TO_1	06	04	5.44	94.12	1.10	93.02	140000	427133	287133	3.05
TO_2	06	03	4.88	98.08	1.08	97.00	150000	450000	300000	3.00

Results: Raising of seedling in pro tray with sterilized potting mixture by coco peat @ 300 kg with 5 kg Neem cake along with Azospirillum and Phosphobacteria each @ 1 kg was found to be superior than other technological options and could give maximum net return.

OFT-11

1.	Title of On farm Trial	**Assessment of different bell pepper varieties**
2.	Problem diagnosed	Low profitability from existing chilli cultivation
3.	Details of technologies selected for assessment/refinement	**FP** Cultivation of Chilli during Rabi season **TO_1** Bell Pepper variety "Green wonder" **TO_2** Bell Pepper variety "Indra" **TO_3** Bell Pepper variety "Arka Mohini"
4.	Source of Technology	**TNAU 2015, IIHR, 2016**
5.	Production system and thematic area	Crop diversification in Commercial Vegetable Production System
6.	Performance of the Technology with performance indicators	Yield (q/ha), Gross return, Net return (Rs/ha), B:C ratio
7.	Final recommendation for micro level situation	▪ High profitability and marketability of bell pepper ▪ Increase land productivity
8.	Constraints identified and feedback for research	-
9.	Process of farmers participation and their reaction	Farmers are very much happy by fetching higher income per unit area

Thematic area: *Crop Diversification*

Problem definition: Low profitability from existing chilli cultivation

Technology assessed:

FP Cultivation of Chilli during Rabi season

TO_1 Bell Pepper variety "Green wonder"

TO_2 Bell Pepper variety "Indra"

TO_3 Bell Pepper variety "Arka Mohini"

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
		Single fruit weight (gm)	Single fruit length (cm)	Fruit yield per plant (Kg.)						

FP	06	07	11.7	0.280	10	137.20	95000	274400	264900	2.88
TO_1	06	62	6.8	0.558	20	273.42	105000	546840	441840	5.20
TO_2	06	70	7.8	1.050	15	514.50	160000	1029000	879000	6.43
TO_3	06	52	7.6	0.572	18	560.56	170000	1121120	951120	6.59

Results: Bell Pepper variety "Arka Mohini" was found to be very much superior than other bell pepper varieties tested and could substitute the practiced crop chilli to fetch higher return per unit area.

3.2 Achievements of Frontline Demonstrations

A. Details of FLDs conducted during the year

Cereals

Sl. No.	Crop	Thematic area	Technology Demonstrated with detailed treatments	Area (ha)		No. of farmers/ demonstration									Reasons for shortfall in achievement
				Proposed	Actual	SC		ST		Others		Total			
						M	F	M	F	M	F	M	F	T	
1.	Maize & Groundnut	Cropping System	Two rows of groundnut with one row of maize, spacing 30cm from line to line for groundnut, 90cm between maize to maize and 60cm between paired row of groundnut	1.0	1.0	2	1	4	3	0	0	6	4	10	
2.	Rice	IWM	Post-emergence application of Metsulfuron methyl 10% + Chlorimuron ethyl 10% (Almix) @ 20g/ha at 15 DAT followed by one hand weeding after 15 days	1.0	1.0	1	1	4	4	0	0	5	5	10	
3.	Rice	Drudgery Reduction	The yoke is specially designed for drudgery reduction of Bullocks while farm operations, length-1550mm, weight- 5 to 6 kg.	1.0	1.0	1	1	5	3	0	0	6	4	10	
4.	Rice	Production of small tools and implements	CRRI Manual Rice Winnower is a simple manual winnowing machine to clean threshed paddy crop, suitable for small farmers and women friendly. Its capacity is around 100 kg/hr of clean paddy having cleaning efficiency of 96-98%. Cost of the machine is Rs. 5,500.	1.0	1.0	1	0	7	2	0	0	8	2	10	

5	Maize	Farm Machinery & Power	Field capacity- 0.24 ha/day with petrol engine, 89.7% weeding efficiency and less than 1% plant damage. It has set of 2 circular discs with 4 no. of weeding tynes fixed on each disc.	1.0	1.0	2	0	6	2	0	0	8	2	10	

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil (Kg/ha)			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P_2O_5	K_2O					
Maize & Groundnut	Kharif	Rain-fed upland	Sandy clay loam	255.8	10.8	285.5	Maize	05.08.2020	06.12.2020	548.8	27
Rice	Kharif	Rainfed – medium land	Sandy clay loam	241.3	20.1	308.1	Rice	08.08.2020	03.12.2020	548.8	27
Rice	Kharif	Rainfed – medium land	Sandy clay loam	197.5	11.7	302.6	Rice	17.08.2020	21.12.2020	548.8	27
Maize	Rabi	Irrigated medium land	Sandy clay loam	302.8	18.8	296.7	Tomato	09.10.2020	22.02.2021	156.6	6
Maize	Pre-Summer	Irrigated medium land	Sandy clay loam	186.5	22.3	271.8	Vegetable	12.12.2020	03.03.2021	156.6	6

In both the Tables, information of same crop should be provided. For example, if in Table 3.2A crops are mentioned as a,b,c,d etc., in the table for Details of farming situation, the same crop should be mentioned in the identical sequence.

Performance of FLD

Oilseeds:

Frontline demonstrations on oilseed crops

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR

Niger	INM	Application of FYM 5 t/ha, 50 % RDF $N:P_2O_5:K_2O$ @ 20:20:10 kg/ha and S @ 30 kg ha^{-1}	10	1.0	5.4	3.9	38.5	16300	27000	10700	1.7	14600	19500	4900	1.3
Sunflower	INM	▪ soil test based N:P2O5:K2O application ▪ Use of FYM @ @ 5 t/ha and ▪ Use of bio-fertilizer (Diazotroph and PSB, 1:1:1 @ 4 kg each/ha)	10	1.0	19.7	13.8	32.8	40200	82740	42540	2.1	34300	57960	23660	1.7
Groundnut	IWM	Post-emergence application of Imazethapyr (10% SL) @ 750ml/ha at 20-30 days after sowing	10	1.0	11.2	8.4	33.3	23338	56000	32662	2.4	29920	42000	19080	1.8
Toria	INM	Foliar application of Thiourea @ 0.05% at 50% flowering and pod filling stage along with one irrigation at 20 DAS	10	1.0	7.2	3.4	11.2	14080	25200	11120	1.8	10560	11900	1340	1.1
Total			**40**	**4.0**											

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Pulses

Frontline demonstration on pulse crops

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Horse gram	INM	▪ Soil test based N:P2O5:K2O application ▪ Use of FYM @ 2.5 t/ha and ▪ Sulphur @ 15 kg /ha	10	1.0	6.2	4.8	29.2	16500	27900	11400	1.7	14800	21600	6800	1.5

Cow pea	Varietal Evaluation	**Demonstration of Cow Pea Variety** Resistant to disease and high cooking value Cow Pea Variety Kashi Kanchan.	18	0.40	168.11	31.00	442	85000	168110	83110	1.97	20000	31000	11000	1.55
Garden pea (TSP)	INM, IPM & IDM	High yielding variety, FYM 5 t/ha, Seed rate 20 kg/ha, seed treatment with Rhizobium 20g/kg of Seed, Spacing 30x10cm, application of biofertilizers @ 12 kg/ha (Azotobacter + Azospirillum+PSB: 4+4+4= 12 kg/ha), application of boron @ 1kg/ha at the time of sowing, application of 75 % of recommended dose of $N:P_2O_5:K_2O$ as per soil test results and need based application of plant protection chemicals.	40	5.0	118.9	78.2	52	55700	202130	146430	3.6	43200	132940	89740	3.1
	Total		**68**	**6.4**											

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Other crops

Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	Other parameters		*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demonstration	Check		Demo	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR

Cauliflower	INM	▪ Soil test based N:P2O5:K2O application ▪ Use of FYM @ 5 t/ha and ▪ Soil application of boron @ 0.5 kg/ha at the time of planting and two foliar sprays of borax @ 0.25% at 15 days interval from 30 days after transplanting	10	1.0	201.5	148.7	35.5	Curd weight-358.9 g	Curd weight-262.7 g	69900	302250	232350	4.3	61300	223050	161750	3.6
Cabbage	Production of small tools & implements	The transplanter has a capacity of 12-15 seedlings per minute with 1 man power and overall dimensions (LxWxH)-210x60x1000 mm and 2 Kg weight. It reduces drudgery due to repeated lowering while transplanting.	10	1.0	270.0	254.0	6.2	Seedlings transplanted 12 nos./min	Seedlings transplanted 4 nos./min	57040	270000	212960	4.7	66000	254000	188000	3.8
Brinjal	IDM	Seed treatment with Metalaxyl MZ 72% WP @ 2gm/kg + soil application of Carbofuran @ 1kg a.i./ha + soil drenching with Carbendazim @ 0.15% + Streptocycline @ 0.015% at 30 and 45 days after transplanting	10	1.0	154.8	106.6	45.2	Wilt incidence 3.0 %	Wilt incidence 21.2 %	60100	232200	172100	3.9	55600	159900	104300	2.9

Okra	IPM	Spraying of Chlorantraniliprole 18.5 % SC @ 0.4 ml /lit at the initiation of the infestation followed by a spraying of Emamectin Benzoate @ 5% SG after 15 days	10	1.0	100.6	78.8	27.7	YVMV incidence after 70 DAS 8.5 %	YVMV incidence after 70 DAS 30.6 %	52600	201200	148600	3.8	47800	157600	109800	3.3
Banana	IPM	Clean cultivation, Spraying of Azadirachtin (1500PPM) @ 2ml/lt. & covering the bunch with plastic polythene bag	10	1.0	280.0	205..0	36.6	Scars/fruit 0.8 Scars/leaf 10.8	Scars/fruit 7.4 Scars/leaf 198.6	120000	720000	60000	6.0	104000	512500	408500	4.9
Cauliflower	IPM	Spraying of 1500 ppm Azatirachtin @ 2500 ml /ha at the initiation of damage and spraying of Fipronil 5% SC @ 1000 ml/ha after 15 days	10	1.0	198.6	160.2	23.9	Pest incidence 5.6 %	Pest incidence 29.8 %	65600	297900	232300	4.5	61300	240300	179000	3.9
Papaya	ICM	Demonstration on planting geometry in Papaya with spacing between PXP & RXR=1.5MX1.5M	**05**	**0.04**	Contd.	-	-	-	-	-	-	-	-	-	-	-	-
Bitter gourd	ICM	Bitter gourd variety Katai HY cultivation with Single line trellis system (SLTS) using HDPE Nylon net with bamboo stump in 5 ft distance in line row and 3 ft distance between two rows.	**16**	**0.40**	85.5	60.2	42.0	-	-	75000	171000	96000	2.3	65000	120400	55400	1.85

Brinjal	Varietal Evaluation	Demonstration on wilt tolerant brinjal var. Swarna Shyamali	**07**	**0.075**	120	68	76.47	Wilt incidence 2.8 %	Wilt incidence 29.2 %	75000	180000	105000	2.4	75000	102000	27000	1.36
Cabbage (TSP)	INM, IPM & IDM	Hybrid cabbage variety, seed rate – 0.3 kg/ha, FYM 5 t/ha , spacing (60 x 45) cm, seed treatment with vitavax power @ 2 gm /kg seed, application of biofertilizers @ 12 kg/ha (*Azotobacter* + *Azospirillum* + PSB: 4+4+4= 12 kg/ha), soil application of boron @ 1 kg/ha at the time of sowing, application of 75 % of recommended dose of N:P_2O_5:K_2O as per soil test results and need based application of plant protection chemicals.	22	2.5	348.5	206.1	69.1	Head weight- 0.92 kg	Head weight- 1.52 kg	63000	191675	128675	3.0	45600	113355	67755	2.5

Cauliflower (TSP)	INM, IPM & IDM	Hybrid cauliflower variety, seed rate – 0.3 kg/ha, FYM 5 t/ha , spacing (60 x 45) cm, seed treatment with vitavax power @ 2 gm /kg seed, application of biofertilizers @ 12 kg/ha (*Azotobacter* + *Azospirillum* + PSB: 4+4+4= 12 kg/ha), soil application of boron @ 1 kg/ha at the time of sowing, application of 75 % of recommended dose of N:P_2O_5:K_2O as per soil test results and need based application of plant protection chemicals.	20	2.5	296.7	183.2	62	Curd weight-0.62 kg	Curd weight-0.97 kg	68500	267030	198530	3.9	49800	164880	115080	3.3
Total																	

Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters (Chick mortality rate/100 chicks)		% change in major parameter	Other parameter (Body weight at 21 days)		*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
Poultry	Income Generation	Demonstration on artificial brooding management in chicks	10		6	44	86.3	286 gm	142 gm	6000	118440	112440	18.74	4000	52920	48920	13.23

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Fisheries

* 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 (Availability of Veg./day)		% change in major parameter	Other parameter (Consumption of Veg./day)		*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
Nutritional Garden	Demonstration on nutritional garden for improving nutritional security of farm family	10	10	3.5 kg	1.0 kg	71.4	1 kg	1 kg	1200	2880	1680	2.4	600	1080	480	1.8

Category	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters (Keeping quality)		% change in major parameter	Other parameter (Sensory parameter in 9 point hedonic scale)		*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
Value Addition	Demonstration on value addition in tomato	10	10	90 days	10 days	800.0	7.4	-	25	80	55	3.2	25	25	00	1.0

* Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Women empowerment

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

Farm implements and machinery

Name of the implement	Crop	Name of the technology demonstrated	No. of Farmer	Area (ha)	Field observation (output/man hour)		% change in major parameter	Labor reduction (man days)	Cost reduction (Rs./ha or Rs./Unit)
					Demonstration	Check			
OUAT YOKE	Rice	Demonstration on OUAT YOKE in rice during Kharif	10	1.0	32.1 q/ha	30.5 q/ha	5.2	-	-
Mini Power Weeder	Maize	Demonstration of Mini Power Weeder (1.8 hp) in Maize for weeding during Rabi season	10	1.0	55,120 cobs/ha	53,020 cobs/ha	3.9	25	7,000/-
CRRI Manual Rice Winnower	Rice	Demonstration on CRRI Manual Rice Winnower	10	1.0	98 kg/hr	75 kg/hr	30.67	7	1,960/-
Single row vegetable transplanter	Vegetable	Demonstration on Single row vegetable transplanter	10	1.0	270 q/ha	254 q/ha	6.2	30	9,000/-

*** Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.**
**** BCR= GROSS RETURN/GROSS COST**

Demonstration details on crop hybrids

Crop	Name of the Hybrid	No. of farmers	Area (ha)	Yield (kg/ha) / major parameter			Economics (Rs./ha)			
				Demo	Local check	% change	Gross Cost	Gross Return	Net Return	BCR
Cereals										
Bajra	-	-	-	-	-	-	-	-	-	-
Maize	VNR-4226	10	1.0	56.5	46.2	22.3	37300	84750	47450	2.3
Paddy	-	-	-	-	-	-	-	-	-	-
Sorghum	-	-	-	-	-	-	-	-	-	-
Wheat	-	-	-	-	-	-	-	-	-	-
Others (Pl. specify)										
Total		**10**	**1.0**							
Oilseeds	-	-	-	-	-	-	-	-	-	-
Castor	-	-	-	-	-	-	-	-	-	-
Mustard	-	-	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-	-	-
Sesame	-	-	-	-	-	-	-	-	-	-
Sunflower	KAVERI CHAMP	10	1.0	19.7	13.8	42.8	40200	82740	42540	2.1

Groundnut	-	-	-	-	-	-	-	-	-	-
Soybean	-	-	-	-	-	-	-	-	-	-
Others (Pl. specify)										
Total		**10**	**1.0**							
Pulses										
Greengram	-	-	-	-	-	-	-	-	-	-
Blackgram	-	-	-	-	-	-	-	-	-	-
Bengalgram	-	-	-	-	-	-	-	-	-	-
Redgram	-	-	-	-	-	-	-	-	-	-
Others (Pl. specify)	-	-	-	-	-	-	-	-	-	-
Total		**0**	**0**							
Vegetable crops										
Bottle gourd	Katahi	10	1.0	85.5	6.2	42.02	75000	171000	96000	2.28
Capsicum	-	-	-	-	-	-	-	-	-	-
Cucumber	-	-	-	-	-	-	-	-	-	-
Tomato	-	-	-	-	-	-	-	-	-	-
Brinjal	-	-	-	-	-	-	-	-	-	-
Okra	-	-	-	-	-	-	-	-	-	-
Onion	-	-	-	-	-	-	-	-	-	-
Potato	-	-	-	-	-	-	-	-	-	-
Field bean	-	-	-	-	-	-	-	-	-	-
Cabbage	Hare Hrishna	22	2.5	348.5	206.1	69.1	63000	191675	128675	3.0
Cauliflower	Madhuri	20	2.5	296.7	183.2	62.0	68500	267030	198530	3.9
Cauliflower	Parijat-040	10	1.0	201.5	148.7	35.5	69900	302250	232350	4.3
Total		**62**	**7.0**							
Commercial crops										
Cotton	-	-	-	-	-	-	-	-	-	-
Coconut	-	-	-	-	-	-	-	-	-	-
Others (Pl. specify)	-	-	-	-	-	-	-	-	-	-
Total		**0**	**0**							
Fodder crops	-	-	-	-	-	-	-	-	-	-
Napier (Fodder)	-	-	-	-	-	-	-	-	-	-
Maize (Fodder)	-	-	-	-	-	-	-	-	-	-

Sorghum (Fodder)	-	-	-	-	-	-	-	-	-	-
Others (Pl. specify)	-	-	-	-	-	-	-	-	-	-
Total		**0**	**0**							

Technical Feedback on the demonstrated technologies

Sl. No	Crop	Feed Back
01	Cow Pea	Kashi Kanchan variety of cow pea has good market demand and good n taste. Seed production of this variety will increase the area. However Utkala Manika variety has good kitchen demand due to fleshy in nature.
02	Bitter gourd	HDPE Nylon netting improves the nos. of branches & fruits. Apart from that off season bitter gourd has good market rate and demand of Nylon netting in other vegetables increases among the farmers.
03	Brinjal	Swarna Shyamali variety is popular due to its taste. Seed productions to spread of this variety are going on. Researches required breeding for new variety by keeping S. Shyamali as parent line.
04	Maize & Groundnut	This technology was very much appreciated by the farmers due to high return (Rs.160820/- per hectare) per unit area
05	Rice	Post-emergence spraying of Almix reduced labour cost in weeding operation and increased the yield of rice
06	Rice	OUAT Yoke has minimized the stress and drudgery on bullocks at the time of ploughing and also the time was saved considerably
07	Rice	CRRI manual rice winnower involved less labour at the time of winnowing and also reduced the drudgery involved
08	Maize	Using the power weeder in maize not only saves time, but also performed the operation with very less cost and labour involvement
09	Niger	Balanced nutrition along with Sulphur increased the yield considerably
10	Sunflower	Application of Bio-fertilizers, Organic manure and balanced fertilizer enhanced the yield considerably in Sunflower
11	Groundnut	Application of post-emergence herbicide Imazethapyr increased the yield by 33.3 % and also reduced the labour involvement considerably
12	Toria	Application of Thiourea in Mustard increased the yield by 11.2 %
13	Horse gram	29.2 % yield increase was achieved in this crop by following STBFR and application of Sulphur
14	Garden pea (TSP)	By adopting proper crop management procedure, the yield of this crop could be increased up to 59 %
15	Cauliflower	Though the yield of cauliflower is less during off-season (Kharif), the market value is very high and adopting the INM practice, the farmer could yield as much as 200 q/ha
16	Cabbage	By using manual vegetable transplanter, the farmer can transplant as high as 12 seedlings per minute which saves 30 mandays/ha
17	Okra	By adopting the technology, even after 70 to 75 DAS, the YVMV disease incidence is < 10 %
18	Banana	The market value and yield of the crop increased considerably. However, the availability of poly-bags for bunch covering needs to be ascertained
19	Cauliflower	The technology not only managed the crop from pest incidences but also increased the quality of curds
20	Papaya	Plants are healthy and expected to give good yield
21	Brinjal	The wilt incidence reduced considerably. But root drenching practice is cumbersome
22	Cabbage (TSP)	By adopting proper crop management procedure, the yield of this crop could be increased up to 69 %

23	Cauliflower (TSP)	By adopting proper crop management procedure, the yield of this crop could be increased up to 62 %
24	Poultry	Artificial brooding management in chicks has resulted in reducing the mortality rate up to 86 % and increased the body weight by more than 100 %
25	Nutritional garden	By making an ideal nutritional garden, a farm family could avail 76 % more vegetable per day and achieve nutritional security
26	Value addition	At the time of market glut, value addition in tomato could able to double the net profit of a farm family

Extension and Training activities under FLD

Sl. No.	Activity	Date	No. of activities organized	Number of participants	Remarks
1.	Field days				
2.	Farmers Training	23.09.2020 03.11.2020 11.02.2021	03	90	Trainings on cow pea, bitter gourd & brinjal has been conducted & package of practices related to FLD discussed.
3.	Media coverage				
4.	Training for extension functionaries				

Performance of the demonstration under CFLD on Pulse and Oilseed Crops during Kharif 2020 and Rabi 2020-21:

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	Horsegram	Chakapada Kolatha	4.8	09	23	220	• Use of local variety • Seed treatment with Vitavax power @ 2 gm per kg seed • Line sowing (with spacing 30x10 cm) • Seed inoculation	32	10	7.3	5.1	6.9	46.5	50.9	(-) 1.4

							with *Rhizobium* @ 20g/kg seed and soil application of PSB @ 6 kg/ha • Application of Boron @ 1kg/ha and Wettable Sulphur @ 1.5 kg/ ha • Soil test based fertilizer application • Spraying of neem oil @ 5 ml/ lit. twice at 15 days interval								
2	Field pea	Aman	7.2	40	-48	830	• Use of improved variety Aman with seed rate @ 50 kg/ha • Seed treatment with Vitavax power @ 2 gm per kg seed • Line sowing	60	20	12.9	10.2	11.7	72.1	52.34	(-) 24.5

							(with spacing 30x10 cm) • Seed inoculation with *Rhizobium* @ 20g/kg seed • Application of Boron @ 1kg/ha and Wettable Sulphur @ 1.5 kg/ ha • Soil test based fertilizer application (based on the recommended dose of 25:50:25 kg NPK / ha) • Spraying of Cartap Hydrochloride @ 1 gm/ lit. twice at 15 days interval								

3	Mustard	Uttra	4.5	18	15	550	• Use of improved variety Uttra, Seed rate @ 10 kg/ha, • Seed treatment with Vitavax power @ 2 gm per kg seed • Line sowing (with spacing 30x10 cm) • Application of Boron @ 1kg/ha, Soil test based fertilizer application (based on the recommended dose of 60:30:30 kg NPK/ ha) • Alternate sprayings of Thiomethoxan @ 5gm/15 liter of water and Neem	50	20	8.2	7.5	7.7	78.2	77.0	(-) 23.0

							oil @ 5 ml per liter								

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	• Use of local variety • Seed treatment with Vitavax power @ 2 gm per kg seed • Line sowing (with spacing 30x10 cm) • Seed inoculation with *Rhizobium* @ 20g/kg seed and soil application of PSB @ 6 kg/ha • Application of Boron @ 1kg/ha and Wettable Sulphur @ 1.5 kg/ ha • Soil test based fertilizer application • Spraying of neem oil @ 5 ml/ lit. twice at 15 days interval	11200	20880	9680	1.9	13300	30015	16715	2.3
2	• Use of improved variety Aman with seed rate @ 50 kg/ha • Seed treatment with	20800	38160	17360	1.8	27200	62010	34810	2.3

	Vitavax power @ 2 gm per kg seed • Line sowing (with spacing 30x10 cm) • Seed inoculation with *Rhizobium* @ 20g/kg seed • Application of Boron @ 1kg/ha and Wettable Sulphur @ 1.5 kg/ ha • Soil test based fertilizer application (based on the recommended dose of 25:50:25 kg NPK / ha) • Spraying of Cartap Hydrochloride @ 1 gm/ lit. twice at 15 days interval								
3	• Use of improved variety Uttra, Seed rate @ 10 kg/ha, • Seed treatment with Vitavax power @ 2 gm per kg seed • Line sowing (with spacing 30x10 cm) • Application of Boron @ 1kg/ha, Soil test based fertilizer application (based on the recommended dose of 60:30:30 kg NPK/ ha) • Alternate sprayings of Thiomethoxan @	11200	19350	8150	1.7	15600	33110	17510	2.1

	5gm/15 liter of water and Neem oil @ 5 ml per liter								

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	Horse gram, Var. Chakapada Kolatha	6900	185	43.50	15	15	To purchase household commodities and education for children	20
2	Field pea, Var. Aman	23400	342	53	28	20	To purchase household commodities and education for children	32
3	Mustard, Uttra	15400	276	43	20	12	To purchase household commodities and education for children	28

D. Oilseed Farmers' perception of the intervention demonstrated

Sl. No.	Technologies demonstrated (with name)	Farmers' Perception parameters					
		Suitability to their farming system	Likings (Preference)	Affordability	Any negative effect	Is Technology acceptable to all in the group/village	Suggestions, for change/improvement, if any
1	• Use of improved variety Uttra, Seed rate @ 10 kg/ha, • Seed treatment with Vitavax	Sustainable	Linked with KASAM, Phulbani for marketing	Affordable	NO	Yes	No

	power @ 2 gm per kg seed • Line sowing (with spacing 30x10 cm) • Application of Boron @ 1kg/ha, Soil test based fertilizer application (based on the recommended dose of 60:30:30 kg NPK/ ha) • Alternate sprayings of Thiomethoxan @ 5gm/15 liter of water and Neem oil @ 5 ml per liter						

E. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
Use of improved variety Uttra	Yield of the crop gave 71 % higher yield than the local check	Seed yield of mustard increased 18 % over local check	Farmers accepted this variety due to higher yield than local toria varieties
Seed treatment	The pest and disease incidences were found to be negligible at the early stage of the crop	Seed yield of mustard increased 06 % over local check	Farmers were convinced that, due to seed treatment the crop escaped early infestation of sucking pests and diseases
Line sowing	The branching was optimum and intercultural operations were easily performed	Seed yield of mustard increased 11.6 % over local check	Due to line sowing , the yield enhanced as well as it is very easy for intercultural operations
Soil test based fertilizer application	Due to STBFR, the crop got more flower, siliqua, bold seeds and yield	Seed yield of mustard increased 18.5 % over local check	Farmers were interested to use fertilizers and micronutrients as per soil test results
Use of PP chemicals at proper time and doses	The crop could manage all the	Seed yield of mustard increased 17 % over	Farmers were interested to use PP chemicals

	diseases and pest incidences throughout the cropping season	local check	at proper time and doses

F. Extension activities under FLD conducted:

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
1	Field day on Horse gram	28.12.2020, Vill.: Chakapada	50
2	Field day on Field pea var. Aman	12.02.2021, Vill. Kilakia 15.02.2021, Vill. Brainguda	200
3	Field day on Mustard var. Uttara	19.02.2021, Vill. Sujeli	50
4	Group meetings on Horse gram CFLD	05.10.2020, Vill.: Brahmanapada, Raipada & Chakapada	42
5	Group meetings on Field pea CFLD	19.11.2020, Vill. Kilakia, Brainguda, Malikapodi, Bearpanga	64
6	Group meetings on Mustard CFLD	04.11.2021, Vill.: Kiramaha, Gamuli, Penala, Telingia, Katadaganda	60

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

CFLD on Toria var. Uttara

CFLD on Horsegram

H. Farmers' training photographs

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

J. Details of budget utilization

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

3.3 Achievements on Training (Including the sponsored and FLD training programmes):

A) **Farmers and farm women (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
I. Crop Production													
Weed Management	2	2	1	3	2	1	3	47	7	54	51	9	60
Resource Conservation Technologies													
Cropping Systems													
Crop Diversification	1	1	0	1	3	1	4	18	5	23	22	8	30
Integrated Farming													
Water management													
Seed production													
Nursery management													
Integrated Crop Management	2	0	1	1	5	3	8	47	4	51	52	8	60
Fodder production													
Production of organic inputs													
Others, (cultivation of crops)													
II. Horticulture													
a) Vegetable Crops													
Integrated nutrient management													
Water management													

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
Enterprise development													
Skill development													
Yield increment													
Production of low volume and high value crops													
Off-season vegetables													
Nursery raising													
Export potential vegetables													
Grading and standardization													
Protective cultivation (Green Houses, Shade Net etc.)	1	1	0	1	0	0	0	29	0	29	30	0	30
Others, if any (Cultivation of Vegetable)													
Training and Pruning													
b) Fruits													
Layout and Management of Orchards													
Cultivation of Fruit													
Management of young plants/orchards													
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													

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
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	1	2	0	2	2	1	3	23	2	25	27	3	30
Soil and Water Conservation													
Integrated Nutrient Management	3	4	2	6	8	4	12	60	12	72	72	18	90
Production and use of organic inputs													
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency													
Soil and Water Testing													
Balanced Use of fertilizer	1	0	1	1	3	1	4	22	3	25	25	5	30
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													
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening													
Design and development of low/minimum cost diet													
Designing and development for high nutrient efficiency diet													
Minimization of nutrient loss in processing													
Gender mainstreaming through SHGs													
Storage loss minimization techniques													
Enterprise development													
Value addition	1	0	2	2	0	7	7	0	21	21	0	30	30
Income generation activities for empowerment of rural Women	3	0	5	5	0	23	23	0	62	62	0	90	90
Location specific drudgery reduction technologies	1	0	3	3	0	9	9	0	18	18	0	30	30
Rural Crafts													

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
Capacity building													
Women and child care													
Others, if any													
VI.Agril. Engineering													
Installation and maintenance of micro irrigation systems													
Use of Plastics in farming practices													
Production of small tools and implements													
Repair and maintenance of farm machinery and implements													
Small scale processing and value addition													
Post Harvest Technology													
Location specific drudgery reduction technology	3	5	3	8	10	0	10	12	60	72	27	63	90
Water Management	1	0	0	0	8	2	10	9	11	20	17	13	30
VII. Plant Protection													
Integrated Pest Management	2	2	1	3	2	1	3	47	7	54	51	9	60
Integrated Disease Management	2	0	1	1	5	3	8	47	4	51	52	8	60
Bio-control of pests and diseases	1	2	1	3	4	0	4	19	4	23	25	5	30
Production of bio control agents and bio pesticides	1	2	0	2	2	1	3	23	2	25	27	3	30
Others, if any													
VIII. Fisheries													
Integrated fish farming													
Carp breeding and hatchery management													
Carp fry and fingerling rearing													
Composite fish culture & fish disease													
Fish feed preparation & its application to fish pond, like nursery, rearing & stocking pond													
Hatchery management and culture of freshwater prawn													
Breeding and culture of ornamental fishes													
Portable plastic carp hatchery													
Pen culture of fish and prawn													
Shrimp farming													
Edible oyster farming													
Pearl culture													
Fish processing and value addition													
Others, if any													
IX. Production of Inputs at site													
Seed Production													

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
Planting material production													
Bio-agents production													
Bio-pesticides production													
Bio-fertilizer production													
Vermi-compost production													
Organic manures production													
Production of fry and fingerlings													
Production of Bee-colonies and wax sheets													
Small tools and implements													
Production of livestock feed and fodder													
Production of Fish feed													
Others, if any													
X. Capacity Building and Group Dynamics													
Leadership development													
Group dynamics													
Formation and Management of SHGs													
Mobilization of social capital													
Entrepreneurial development of farmers/youths													
WTO and IPR issues													
Others, if any													
XI Agro-forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													
XII. Others (Pl. Specify)													
TOTAL													

B) Rural Youth (on campus)

Thematic Area	**No. of Courses**	**No. of Participants**									**Grand Total**		
		Other			**SC**			**ST**					
		M	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**
Mushroom Production													
Bee-keeping													
Integrated farming													
Seed production	1	1	0	1	2	0	3	15	2	17	18	2	20
Production of organic inputs	5	3	1	4	12	3	15	69	12	81	84	16	100

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
Planting material production													
Vermi-culture	1	0	0	0	2	1	3	15	2	17	17	3	20
Sericulture													
Protected cultivation of vegetable crops													
Commercial fruit production													
Repair and maintenance of farm machinery and implements	1	0	0	0	2	0	2	18	0	18	20	0	20
Nursery Management of Horticulture crops	1	1	0	1	0	0	0	19	0	19	20	0	20
Training and pruning of orchards													
Value addition													
Production of quality animal products													
Dairying													
Sheep and goat rearing													
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Para vets													
Para extension workers													
Composite fish culture													
Freshwater prawn culture													
Shrimp farming													
Pearl culture													
Cold water fisheries													
Fish harvest and processing technology													
Fry and fingerling rearing													
Small scale processing													
Post Harvest Technology													
Tailoring and Stitching													
Rural Crafts													
Enterprise development													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Others if any (ICT application in agriculture)													
TOTAL	9												

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													
Rejuvenation of old orchards													
Protected cultivation technology													
Formation and Management of SHGs													
Group Dynamics and farmers organization													
Information networking among farmers													
Capacity building for ICT application													
Care and maintenance of farm machinery and implements													
WTO and IPR issues													
Management in farm animals													
Livestock feed and fodder production													
Household food security													
Women and Child care													
Low cost and nutrient efficient diet designing													
Production and use of organic inputs													
Gender mainstreaming through SHGs													
TOTAL													

D) Farmers and farm women (off campus)

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

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
I. Crop Production													
Weed Management	2	2	1	3	4	2	6	42	9	51	48	12	60
Resource Conservation Technologies	1	0	1	1	2	2	4	21	4	25	23	7	30
Cropping Systems	1	1	1	2	2	1	3	22	3	25	25	5	30
Crop Diversification													
Integrated Farming													
Water management													
Seed production													
Nursery management													
Integrated Crop Management	1	0	1	1	3	1	4	24	1	25			30
Fodder production													
Production of organic inputs													
Others, (cultivation of crops)													
II. Horticulture													
a) Vegetable Crops													
Integrated nutrient management													
Water management													
Enterprise development													
Skill development													
Yield increment													
Production of low volume and high value crops													
Off-season vegetables	1	0	0	0	7	0	7	11	2	13	18	2	20
Nursery raising													
Export potential vegetables													
Grading and standardization													
Protective cultivation (Green Houses, Shade Net etc.)													
Organic Vegetable Farming	1	2	1	3	1	0	1	17	9	26	20	10	30
Training and Pruning													
Cultivation of winter & under utilize vegetables	1	1	1	2	0	0	0	13	15	28	14	16	30
b) Fruits													
Layout and Management of Orchards													
Cultivation of Fruit													
Management of young plants/orchards													
Rejuvenation of old orchards													
Export potential fruits													
Micro irrigation systems of orchards													
Plant propagation techniques													
Others, if any(INM)													
c) Ornamental Plants													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Nursery Management													
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													
Cultivation & processing of Spices (Chilli, Hot pepper, Bell pepper, Black pepper)	1	0	0	0	0	0	0	23	7	30	23	7	30
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	2	3	1	4	2	1	3	44	9	53	49	11	60
Production and use of organic inputs													
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency	2	1	0	1	6	3	9	42	8	50	49	11	60
Soil and Water Testing													
Others, if any													
IV. Livestock Production and Management													
Dairy Management													
Poultry Management													
Piggery Management													
Rabbit Management													
Disease Management													

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
Feed management													
Production of quality animal products													
Others, if any Goat farming													
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening	1	0	2	2	0	5	5	0	23	23	0	30	30
Design and development of low/minimum cost diet													
Designing and development for high nutrient efficiency diet													
Minimization of nutrient loss in processing													
Gender mainstreaming through SHGs													
Storage loss minimization techniques	1	0	1	1	0	6	6	0	23	23	0	30	30
Enterprise development													
Value addition													
Income generation activities for empowerment of rural Women	2	0	3	3	0	12	12	0	45	45	0	60	60
Location specific drudgery reduction technologies													
Rural Crafts													
Capacity building													
Women and child care	1	0	2	2	0	7	7	0	21	21	0	30	30
Others, if any													
VI.Agril. Engineering													
Installation and maintenance of micro irrigation systems	1	2	3	5	2	8	10	12	3	15	16	14	30
Use of Plastics in farming practices													
Production of small tools and implements													
Repair and maintenance of farm machinery and implements	3	7	3	10	15	5	20	53	7	60	75	15	90
Small scale processing and value addition													
Post Harvest Technology													
Location specific drudgery reduction technology	3	10	3	13	17	10	27	45	5	50	72	18	90
VII. Plant Protection													
Integrated Pest Management	2	3	2	5	8	2	10	40	5	45	51	9	60
Integrated Disease Management	2	2	2	4	6	5	11	38	7	45	46	14	60
Bio-control of pests and diseases													
Production of bio control agents and bio pesticides													
Others, if any													
VIII. Fisheries													
Integrated fish farming													
Carp breeding and hatchery management													

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
Carp fry and fingerling rearing													
Composite fish culture & fish disease													
Fish feed preparation & its application to fish pond, like nursery, rearing & stocking pond													
Hatchery management and culture of freshwater prawn													
Breeding and culture of ornamental fishes													
Portable plastic carp hatchery													
Pen culture of fish and prawn													
Shrimp farming													
Edible oyster farming													
Pearl culture													
Fish processing and value addition													
Others, if any													
IX. Production of Inputs at site													
Seed Production													
Planting material production													
Bio-agents production													
Bio-pesticides production													
Bio-fertilizer production													
Vermi-compost production													
Organic manures production													
Production of fry and fingerlings													
Production of Bee-colonies and wax sheets													
Small tools and implements													
Production of livestock feed and fodder													
Production of Fish feed													
Others, if any													
X. Capacity Building and Group Dynamics													
Leadership development													
Group dynamics													
Formation and Management of SHGs													
Mobilization of social capital													
Entrepreneurial development of farmers/youths													
WTO and IPR issues													
Others, if any													
XI Agro-forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													

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
XII. Others (Pl. Specify)													
TOTAL													

E) RURAL YOUTH (Off Campus)

Thematic Area	**No. of Courses**	**No. of Participants**									**Grand Total**		
		Other			**SC**			**ST**					
		M	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**	**M**	**F**	**T**
Mushroom Production													
Bee-keeping													
Integrated farming													
Seed production													
Production of organic inputs													
Integrated Farming													
Planting material production													
Vermi-culture													
Sericulture													
Protected cultivation of vegetable crops													
Commercial fruit production													
Repair and maintenance of farm machinery and implements													
Nursery Management of Horticulture crops													
Training and pruning of orchards													
Value addition													
Production of quality animal products													
Dairying													
Sheep and goat rearing													
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Para vets													
Para extension workers													
Composite fish culture													
Freshwater prawn culture													
Shrimp farming													
Pearl culture													

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
Cold water fisheries													
Fish harvest and processing technology													
Fry and fingerling rearing													
Small scale processing													
Post Harvest Technology													
Tailoring and Stitching													
Rural Crafts													
Others, if any													
TOTAL													

F) Extension Personnel (Off Campus)

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

G) Consolidated table (ON and OFF Campus)

i. Farmers & Farm Women

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
I. Crop Production													
Weed Management	4	4	2	6	6	3	9	89	16	105	99	21	120
Resource Conservation Technologies	1	0	1	1	2	2	4	21	4	25	23	7	30
Cropping Systems	1	1	1	2	2	1	3	22	3	25	25	5	30
Crop Diversification	1	1	0	1	3	1	4	18	5	23	22	8	30
Integrated Farming													
Water management													
Seed production													
Nursery management													
Integrated Crop Management	3	0	2	3	8	4	12	71	5	76	79	11	90
Fodder production													
Production of organic inputs													
Others, (cultivation of crops)													
TOTAL													
II. Horticulture													
a) Vegetable Crops													
Integrated nutrient management													
Water management													
Enterprise development													
Skill development													
Yield increment													
Production of low volume and high value crops													
Off-season vegetables	1	0	0	0	7	0	7	11	2	13	18	2	20
Nursery raising													
Exotic vegetables like Broccoli													
Export potential vegetables													
Grading and standardization													
Protective cultivation (Green Houses, Shade Net etc.)	1	1	0	1	0	0	0	29	0	29	30	0	30

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
Organic Vegetable Farming	1	2	1	3	1	0	1	17	9	26	20	10	30
Training and Pruning													
Cultivation of winter & under utilize vegetables	1	1	1	2	0	0	0	13	15	28	14	16	30
TOTAL													
b) Fruits													
Training and Pruning													
Layout and Management of Orchards													
Cultivation of Fruit													
Management of young plants/orchards													
Rejuvenation of old orchards													
Export potential fruits													
Micro irrigation systems of orchards													
Plant propagation techniques													
Others, if any(INM)													
TOTAL													
c) Ornamental Plants													
Nursery Management													
Management of potted plants													
Export potential of ornamental plants													
Propagation techniques of Ornamental Plants													
Others, if any													
TOTAL													
d) Plantation crops													
Production and Management technology													
Processing and value addition													
Others, if any													
TOTAL													
e) Tuber crops													
Production and Management technology													
Processing and value addition													
Others, if any													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
TOTAL													
f) Spices													
Production and Management technology													
Processing and value addition													
Cultivation & processing of Spices (Chilli, Hot pepper, Bell pepper, Black pepper)	1	0	0	0	0	0	0	23	7	30	23	7	30
TOTAL													
g) Medicinal and Aromatic Plants													
Nursery management													
Production and management technology													
Post harvest technology and value addition													
Others, if any													
TOTAL													
III. Soil Health and Fertility Management													
Soil fertility management	1	2	0	2	2	1	3	23	2	25	27	3	30
Soil and Water Conservation													
Integrated Nutrient Management	5	7	3	10	10	5	15	104	21	125	121	29	150
Production and use of organic inputs													
Management of Problematic soils													
Micro nutrient deficiency in crops													
Nutrient Use Efficiency	2	1	0	1	6	3	9	42	8	50	49	11	60
Soil and Water Testing													
Balanced Use of Fertilizer	1	0	1	1	3	1	4	22	3	25	25	5	30
TOTAL													
IV. Livestock Production and Management													
Dairy Management													
Poultry Management													
Piggery Management													
Rabbit Management													
Disease Management													
Feed management													
Production of quality animal products													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Others, if any (Goat farming)													
TOTAL													
V. Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening	1	0	2	2	0	5	5	0	23	23	0	30	30
Design and development of low/minimum cost diet													
Designing and development for high nutrient efficiency diet													
Minimization of nutrient loss in processing													
Gender mainstreaming through SHGs													
Storage loss minimization techniques	1	0	1	1	0	6	6	0	23	23	0	30	30
Enterprise development													
Value addition													
Income generation activities for empowerment of rural Women	3	0	5	5	0	19	19	0	66	66	0	90	90
Location specific drudgery reduction technologies	3	0	5	5	0	23	23	0	62	62	0	90	90
Rural Crafts	1	0	3	3	0	9	9	0	18	18	0	30	30
Capacity building													
Women and child care	1	0	2	2	0	7	7	0	21	21	0	30	30
Others, if any													
TOTAL													
VI. Agril. Engineering													
Installation and maintenance of micro irrigation systems	1	2	3	5	2	8	10	12	3	15	16	14	30
Use of Plastics in farming practices													
Production of small tools and implements													
Repair and maintenance of farm machinery and implements	3	7	3	10	15	5	20	53	7	60	75	15	90
Small scale processing and value addition													
Post Harvest Technology													
Location specific drudgery reduction technology	6	15	6	21	27	10	37	57	65	137	99	81	180
Water Management	1	0	0	0	8	2	10	9	11	20	17	13	30
TOTAL													
VII. Plant Protection													

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
Integrated Pest Management	4	5	3	8	10	3	13	87	12	99	102	18	120
Integrated Disease Management	4	2	3	5	11	8	19	85	11	96	98	22	120
Bio-control of pests and diseases	1	2	1	3	4	0	4	19	4	23	25	5	30
Production of bio control agents and bio pesticides	1	2	0	2	2	1	3	23	2	25	27	3	30
Others, if any													
TOTAL													
VIII. Fisheries													
Integrated fish farming													
Carp breeding and hatchery management													
Carp fry and fingerling rearing													
Composite fish culture & fish disease													
Fish feed preparation & its application to fish pond, like nursery, rearing & stocking pond													
Hatchery management and culture of freshwater prawn													
Breeding and culture of ornamental fishes													
Portable plastic carp hatchery													
Pen culture of fish and prawn													
Shrimp farming													
Edible oyster farming													
Pearl culture													
Fish processing and value addition													
Others, if any													
TOTAL													
IX. Production of Inputs at site													
Seed Production													
Planting material production													
Bio-agents production													
Bio-pesticides production													
Bio-fertilizer production													
Vermi-compost production													
Organic manures production													
Production of fry and fingerlings													

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Production of Bee-colonies and wax sheets													
Small tools and implements													
Production of livestock feed and fodder													
Production of Fish feed													
Others, if any													
TOTAL													
X. Capacity Building and Group Dynamics													
Leadership development													
Group dynamics													
Formation and Management of SHGs													
Mobilization of social capital													
Entrepreneurial development of farmers/youths													
WTO and IPR issues													
Others, if any													
TOTAL													
XI Agro-forestry													
Production technologies													
Nursery management													
Integrated Farming Systems													
TOTAL													
XII. Others (Pl. specify)													
TOTAL	55												

ii. RURAL YOUTH (On and Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST					
		M	F	T	M	F	T	M	F	T	M	F	T
Mushroom Production													
Bee-keeping													
Integrated 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
Seed production	1	1	0	1	2	0	3	15	2	17	18	2	20
Production of organic inputs	5	3	1	4	12	3	15	69	12	81	84	16	100
Planting material production													
Vermi-culture	1	0	0	0	2	1	3	15	2	17	17	3	20
Sericulture													
Protected cultivation of vegetable crops													
Commercial fruit production													
Repair and maintenance of farm machinery and implements	1	0	0	0	2	0	2	18	0	18	20	0	20
Nursery Management of Horticulture crops	1	1	0	1	0	0	0	19	0	19	20	0	20
Training and pruning of orchards													
Value addition													
Production of quality animal products													
Dairying													
Sheep and goat rearing													
Quail farming													
Piggery													
Rabbit farming													
Poultry production													
Ornamental fisheries													
Para vets													
Para extension workers													
Composite fish culture													
Freshwater prawn culture													
Shrimp farming													
Pearl culture													
Cold water fisheries													
Fish harvest and processing technology													
Fry and fingerling rearing													
Small scale processing													
Post Harvest Technology													
Tailoring and Stitching													

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
Rural Crafts													
Enterprise development													
Others if any (ICT application in agriculture)													
TOTAL	9												

iii. Extension Personnel (On and Off Campus)

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

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

Discipline	Clientele	Title of the training programme	Duration in days	Venue (Off / On Campus)	Number of participants			Number of SC/ST		
					Male	Female	Total	Male	Female	Total
Crop Production	Farmers/Farm women	Package of practices for high value rice cultivation	2	On	20	10	30	16	10	26
	Farmers/Farm women	Integrated weed management in groundnut	1	Off	13	17	30	11	15	26
	Farmers/Farm women	Package of practices for finger millet cultivation	1	Off	21	9	30	18	9	27
	Farmers/Farm women	Package of practices for SRI method of rice cultivation	2	On	18	12	30	15	10	25
	Farmers/Farm women	Integrated weed management in transplanted rice	1	Off	20	10	30	17	9	26
	Farmers/Farm women	Production techniques for hybrid maize cultivation	1	Off	19	11	30	19	11	30
	Farmers/Farm women	Package of practices for Sunflower cultivation	1	Off	17	13	30	15	13	28
	Farmers/Farm women	Cultivation of field pea in Paira cropping	2	On	16	14	30	14	14	28
	Farmers/Farm women	Importance of green manuring for soil health improvement	1	Off	18	12	30	16	10	26
	Farmers/Farm women	Production technique for maize : groundnut intercropping	2	On	18	12	30	15	11	26
	Farmers/Farm women	Importance & use of Thiourea in mustard crop	1	Off	15	15	30	15	12	27
	Farmers/Farm women	Integrated weed management in garden pea	1	Off	19	11	30	18	10	28
	Farmers/Farm women	Importance o & use of herbicides in upland situations	1	Off	14	16	30	9	16	25

Soil Health and Fertility Management	Farmers/Farm women	Green manure crops and their uses for soil health management	2	On	23	7	30	21	6	27
	Farmers/Farm women	Rainwater management for increased crop productivity	1	Off	23	7	30	22	6	28
	Farmers/Farm women	Integrated nutrient management practices for chilli cultivation	1	Off	22	8	30	21	7	28
	Farmers/Farm women	Balanced use of fertilizers and organic manure in rice cultivation	2	On	21	9	30	18	8	26
	Farmers/Farm women	Integrated nutrient management practices for off-season vegetable cultivation	1	Off	20	10	30	17	7	24
	Farmers/Farm women	Integrated nutrient management practices for oilseed cultivation	2	On	18	12	30	14	10	24
	Farmers/Farm women	Balanced use of fertilizers and organic manure in pulse cultivation	2	On	19	11	30	15	7	22
	Farmers/Farm women	Integrated nutrient management practices for potato cultivation	1	Off	20	10	30	18	8	26
	Farmers/Farm women	Integrated nutrient management practices for cole	2	On	21	9	30	18	7	25

		crops								
	Farmers/Farm women	Use and importance of water soluble fertilizers in major crops grown in Kandhamal district	1	Off	22	8	30	20	5	25
	Farmers/Farm women	Importance of soil and water testing for sustainable agriculture	1	On	22	8	30	20	7	27
	Farmers/Farm women	Management of acid soil for higher crop productivity	1	On	22	8	30	20	6	26
Horticulture	Farmers/Farm women	Off season tomato farming	2	On	23	7	30	20	7	27
	Farmers/Farm women	Organic vegetable farming and its marketing management.	2	Off	22	8	30	19	7	26
	Farmers/Farm women	Cultivation of Kharif Onion	2	On	24	6	30	21	5	26
	Farmers/Farm women	Trelis management in runner vegetables	2	On	19	11	30	17	9	26
	Farmers/Farm women	Cultivation of winter & under utilise vegetables	2	Off	22	8	30	22	8	30
	Farmers/Farm women	Cultivation of alternative high value crops	2	Off	18	12	30	16	11	27
	Farmers/Farm women	Improve method of cultivation of Tikabali potato.	2	Off	19	11	30	19	11	30
	Farmers/Farm women	Management of fruit orchard	2	On	22	8	30	20	7	27
	Farmers/Farm women	Planting mechanism in fruit crops.	2	Off	20	10	30	18	8	26
	Farmers/Farm women	Cultivation and seed tuber multiplication of Tuber crops (Sweet potato, Yam, Colocasia, EFY)	1	Off	18	12	30	16	12	28

	Farmers/Farm women	Cultivation & processing of Spices (Chilli, Hot pepper, Bell pepper, Black pepper)	2	Off	17	13	30	15	13	28
	Farmers/Farm women	Cultivation of high market demand flowers & its marketing.	2	On	21	9	30	19	7	26
Agricultural Engineering	Farmers/Farm women	Operation on bullock drawn farm implements	1	On	22	8	30	20	7	27
	Farmers/Farm women	Operation of bullock drawn puddler	1	Off	25	5	30	22	5	27
	Farmers/Farm women	Operation of power tiller for puddling	1	On	19	11	30	16	10	26
	Farmers/Farm women	Operation of drum seeder for direct sowing of paddy	1	Off	22	8	30	21	6	27
	Farmers/Farm women	Different drudgery reducing farm implements for women	1	Off	25	5	30	22	5	27
	Farmers/Farm women	Use of different plant protection equipments	1	On	23	7	30	21	5	26
	Farmers/Farm women	Small harvesting implements	1	Off	24	6	30	23	4	27
	Farmers/Farm women	Use of manual vegetable transplanter	1	Off	20	10	30	19	7	26
	Farmers/Farm women	Use of micro irrigation system in horticulture crops	1	On	27	3	30	24	3	27
	Farmers/Farm women	Use of different intercultural implements in vegetable crop	1	Off	24	6	30	22	5	27
	Farmers/Farm women	Operation of power weeder in vegetables	1	Off	21	9	30	20	7	27
	Farmers/Farm women	Water management techniques for soil moisture conservation	1	On	20	10	30	18	6	24
	Farmers/Farm women	Use of turmeric boiler for drudgery reduction	1	Off	19	11	30	17	8	25
Home Science	Farmers/Farm women	Use of indigenous techniques for staring grains	1	Off	0	30	30	0	30	30
	Farmers/Farm women	Cultivation practices of paddy straw mushrooms	2	On	0	30	30	0	25	25

	Farmers/Farm women	Planning and layout of nutritional garden	2	On	0	30	30	0	26	26
	Farmers/Farm women	Inclusion of high fibber millets in regular food of children and women	1	Off	0	30	30	0	25	25
	Farmers/Farm women	Use of small implements for drudgery reduction of farm woman	1	Off	0	30	30	0	26	26
	Farmers/Farm women	Value addition of tomato for additional income generation	2	On	0	30	30	0	26	26
	Farmers/Farm women	Cultivation practices of oyster mushroom	2	On	0	30	30	0	26	26
	Farmers/Farm women	Improved backyard poultry rearing	1	On	0	30	30	0	25	25
	Farmers/Farm women	Value addition of tomato for additional income generation	2	On	0	30	30	0	27	27
Plant protection	Farmers/Farm women	IDM in Ragi & other millets	2	Off	23	7	30	23	7	30
	Farmers/Farm women	IPM in Black gram & Green gram	2	Off	22	8	30	22	8	30
	Farmers/Farm women	IPM in Toria	2	On	20	10	30	20	10	30
	Farmers/Farm women	IPM in solanaceous crops	2	On	24	6	30	24	6	30
	Farmers/Farm women	IDM in solanaceous crops	2	Off	22	8	30	22	8	30
	Farmers/Farm women	IDM in Okra	2	Off	23	7	30	23	7	30
	Farmers/Farm women	IPM in cole crops	2	On	21	9	30	21	9	30
	Farmers/Farm women	IDM in cole crops	2	On	20	10	30	20	10	30
	Farmers/Farm women	Management of fruit fly in Mango	1	On	21	9	30	21	9	30
	Farmers/Farm women	IDM in Turmeric and Ginger	2	On	23	7	30	23	7	30
	Farmers/Farm women	IPM in Banana	2	Off	25	5	30	25	5	30
	Farmers/Farm women	IPDM in nurseries during Kharif season	2	On	22	8	30	22	8	30

H) Vocational training programmes for Rural Youth

Details of training programmes for Rural Youth

Crop / Enterprise	Identified Thrust Area	Training title*	Duration (days)	No. of Participants			Self-employed after training			Number of persons employed else where
				Male	Female	Total	Type of units	Number of units	Number of persons employed	
Vermicompost	Production and use of organic inputs	Practices and skill in production of vermicompost and vermin wash	4	14	6	20			04	
Azolla	Production and use of organic inputs	Production techniques and uses of Azolla for soil health management	2	11	9	20			05	
Earthworm	Vermi-culture	Practices and skill in production of earthworm & maintenance of vermiculture unit	2	11	9	20			03	
Organic inputs	Production and use of organic inputs	Production technique for different organic inputs	2	11	9	20			02	
Seed production	Seed production	Quality Seed Production technique	2	16	4	20			05	
Farm machinery	Repair and maintenance of farm machinery	Operation of power-tiller for wet & dry tillage	2	20	0	20			04	
Fruits	Nursery management	Entrepreneurship development in production of fruit saplings.	3	14	6	20			03	
Fruits	Production of fruit saplings	Grafting & budding technology in fruits.	4	20	0	20			03	
Organic inputs	Production and use of organic inputs	Production of bio-concentrates with locally available products for use in organic farming	3	15	5	20			05	

Sponsored Training Programmes

Sl. No	Title	Thematic area	Month	Duration (days)	Client PF/RY/ EF	No. of courses	No. of Participants									Sponsoring Agency
							Male			Female			Total			
							Others	SC	ST	Others	SC	ST	Others	SC	ST	Total	
1	Organic turmeric cultivation, certification process and marketing	Organic Farming	February, 2021	05	PF	1	0	0	12	0	2	6	0	2	18	20	Dept. of Biotechnology, Ministry of Science & Technology, GoI
2	Off-season vegetable cultivation	Integrated Crop Management	February, 2021	05	PF	1	0	2	13	0	1	4	0	3	17	20	Dept. of Biotechnology, Ministry of Science & Technology, GoI
3	Production technique of various organic inputs for use in organic farming	Production and use of organic inputs	February, 2021	05	PF	1	0	2	12	0	1	5	0	3	17	20	Dept. of Biotechnology, Ministry of Science & Technology, GoI
4	Entrepreneurship development through mushroom production	Small scale income generation activities	March, 2021	05	PF	1	0	0	5	2	3	10	2	3	15	20	Dept. of Biotechnology, Ministry of Science & Technology, GoI
5	Backyard poultry rearing for sustainable livelihood	Small scale income generation activities	March, 2021	05	PF	1	0	0	3	1	1	15	1	1	18	20	Dept. of Biotechnology, Ministry of Science & Technology, GoI

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

Nature of Extension Activity	No. of activities	Farmers				Extension Officials			Total		
		M	F	T	SC/ ST (% of total)	Male	Female	Total	Male	Female	Total
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Field Day	13	528	122	650	89	12	07	19	540	129	669
KisanMela	02	102	48	150	93	04	01	05	106	49	155
KisanGhosthi	0								0	0	0
Exhibition	03	138	26	164	95	07	04	11	145	30	175
Film Show	13	233	39	272	97	04	0	04	237	39	276
Method Demonstrations	17	152	29	181	87	06	03	09	158	32	190
Farmers Seminar	01	25	05	30	88	03	01	04	28	6	34
Workshop	02	0	60	60	97	02	02	04	2	62	64
Group meetings	19	179	49	228	94	04	01	05	183	50	233
Lectures delivered as resource persons	42	1050	630	1680	92	22	8	30	1072	638	1710
Advisory Services	53	1122	521	1643	86	18	06	24	1140	527	1667
Scientific visit to farmers field	126	632	250	882	91	24	08	32	656	258	914
Farmers visit to KVK	690	518	172	690	82	0	0	0	518	172	690
Diagnostic visits	78	443	103	546	80	15	05	20	458	108	566
Exposure visits	01	17	03	20	96	0	0	0	17	3	20
Ex-trainees Sammelan	0								0	0	0
Soil health Camp	04	96	24	120	91	04	01	05	100	25	125
Animal Health Camp	02	37	23	60	89	02	02	04	39	25	64
Agri mobile clinic	02	36	24	60	91	03	02	05	39	26	65
Soil test campaigns	01	17	03	20	96	03	0	03	20	3	23
Farm Science Club Conveners meet	0								0	0	0
Self Help Group Conveners meetings	02	0	60	60	83	05	0	05	5	60	65
Mahila Mandals Conveners meetings	0								0	0	0
Celebration of important days (specify)	6	85	57	142	92	04	02	6	89	59	148
Sankalp Se Siddhi	0								0	0	0
Swatchta Hi Sewa	22	236	36	272	90	09	05	14	245	41	286
Mahila Kisan Divas	01	0	50	50	89	01	02	03	1	52	53

Posan Abhiyan	01	0	100	100	96	01	05	06	1	105	106
Total	1101	5646	2434	8080	2084	153	65	218	5799	2499	8298

B. Other Extension activities

Nature of Extension Activity	No. of activities
Newspaper coverage	08
Radio talks	0
TV talks	0
Popular articles	07
Extension Literature	06
Other, if any	0

3.5 a. Production and supply of Technological products

Village seed

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

KVK farm

Crop	Variety	Quantity of seed (q)	Value (Rs)	Number of farmers to whom seed provided			
				SC	ST	Other	Total
Toria	Sushree	5.8	40120	-	-	-	-
Niger	Utkal Niger – 150	4.35	46110	-	-	-	-
Grand Total		10.15	86230	-	-	-	-

Production of planting materials by the KVKs

Crop		Variety	No. of planting materials	Value (Rs)	Number of farmers to whom planting material provided			
					SC	ST	Other	Total
Vegetable seedlings								
Cauliflower		Madhuri	5200	7800	-	08	-	08
Cabbage		Hare Krishna	6300	9450	-	09	-	09
Tomato		NS-592	2200	3300	01	03	-	04
Brinjal		Blue Star	800	1200	02	06	05	13
Chilli		Suryamukhi	2700	4050	01	10	03	14
Onion								
Others	Drumstick	PKM-1	415	6225	04	14	05	23
	Broccoli	F1 Mario	1200	1800	01	05	01	07
Fruits								
Mango								
Guava								
Lime								
Papaya		Honey Dew	150	1500	02	07	01	10
Banana								
Others								
Ornamental plants								
Medicinal and Aromatic								
Plantation								
Spices								
Turmeric		Roma	50.0	175000	08	19	05	32
Turmeric		Rajendra Sonia	6.0	21000	02	06	0	08
Turmeric		Rasmi	6.5	22750	03	06	01	10
Tuber								
Elephant yams								
Fodder crop saplings								
Forest Species								
Mushroom Spawn		Oyster & Paddy Straw Mushroom	6150	92250	14	106	12	132
Total			25178	337125	38	199	33	270

Production of Bio- product by KVKs

Bio -product	Name of the Bio - product	Quantity (no.)	Quantity (Kg.)	Value (Rs.)	Number of farmers	Quantity (no.)	Quantity (Kg.)	Value (Rs.)	Number of farmers	Quantity (no.)	Quantity (Kg.)	Value (Rs.)	Number of farmers	Quantity (no.)	Quantity (Kg.)	Value (Rs.)	Number of farmers
Bio-fertilisers		**A&N Islands**				**Odisha**				**West bengal**				**Total**			
Non Symbiotic Azotobacter																	
Vermi compost							10366	155490	80								
Azolla							20	200	2								
Earth worms							30.5	15250	13								
Compost							700	10500	2								
Worms																	
Blue green algae																	
NADEP																	
Azatobactor																	
Azospirillum																	
PSB																	
Rhizobium																	
Azolla culture																	
Total							11116.5	181440	97								
Bio-pestisides																	
Neem extract																	
Tobacco extract																	
Trichoder-maviride																	
Panchagavya																	
Trichoderma																	
Total																	
Worms																	
Eudriluseunia e																	

Bio -product	Name of the Bio - product	Quantity (no.)	Quantity (Kg.)	Value (Rs.)	Number of farmers	Quantity (no.)	Quantity (Kg.)	Value (Rs.)	Number of farmers	Quantity (no.)	Quantity (Kg.)	Value (Rs.)	Number of farmers	Quantity (no.)	Quantity (Kg.)	Value (Rs.)	Number of farmers
Bio-fertilisers		**A&N Islands**				**Odisha**				**West bengal**				**Total**			
Total																	
Earth worm																	
Eiseniafoetida																	
Earth worm																	
Total																	
Bio-fungicides																	
Trichoder maviridae																	
Total																	
others																	
Vermiculture																	
Mushroom-spawn						6867		103005	167								
Cuelure																	
Mineral mixture																	
Cow dung(dry)																	
Cow dung(wet)																	
Total																	
Grand Total						6867	11116.5	284445	264								

Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers benefitted			
				SC	ST	Other	Total
Dairy animals							
Cows							
Buffaloes							

Calves				
Others (Pl. specify)				
Small ruminants				
Sheep				
Goat				
Other, please specify				
Poultry				
Broilers				
Layers				
Duals (broiler and layer)	Banraja	400	24000	20
Japanese Quail				
Turkey				
Emu				
Ducks				
Others (Pl. specify)				
Piggery				
Piglet				
Hog				
Others (Pl. specify)				
Fisheries				
Indian carp				
Exotic carp				
Mixed carp				
Fish fingerlings				
Spawn				
Others (Pl. specify)				
Grand Total		400	24000	20

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

i) Name of Seed Hub Centre:

Name of Nodal Officer :	
Address :	
e-mail :	

Phone No. : Mobile :	

ii) Details of Quality Seed Production

Season	Crop	Variety	Production (q)			
			Target	Area sown (ha)	Production	Category of Seed (F/S, C/S)
Kharif 2020						
Rabi 2020-21						
Summer/Spring 2021						

iii) Financial Progress

Fund received (2016-17, 2017-18 2018-19 and2019-20)	Expenditure (Rs. in lakhs)		Unspent balance (Rs. in lakhs)	Remarks
	Infrastructure	Revolving fund		
2016-17				
2017-18				
2018-19				
2019-20				

iv) Infrastructure Development

Item	Progress
Seed processing unit	
Seed storage structure	

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

Item	Title	Author's name	Number	Circulation
Research paper				
Seminar/conference/ symposia papers				
Books				
Bulletins				
News letter	The Kalinga	KVK, Kandhamal	500	500
Popular Articles				
Book Chapter				
Extension Pamphlets/ literature				
Technical reports				
Electronic Publication (CD/DVD etc)				
TOTAL			500	500

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.					
2.					
3.					
4.					
5.					
6.					
7.					

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

Name of farmer	Sri Janardan Pradhan
Address	Vill-Penala, Po-Gressingia, Block-Tikabali
Contact details (Phone, mobile, email Id)	8763925859, 6383291286
Landholding (in ha.)	0.4 ha

Name and description of the farm/ enterprise	He is cultivating various vegetables like tomato, brinjal and cucurbits following traditional practices. Under Biotech KISAN project, KVK included Mr. Pradhan as a beneficiary under the activity of cultivation of off-season chilli during Kharif 2020. He was adviced to conduct the demonstration which included, use of highly pungent HYV chilli, var. Suryamukhi with tolerance to wilt & thrips, application of Vermicompost @ 5 qtl/ha, soil test based fertilizer & micronutrient application and application of VAM @ 20 kg/ha & bio-consortia @ 12 kg/ha and following need based plant protection measures.
Economic impact	After completion of the crop period, it was found that, Mr. Pradhan could able to harvest a total of 64.4 qtl green chilli from his 0.4 ha land which accounts to a yield of about 161.2 q/ha, with reduced disease and pest incidence. He got a higher price of Rs. 5,000/- per qtl due to more market demand in the peak season as well as the high pungency character of the variety. He got a net profit of Rs.2,11,000/- from his 0.4 ha land which was around 65 % more than the traditional practice followed by other farmers in his village
Social impact	The outcome of the demonstration has motivated the other nearby farmers to adopt chilli cultivation with recommended package of practices during off-season period to fetch more and more net profit. Mr. Pradhan's success was recognized by many leading farmers, govt. officials and other NGOs during the crop period and got him lots of confidence. He also got selected for getting fellowship under the BioTech KISAN project during 2020-21 by district selection committee.
Environmental impact	He has developed a waste land of 0.4 ha into a very good irrigated productive land and has developed a vermicompost unit which recycles the bio-waste to make the environment clean.
Horizontal/ Vertical spread	54 ha

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

Sl. No.	Name/ Title of the technology	Name/ Details of the Innovator(s)	Brief details of the Innovative Technology

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

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

b. Give details of organic farming practiced by the farmer

Sl. No.	Crop / Enterprise	Area (ha)/ No. covered	Production	No. of farmers involved	Market available (Y/N)
1	Turmeric	1220 ha	103700 q	184	Yes

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

Sl. No.	Brief details of the tool/ methodology followed	Purpose for which the tool was followed
1	SWOT Analysis & PRA Survey at village level	To formulate action plan of KVK, Kandhamal

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

Sl. No	Name of the Equipment	Qty.
1	Automatic Nitrogen estimation System (KELPLUS) with accessories a. Manoblock Digestion System. b. Acidic Neutralizer Scrubber Unit. c. Automatic Nitrogen Distillation System. d. Electronic Titration System	1
2	Flame Photometer	1
3	Spectro Photometer	1
4	Plant Sample Grinder	1
5	Hot Water Bath	1
6	Horizontal Shaker	1
7	Distilled Water Unit(Stainless Steel)	1
8	Hot Air Oven	1
9	Laboratory Centrifuge	1
10	Microscope(Olympus)	1
11	Microscope(Olympus)Ms-13	1
12	BOD Incubator	1
13	Elico PH Meter	1
14	Conductivity Meter	1
15	Refrigerator	1
16	Electronic Top Pan Balance	1
17	Physical Balance	1

18	Mechanical Stirrer	1
19	Colony Counter	1
20	Hot Plate	1
21	Voltage Stabilizer	1
22	Single Distillation Unit	1

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			
456	627	1083	1083	23	5415

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	Soil Health Card Distribution, Exhibition, Farmers-Scientist interaction	75	08		25	25

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

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

3.13. Technology week celebration

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

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

No of student trained	No of days stayed
04	10

ARS trainees trained	No of days stayed

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

Date	Name of the person	Purpose of visit
31.12.2020	Prof. Pawan Kumar Agarwal, Vice-Chancellor, OUAT, Bhubaneswar	To review the activities of KVK, Kandhamal
31.12.2020	Prof. L.M. Garanayak, Dean Extension Education, OUAT, Bhubaneswar	To review the activities of KVK, Kandhamal

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)
Use of lime for management of acid soil	2800	83	15800	21330
Vermicomposting	40	87	-	3000
INM in Off- season cauliflower cultivation: ▪ Soil test based N:P2O5:K2O application ▪ Use of FYM @ 5 t/ha and ▪ Soil application of boron @ 0.5 kg/ha at the time of planting and two foliar sprays of borax @ 0.25% at 15 days interval from 30 days after transplanting	40	67	52800	67056
INM in Groundnut: Application of lime @0.2 LR mixed with FYM @ 2 t/ha applied in the seed zone on the day of sowing + Soil test based fertilizer dose + boron as Solubor @ 10 kg/ha and Sulphur @ 40 kg/ha applied at the time of sowing	40	71	22300	29213

Organic nutrient management in Turmeric cultivation: FYM 10 t/ha + mulching with dry sal leaves @ 12.5 t/ha +Bio-fertilizers : Azotobacter, Azospirillum and PSB each @ 4 kg/ha + Neem cake 0.5/ha at the time of planting	95	86	56900	71125
INM in Garden pea: Application of lime @0.2 LR mixed with FYM @ 2 t/ha applied in the seed zone on the day of sowing. Sulphur @ 20 kg/ha and Boron @ 1 kg/ha applied at the time of sowing, one third dose of nitrogen and full dose of phosphorus and potassium applied at the time sowing and rest dose of nitrogen applied in two equal splits at 25 and 40 DAS.	45	63	80700	108138
Backyard poultry rearing: Rearing 20 nos. of Rainbow Rooster bird for 3 - 4 months with proper feeding schedule and vaccination	40	84	3000	5200
IDM of phloem necrosis/black rot in Cauliflower: Seed soaking with Streptocycline solution @ 200 ppm, Spraying of Streptocycline @ 200 ppm + COC @ 0.2 % twice at 15 days interval starting at 25 DAT	55	62	74500	90145
Management of powdery mildew in Garden pea: Spraying of Propiconazole 5%EC @ 0.1% twice at 10 days interval at flowering stage as prophylactic measure	40	66	80700	99261
Paddy straw mushroom cultivation	80	71	900	1500

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

Give information in the same format as in case studies

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

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

4.4. Details of innovations recorded by the KVK

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

4.5. Details of entrepreneurship development

Entrepreneurship development	
Name of the enterprise	
Name & complete address of the entrepreneur	
Role of KVK with quantitative data support:	
Timeline of the entrepreneurship development	
Technical Components of the Enterprise	
Status of entrepreneur before and after the enterprise	
Present working condition of enterprise in terms of raw materials availability, labour availability, consumer preference, marketing the product etc. (Economic viability of the enterprise):	
Horizontal spread of enterprise	

4.6. Any other initiative taken by the KVK

5. LINKAGES

5.1. Functional linkage with different organizations

Name of organization	Nature of linkage
ATMA	Technical guidance, imparting training programmes
Dept. of Watershed	Technical guidance, imparting training programmes
Dept. of Agriculture and food production	Technical guidance, imparting training programmes, Demonstration
Dept of Horticulture	Technical guidance, imparting training programmes, Demonstration
Dept. of fisheries and animal research development	Technical guidance, imparting training programmes, Demonstration

5.2. List of special programmes undertaken during 2020-21 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.)
Establishment of Biotech KISAN Hub at OUAT, Bhubaneswar funded by Department of Biotechnology, Ministry of Science & Technology, GoI	• To apply and disseminate location-specific, clientele-specific and problem solving technological solutions the small and marginal farmers including farm women. • To establish networking of farmers-scientist through physical and digital space. • To develop band of farmers-scientist as connoisseur of agri-tech agents to provide last mile service.	07.07.2020	Department of Biotechnology, Ministry of Science & Technology, GoI	2500000

(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.)

Demonstration on organic turmeric cultivation and marketing	FLD	07.07.2020	Department of Biotechnology, Ministry of Science & Technology, GoI	320000
Demonstration on high yielding backyard Poultry rearing	FLD	07.07.2020	Department of Biotechnology, Ministry of Science & Technology, GoI	200000
Demonstration of mushroom cultivation throughout the year	FLD	07.07.2020	Department of Biotechnology, Ministry of Science & Technology, GoI	140000
Demonstration on vegetable cultivation and marketing	FLD	07.07.2020	Department of Biotechnology, Ministry of Science & Technology, GoI	340000
Training	Training	10.11.2020	Department of Biotechnology, Ministry of Science & Technology, GoI	200000

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	Vermicompost	2018-19	60	*E. foetida*	Vermicompost	103.6 q	26000	155400	
2	Poultry	2015-16	30	Dual purpose	Poultry chicks	400	20000	24000	
3	Mushroom spawn	2015-16	9	PSM & Oyster	Mushroom spawn	6867	82404	103005	
4	Poly house	2015-16	100	Vegetable & fruits	Seedlings	18815	8500	33825	
						Total	**136904**	**316230**	

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	

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

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

6.4 Performance of instructional farm (livestock and fisheries production)

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1.							
2.							
3.							

6.5 Utilization of hostel facilities

Accommodation available (No. of beds)

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

(For whole of the year)

6.6 Utilization of staff quarters

Whether staff quarters has been completed:
No. of staff quarters:
Date of completion:
Occupancy details:

Months	Q I	QII	Q III	QIV	Q V	QVI

7 FINANCIAL PERFORMANCE

7.1. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
CA, Flexi (Contingency)	State Bank of India	G. Udayagiri	11754367211
CA, Flexi (Revolving Fund)	State Bank of India	G. Udayagiri	11754367222

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	
Rapeseed & Mustard		1.2		1.16036	0.03964

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

Item	Released by ICAR		Expenditure		Unspent balance as on 1st April 2013
	Kharif	Rabi	Kharif	Rabi	
Horse gram		0.9		0.68295	0.21705
Field pea		1.788		1.12543	0.66257

2019.5. Utilization of KVK funds during the year 2020-21 (Not audited)

Sl. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	76,00,000	76,00,000	67,87,326
2	Traveling allowances	1,00,000	1,00,000	1,00,000
3	Contingencies			
A		17,40,000	16,85,422	13,09,040
B				
C				
D				
E				
F				
G				
H				
I				
J	Swachhta Expenditure			
TOTAL (A)		94,40,000	93,85,422	81,96,366
B. Non-Recurring Contingencies				
1				
2				
3				
4				
TOTAL (B)				
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)		94,40,000	93,85,422	81,86,366

7.5. Status of revolving fund (Rs. in lakh)

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year (Kind + cash)
2020-21	1,44,975	16,87,500	6,38,387.30	11,94,087.70

7.6. (i) Number of SHGs formed by KVKs
(ii) Association of KVKs with SHGs formed by other organizations indicating the area of SHG activities
(iii) Details of marketing channels created for the SHGs

7.7. Joint activity carried out with line departments and ATMA

Name of activity	Number of activity	Season	With line department	With ATMA	With both

8. Other information

8.1. Prevalent diseases in Crops

Name of the disease	Crop	Date of outbreak	Area affected (in ha)	% Commodity loss	Preventive measures taken for area (in ha)
Powdery mildew	Garden pea	7.01.2021	250	15	50
Wilt	Brinjal	12.02.2021	380	26	-

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)
Ranikhet	Poultry	30.04.2020	32	25,600	

9.1. Nehru Yuva Kendra (NYK) Training

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

9.2. *mKisan* Portal (National Farmers' Portal/ SMS Portal)

Type of message	No. of messages	No. of farmers covered
Crop	26	28962
Livestock	02	28962
Fishery	00	00
Weather	04	28962
Marketing	00	00
Awareness	08	28962
Training information	00	00
Other	03	28962
Total	**43**	**28962**

9.3. *KVK* Portal and Mobile App

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

9.4. a. Observation of Swachh Bharat Programme

Date/ Duration of Observation	Activities undertaken

b. Details of Swachhta activities with expenditure

Activities	Number	Expenditure (in Rs.)
1. Digitization of office records/ e-office		
2. Basic maintenance		

3. Sanitation and SBM		
4. Cleaning and beautification of surrounding areas		
5. Vermicomposting/ Composting of biodegradable waste management & other activities on generate of wealth for waste		
6. Used water for agriculture/ horticulture application		
7. Swachhta Awareness at local level		
8. Swachhta Workshops		
9. Swachhta Pledge		
10. Display and Banner		
11. Foster healthy competition		
12. Involvement of print and electronic media		
13. Involving the farmers, farm women and village youth in the adopted villages (no of adopted village)		
14. No of Staff members involved in the activities		
15. No of VIP/VVIPs involved in the activities		
16. Any other specific activity (in details)		
Total		

9.5. Observation of National Science day

Date of Observation	Activities undertaken

9.6. Programme with Seema Suraksha Bal/ BSF

Title of Programme	Date	No. of participants

9.7. 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)

9.8. Details of '*Pre-Rabi Campaign'* Programme

Date of programme	No. of Union Ministers attended the programme	No. of Hon'ble MPs (Loksabha/ Rajyasabha) participated	No. of State Govt. Ministers	Participants (No.)							Coverage by Door Darshan (Yes/No)	Coverage by other channels (Number)
				MLAs Attended the programme	Chairman ZilaPanchayat	Distt. Collector/ DM	Bank Officials	Farmers	Govt. Officials, PRI members etc.	Total		

9.9. 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)

9.10. 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	Mahila Kisan Diwas on dt.15.10.2020	03	50	-	-
2	International Women's Day on dt.08.03.2021	08	44	-	-

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

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

9.12. Revenue generation

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

9.13. Resource Generation:

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

9.14. Performance of Automatic Weather Station in KVK

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

9.15. Contingent crop planning

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

10. Report on Cereal Systems Initiative for South Asia (CSISA)

a) Year:
b) Introduction / General Information:

	Title	Objective	Treatment details	Date of sowing	Replication	Result with photographs
Experiment 1						
Experiment 2						
Experiment 3						
…						
..						
Others (If any)						

11. Details of TSP

a. Achievements of physical output under TSP during 2020-21

Programmes	**Physical achievements**
Asset creation (Number; Sprayer, ridge maker, pump set, weeder etc.)	
On-farm trials (Number)	11
Frontline demonstrations (Number)	26
Farmers training (in lakh)	0.00064
Extension personnel training (in lakh)	0
Participants in extension activities (in lakh)	0.08298
Seed production (in tonnes)	7.265
Planting material production (in lakh)	0.1872
Livestock strains and fingerlings production (in lakh)	0.004
Soil, water, plant, manures samples testing (in lakh)	0.01083
Provision of mobile agro – advisory to farmers (in lakh)	0.00043
No. of other programmes (Swachha Bharat Abhiyaan, Agriculture knowledge in rural school, Planting material distribution, Vaccination camp etc.)	42 nos

b. Fund received under TSP in 2020-21 (Rs. In lakh): 17.85422

c. (i) Achievements of physical outcome under TSP during 2020-21

Sl. No.	Description	Unit	Achievements
1	Change in family income	%	36.2
2	Change in family consumption level	%	16.7
3	Change in availability of agricultural implements/ tools etc.	No. per household	0.6

(ii) Table:

Sl. No.	***Description***	***Unit***	***Achievements***
1	Number of Technologies Identified after Assessment	Number	11
2	Upgraded Skills and Knowledge of farmers	Number	2010
3	Oriented extension personnel in frontier areas of agricultural technology	Number	0
4	Increased availability of quality seed	Quintal	
5	Increased availability of quality Planting material	Number	18720
6	Increased availability of live-stock strains and fingerlings	Number	400
7	Testing of Soil & water samples for balance fertilizer use	Number	1083

d. Location and Beneficiary Details during 2020-21

District	***Sub-district***	***No. of Village***	***Name of village(s)***	***ST population benefitted (No.)***		
				M	***F***	***T***
Kandhamal	G. Udayagiri	07	Sirki	46	22	68
			Bearpanga	55	39	94
			Kilakia	52	29	81
			Sujeli	50	41	91
			Baudinaju	31	9	40
			Sudhipada	25	17	42

			Kiramaha	13	6	19
Kandhamal	K. Nuagaon	02	Gindapanga	41	33	74
			Bandaguda	43	59	102
Kandhamal	Tikabali	03	Penala	53	69	122
			Gadaguda	49	22	71
			Brainguda	47	31	78
Kandhamal	Chakapada	02	Raipada	27	19	46
			Brahmanapada	48	21	69

12. Schedule caste Output & Outcome achievements

Sl. No.	Indicator/Activities	Unit of Indicator	Achievements
1	Farmers, farm women trained by KVKs	Number	
2	Extension personnel trained by KVKs	Number	
3	On-farm trials conducted by KVKs	Number	
4	Frontline demonstrations conducted by KVKs	Number	
5	Quantity of seeds produced	Quintal	
6	Planting materials Produced	Number	
7	Livestock strains and fingerlings produced	Number	
8	Soil & water samples tested	Number	

13**.** Information pertaining to ARYA Project

2020-21							
Name of KVK	Year since ARYA is initiated in the KVK (specify year)	No. of Training programs	No. of rural youth trained		No. of youth established units		No. of entrepreneurial units established
			M	**F**	**M**	**F**	

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

Natural Resource Management

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

Crop Management

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

Livestock and fisheries

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

Institutional interventions

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

Capacity building

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

Extension activities

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

Detailed report should be provided in the circulated Performa

15. Awards/Recognition received by the KVK

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

Award received by Farmers from the KVK district

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

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

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

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

18. Integrated Farming System (IFS)

Details of KVK Demo. Unit

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

19.Technologies for Doubling Farmers' Income

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

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

	Database prepared/ covered for	KVK level Committee	Various activity

					conducted for farmers
Phase	Total no. of villages	Total no. of farmers	Date of formation	Name of members	
I (up-to 15.03.2018)					
II (up-to 24.04.218)					
Total					

21.Information on Visit of VIPs to KVKs, if any

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

22.a) Information on **ASCI** Skill Development Training Programme, if undertaken during 2019-20 and 2020-21

Year	Name of the Job role	Name of the certified Trainer of KVK for the Job role	Date of start of training	Date of completion of training	No. of participants	Whether uploaded to SDMS Portal (Y/N)	Fund utilized for the training (Rs.)
2018-19	Vermicompost Producers	S.K. Mukhi	15.01.2019	08.02.2019	20	Y	3,29,200
	Organic Growers	D. Mishra	15.02.2019	11.03.2019	20	Y	
2019-20	Quality Seed Grower	S. Pradhan	27.01.2020	20.02.2020	20	Y	3,62,804
	Tractor Operator	S. Biswal	24.02.2020	21.03.2020	20	Y	

b) Information on Skill Development Training Programme (**Other than ASCI or less than 200 hrs**., if any) if undertaken during 2020-21

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

23. Information on NARI Project (if applicable)

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

						project

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

Krishi Kalyan Abhiyan- I and II

A. Training

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

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

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

C. Livestock and Fishery related activities

Name of programme	***No. of Programme***	***Activities performed***				***No. of farmers benefited***				***No. of other officials (except KVK)***
		No. of	***No. of***	***Feed/***	***Any other***	***SC***	***ST***	***Others***	***Total***	

		animals vaccinated	*animals dewormed*	*nutrient supplements provided (kg)*	*(Distribution of animals/ birds/ fingerlings) [No.]*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*T*	*attended the programme*
KKA-I															
KKA-II															

D. Other activities

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

Krishi Kalyan Abhiyan- III

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

25. Nutri-garden

Sl.no.	**Name of KVK**	**Established in KVK Campus**	**No. of nutria-garden established in the village**	**Major vegetables production**

Please provide one or two good quality photographs

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

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

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

28. SC SP quarter-wise

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

Physical Output 2020-2021

Sl. No.	Indicator/Activities	Unit of Indicator	Quarterly Breakup (Target)	Targets Achieved	No. of Beneficiaries	Outcome
1	**Farmers, farm women trained by KVKs**	**Number**	Q-1 Q-2 Q-3 Q-4	Q-1 Q-2 Q-3 Q-4	Q-1 Q-2 Q-3 Q-4	
2	**Extension personnel trained by KVKs**	**Number**	Q-1 Q-2 Q-3 Q-4	Q-1 Q-2 Q-3 Q-4	Q-1 Q-2 Q-3 Q-4	
3	**On-farm trials conducted by KVKs**	**Number**	Q-1 Q-2 Q-3	Q-1 Q-2 Q-3	Q-1 Q-2 Q-3	

Sl. No.	Indicator/Activities	Unit of Indicator	Quarterly Breakup (Target)	Targets Achieved	No. of Beneficiaries	Outcome
			Q-4	Q-4	Q-4	
4	**Frontline demonstrations conducted by KVKs**	**Number**	Q-1 Q-2 Q-3 Q-4	Q-1 Q-2 Q-3 Q-4	Q-1 Q-2 Q-3 Q-4	
5	**Quantity of seeds produced**	**Quintal**	Q-1 Q-2 Q-3 Q-4	Q-1 Q-2 Q-3 Q-4	Q-1 Q-2 Q-3 Q-4	
6	**Planting materials Produced**	**Number**	Q-1 Q-2 Q-3 Q-4	Q-1 Q-2 Q-3 Q-4	Q-1 Q-2 Q-3 Q-4	
7	**Livestock strains and fingerlings produced**	**Number**	Q-1 Q-2 Q-3 Q-4	Q-1 Q-2 Q-3 Q-4	Q-1 Q-2 Q-3 Q-4	
8	**Soil & water samples tested**	**Number**	Q-1 Q-2 Q-3 Q-4	Q-1 Q-2 Q-3 Q-4	Q-1 Q-2 Q-3 Q-4	

Sd/-
Sr. Scientist & Head
KVK, Kandhamal