

ANNUAL REPORT 2022-23

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. Narayan Bar	-	8917575257	barnarayan@gmail.com

1.4. Year of sanction of KVK: 1993

1.5. Staff Position (as on 1st January, 2022)

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. Narayan Bar	Sr. Scientist & Head	Agril. Ext	84,700/-	08.04.2010	Permanent	
2	Subject Matter Specialist	Dr. Sidhartha Kar	Scientist	Horticulture	77,500/-	01.10.2009	Permanent	
3	Subject Matter Specialist	Sri Sujit Kumar Mukhi	Scientist	Soil Science	77,500/-	23.10.2009	Permanent	
4	Subject Matter Specialist	Ms Sripali Pradhan	SMS	Agronomy	59,500/-	13.06.2018	Permanent	
5	Subject Matter Specialist	Ms Sanghamitra Biswal	SMS	Agricultural Engineering	59,500/-	06.12.2018	Permanent	
6	Subject Matter Specialist	-	-	-	-	-	-	
7	Subject Matter Specialist	-	-	-	-	-	-	
8	Programme Assistant	Ms Sumitra Hembram	P.A. (Tech.)	Home Science	37,600/-	09.08.2018	Permanent	
9	Computer Programmer	Sri Dibyasingh Pradhan	PA (Computer)	Computer Science	46,200/-	01.08.2022	Permanent	
10	Farm Manager	Ms Sushree Sibanee Sardar	Farm Manager	Plant Breeding & Genetics	36,500/-	08.02.2019	Permanent	
11	Accountant / Superintendent	-	-	-	-	-	-	
12	Stenographer	Sri Pabitra Mohan Pradhan	Jr. Steno-cum-Computer Operator	-	29,600/-	29.07.2015	Permanent	
13.	Driver	Sri Maheswar Pradhan	Driver-cum-Mechanic	-	23,100/-	13.02.2014	Permanent	
14.	Driver	Sri Gopal Pradhan	Driver-cum-Mechanic	-	23,100/-	20.07.2015	Permanent	
15.	Supporting staff	Sri Aparti Chhatoi	Peon-cum-Watchman	-	22,900/-	28.07.2008	Permanent	
16.	Supporting staff	Sri Arjuni Charan Swain	Peon-cum-Watchman	-	22,900/-	02.08.2008	Permanent	

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	Present status
Bolero (Mahindra Di Turbo)	2010-11	5,52,236/-	1,85,340	Condemned
Tractor (Mahindra 475 DI – Bhumiputra)	2004-05	3,74,223/-	-	Running
Bike (Hero Honda Passion Pro)	2009-10	49,965/-	57,442	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.	04.02.2023	40	Given below at Agenda-2	Given below at Agenda-2	

* Salient recommendation of SAC in bullet form

Attach a copy of SAC proceedings along with list of participants

PROCEEDINGS OF THE 27th SCIENTIFIC ADVISORY COMMITTEE MEETING OF KVK KANDHAMAL, G.UDAYAGIRI HELD ON 04.02.2023

The 27th Scientific Advisory Committee meeting of KVK, Kandhamal was held on 04.02.23 at 11.00 am in the training hall of KVK, Kandhamal. The meeting was conducted under the Chairmanship of Prof. S. Mishra, Department of Animal Nutrition, OUAT, Bhubaneswar. Dr. Avijit Halder, Principal Scientist, ICAR-ATARI, Zone-V, Kolkata and Dr. H.K Sahoo, Dy. Director Extension Education, OUAT, Bhubaneswar were also present in this meeting. The other members present in the meeting is annexed herewith.

At the outset, Dr. Narayan Bar, 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 brief introductory remarks, 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 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 21.01.2022

S.No.	Recommendations	Activities taken
1	Demonstration on Paddy Straw Mushroom production technology	Demonstration conducted in 3 villages of Penala and G. Udayagiri blocks covered 62 nos. of beneficiaries. Total numbers of bed 382, production per bed 1.92 kg. Total production was 7.34 qtl.
2	Demonstration on Onion varieties	1. Demonstration on Onion varieties ALR,ADR, A.Niketan has been conducted in 4nos. of villages (Mundakanga, Sujeli, Kurmingia, Malarimaha), 10 nos. of progressive farmers benefited under the programme 2. Training programme on INM, IPM & IDM provided to the beneficiaries.
3	RE- linkage meeting	Regularly Conducted RE-linkage meeting involving all the line departments.
4	Pond based farming system	OFT on assessment of Horticulture based farming system conducted in 1.45 ha with 9 nos. of farmers in 5 villages (Retudi, Tameribadi, Gandhari bhuin, Latedi, Bakingia) with components such as Papeya, Drumstick, Banana, Vegetables(Runner bean, Garden peas & Summer Tomato)

5	Technologies developed by DLAP, Phulbani	Demonstration on organic nutrient management in Maize + Cowpea (2:2) intercropping system conducted in 3 villages in an area of 1.00 ha covering 10 nos of beneficiaries. The net income increased to Rs.53083/- with intercropping where as the net income of Rs.35401/- was recorded under sole maize cropping.
6	Value addition of tender Jackfruit	Assessment of processing and packaging methods of tender Jackfruit will be conducted during the month of February 2023 and 3 nos. of training programme imparted to 75 nos. of beneficiaries for processing and packaging of tender Jackfruit.
7	Demonstration on performance of Micro nutrient fertilizer on vegetables	Demonstration of micro nutrient application on vegetables viz Cabbage, Cauliflower & Garden peas conducted in 5 villages in an area of 7.5 ha covering 83 beneficiaries.
8	Trial on performance of different Coffee varieties	Awareness and capacity building programme under taken in 7 nos. of villages covering 210 nos. of beneficiaries.
9	Different black pepper varieties	Due to non availability of sapling, the programme was not possible to conduct, only training programme has been imparted in 3 villages covering 75 nos. of beneficiaries. This programme may be conducted when sapling is available.
10	Performance of different date of sowing of Raikia bean	Testing on showing date of Raikia bean such as on June (Kharif) and on Oct-Nov (Rabi) done under IHFS programme. It was observed that Kharif runner beans planted on June have 60% more yield i.e 120 qtl/ha than Rabi showing.
11	Popularizing of Kadaknath poultry and dockery farming	Demonstrated 3 improved varieties of poultry Chicks (Kadaknath, Kaling Brown and Sonali) in deferent villages. 3020 nos. of chicks distributed and 201 nos. of beneficiaries benefited.
12	Assess the performance of different exotic fruit crops	Exotic fruit such as Apple ber, Dragon fruit, Apple, Straw berry and Nagpur Orange planted in KVK instructional farm for assessment

AGENDA 3 – ACHIEVEMENT MADE BY THE KVK

The Senior Scientist and Head presented the overall achievements made by KVK, Kandhamal during Rabi 2021-22 and Kharif 2022.

- 1. Training** –KVK has conducted 94 training programmes for 2350 numbers of practicing farmers and farm women, 08 for rural youths involving 120 participants & 03 nos for extension functionaries involving 45 participants during Rabi 2021-22 and Kharif 2022.
- 2. Front Line Demonstration** – KVK conducted 22 numbers of Front Line Demonstrations during Rabi 2021-22 and Kharif 2022 on the thematic areas of INM, IWM, Organic farming, Varietal evaluation, Optimum land utilization methods, Farm implements & machineries, Drudgery reduction, Nutritional security and Small-scale income generation activities in 15.4 ha area involving 264 participating farmers/farm women. 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 10 nos. of On Farm Trials(OFTs) were conducted during Rabi 2021-22 and Kharif 2022 on the thematic areas of INM, Varietal evaluation, IWM, Crop establishment method, Farm implements & machineries and Small-scale income generation activities involving 62 numbers of practicing farmers.
- 4. Extension Activities:** KVK also conducted various extension activities viz. 12 numbers of field days, one Kissan Mela, 03 Exhibitions, 20 CD Film shows, 03 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 Plantation Programme under Azadi ka Amrit Mahotshav, Agril. Education Day, Jai Kisan Jai Vigyan, Mahila Kisan Divas, Women in

Agriculture Day, World Food Day, World Meteorological Day, Poshan Abhiyan & Plantation Programme, Jal Shakti Abhiyan, World Soil Day and 02 numbers of farmers-scientist interactions etc.

AGENDA 4 – PRESENTATION OF ACTION PLAN FOR 2023-24

The Senior Scientist and Head presented the detailed Action Plan developed by KVK for the year 2023-24 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 60 numbers of training programmes for 1500 practising farmers and farm women, 20 trainings for Rural youths involving 300 participants, 8 number of trainings for 120 numbers of extension functionaries and 03 numbers of vocational trainings for 15 numbers of participants during 2023-24.
2. **Front Line Demonstration** – KVK has planned for conducting 19 numbers of Front-Line Demonstrations during 2023-24 on the thematic areas of INM, ICM, IWM, IPDM, Crop establishment methods, Varietal substitution, Drudgery reduction, Use of farm machineries, small scale income generating activities and value addition.
3. **On Farm Trial:** A total of 10 nos. of On Farm Trials (OFTs) are proposed to be conducted during 2023-24 on INM in maize and mustard, Horti-Based Farming System Model, varietal evaluation of Onion and sweet corn, IWM in direct seeded rice, in-situ soil moisture conservation methods in tomato-radish sequence, 8 row self-propelled rice transplanter, value added products from green mango, suitable variety and different planting time for better market price of Cauliflower involving 56 numbers of practising farmer/farm women.
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, 03 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. during 2023-24.

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 godown
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 achievement and action plan & invited suggestions. The suggestions were made by the members as listed below.

1. The CDAO Kandhamal suggested assessing the performance of color oyster mushroom production in the district. He also suggested popularizing different varieties of finger millets in the districts through demonstration programme.
2. The Principal Scientist, ICAR-ATARI, Zone-V, Kolkata suggested that the technologies of RRTTS, G. Udayagiri and AICRP on DLAP should be taken under FLD programmes for wide spread of the technology. He also recommended to record the economic parameters of all the components under the IFS for which is the best components should be identified. He also recommended to promote pig farming in the district.
3. The DDE, OUAT, Bhubaneswar suggested to provide different intercultural implements to the progressive vegetable growers through different schemes for popularization of the implements in the districts. He also recommended to collect the seeds from farmers under varietal evaluation FLD/OFT and the seeds should be distributed among the farmers of other blocks.

He also recommended increasing the short duration HYV mustard demonstration areas as the mustard cultivation area is diminishing in the district. He also suggested to demonstrate small paddy transplanter operated by power tiller. He also recommended to under take one varietal trial on potato during kharif season.

4. The Chief Scientist, DLAP suggested that, KVK should take initiatives for establishment of pond-based farming system model by targeting the Farm Pond beneficiaries. He also advised to spread the technologies developed by DLAP, Phulbani by the KVK through various activities.

5. The ADH, Kandhamal suggested that, KVK needs to emphasize on value addition of tender jack fruits and should assess the performance of different exotic fruit crops in the district. He also suggested that, KVK should increase the spawn production activity as mushroom growers in the district are increasing.

6. The CDVO, Kandhamal emphasized that KVK should take steps for popularizing Kadaknath poultry breed in the district through demonstration programme. He also suggested that, KVK should organize the awareness programme for popularization of pig farming by involving the farm pond beneficiaries.

7. The ADR, RRTTS, G. Udayagiri suggested that, KVK needs to carry out the trial on performance of different date of sowing of raikia bean. He also suggested to popularize the OUAT release maize hybrid variety in the district.

CHAIRMAN'S REMARKS

- KVK should popularize the food processing and value addition of different agri products in the district.
- As the farmers of the district getting low income in the rainfed farming so KVK should initiate to increase their income through the interventions like poultry rearing, goat farming, mushroom cultivation etc.,
- KVK should include the line departments in all the activities and proper documentation should be recorded.
- KVK should increase the capacity building on spawn production in the district and necessary linkage to be made for creating entrepreneurs on mushroom spawn production in the district.
- Direct demonstration of performance of different date of sowing of raikia bean with consultation with the ADR, RRTTS, G. Udayagiri.
- More emphasis should be given for popularization of Natural farming.

The meeting ended at 2.30 pm with vote of thanks given by Dr. Sujit Kumar Mukhi, Scientist (Soil Science), KVK, Kandhamal.

ANNEXURE-I**Members Present**

S.No	NAME	DESIGNATION	REMARK
1	Prof. Sumanta Ku. Mishra	Professor, Dept. of Animal Nutrition, OUAT, BBSR	Chairman
2	Dr. Avijit Halder	Principal Scientist, ATARI, Kolkata	Member
3	Dr. H. K. Sahoo	Dy. Director of Extension, DEE, OUAT, BBSR	Member
4	Dr. Gyanalok Dash	ADR, RRTTS, G.Udayagiri	Member
5	Dr. Ayurdehi Mishra	CDAO, Kandhamal	Member
6	Mr. Basanta Ku. Panigrahi	ADO, G. Udayagiri, Kandhamal	Member
7	Ms. Archana Nayak	APD, Soil Conservation, Kandhamal O/O PD Water shade	Member
8	Ms. Ranchilata Mandangi	Asst. Fishery Officer, G. Udayagiri (O/O DFO, Kandhamal)	Member
9	Mr. Harekrushna Jena	CM, LDM, Kandhamal	Member
10	Dr. D. K. Debata	Sr. Scientist, RRTTS, G. Udayagiri	Invitee
11	Mr. Debaprasad Routray	ADH, Balidguda O/O DDH, Phulbani	Member
12	Mr. A.K Sathy	Sr. Agronomist, RRTTS, Kandhamal	Invitee
13	Dr. Debadata Sethi	Jr. Scientist (Soil.Sc), RRTTS, Kandhamal	Invitee
14	Mr. Sujit Kumar Mukhi	Scientist (Soil Sc.),KVK,Kandhamal	Member
15	Mr. Sidhartha Kar	Scientist (Horticulture),KVK,Kandhamal	Member
16	Ms. Sumitra Hembram	PA (Home Science), KVK, Kandhamal	Member
17	Mr. Prasanta Ku. Panda	Scientist, Plant Protection, Ganjam-1	Invitee
18	Dr. Siddharth Ranabijuli	Scientist, Animal Science, Ganjam-1	Invitee
19	Mr. Sunil Ku, Mallick	DPC, Mission Shakti, O/O DSWO, Phulbani	Member
20	Mr. M. R Panda	Technical Officer, O/O Chief Scientist DLAP, Phulbani	Member
21	Samson Nayak	Farmer representative, Kanbagiri, G. Udyagiri	Member
22	Paula Pradhan	Farmer representative, Katadagonda, G. Udayagiri	Member
23	Sashirekha Nayak	Farm-woman representative, Kurmingia, G. Udayagiri	Member
24	Snehalata Digal	Farm-woman representative, Kurmingia, G. Udayagiri	Member
25	Dr. Narayan Bar	Senior Scientist & Head, KVK, Kandhamal	Member Secretary

2.a. District level data on agriculture, livestock and farming situation (2022)

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	<ul style="list-style-type: none"> 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	<table> <thead> <tr> <th>Crop</th> <th>Productivity (kg/ha)</th> </tr> </thead> <tbody> <tr><td>Rice</td><td>2447</td></tr> <tr><td>Maize</td><td>1706</td></tr> <tr><td>Blackgram</td><td>242</td></tr> <tr><td>Arhar</td><td>961</td></tr> <tr><td>Field Pea</td><td>633</td></tr> <tr><td>Groundnut</td><td>1507</td></tr> <tr><td>Niger</td><td>312</td></tr> <tr><td>Mustard</td><td>305</td></tr> <tr><td>Turmeric</td><td>9710</td></tr> <tr><td>Ginger</td><td>10526</td></tr> <tr><td>Kulthi</td><td>358</td></tr> <tr><td>Cabbage</td><td>18000</td></tr> <tr><td>Tomato</td><td>20800</td></tr> <tr><td>Potato</td><td>18500</td></tr> <tr><td>Ragi</td><td>930</td></tr> </tbody> </table>	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	Ragi	930
Crop	Productivity (kg/ha)																																	
Rice	2447																																	
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Kulthi	358																																	
Cabbage	18000																																	
Tomato	20800																																	
Potato	18500																																	
Ragi	930																																	
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																																

Note: Please give recent data only

2.b. Details of operational area / villages (2022)

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 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
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, Daringibadi, Simanbadi	Turmeric, Ginger, Paddy, Maize, Niger, 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 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	Organic Farming 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 PC and SMS (2022-23) for its development and action plan

Name of village	Block	Action taken for development
Penala	Tikabali	FLD, OFT, CFLD, Training, Soil Testing, Diagnostic Field Visit, Convergence programme with Line Departments
Mazagada	Chakapada	FLD, OFT, CFLD, Training, Soil Testing, Diagnostic Field Visit, Convergence programme with Line Departments
Kalikheta	Tikabali	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
Ladamaha	Daringibadi	FLD, OFT, CFLD, Training, Soil Testing, Diagnostic Field Visit, Convergence programme with Line Departments

2.1 Priority thrust areas

S. No	Thrust area
1.	Soil health & fertility management
2.	Non land enterprises
3.	Soil and water conservation
4.	Crop substitution & cropping system
5.	Low cost production technique
6.	Weed management
7.	Pest & disease management
8.	Marketing awareness
9.	Dry land Farming
10.	Fruit & Vegetable Cultivation
11.	Backyard poultry rearing
12.	Processing and value addition

3. TECHNICAL ACHIEVEMENTS

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

OFT												FLD													
No. of technologies tested:												No. of technologies demonstrated:													
Number of OFTs				Number of farmers								Number of FLDs				Number of farmers									
Target	Achievement	Target	Achievement	SC		ST		Others		Total		Target	Achievement	Target	Achievement	SC		ST		Others		Total			
				M	F	M	F	M	F	M	F	T					M	F	M	F	M	F	M	F	T
10	10	68		15	10	26	12	5	-	46	22	68	22	19	190		25	17	98	32	8	10	131	59	190

Training												Extension activities													
Number of Courses				Number of Participants								Number of activities		Number of participants											
Target	Achievement	Target	Achievement	SC		ST		Others		Total		Target	Achievement	Target	Achievement	SC		ST		Others		Total			
				M	F	M	F	M	F	M	F	T					M	F	M	F	M	F	M	F	T
94	94	1865		136	152	825	530	79	49	1030	745	1865	689	689	35032		2692	673	23376	5839	1961	491	28029	7003	35032

Impact of capacity building											Impact of Extension activities										
Number of Participants trained		Number of Trainees got employment (self/ wage/ entrepreneur/ engaged as skilled manpower)									Number of Participants attended		Number of participants got employment (self/ wage/ entrepreneur/ engaged as skilled manpower)								
Target	Achievement	SC		ST		Others		Total			Target	Achievement	SC		ST		Others		Total		
		M	F	M	F	M	F	M	F	T			M	F	M	F	M	F	M	F	T
2183	1865	41	50	247	148	20	18	308	216	524	567	589	897	250	7120	1751	392	99	8409	2100	10509

Seed production (q)						Planting material (in Lakh)					
Target			Achievement			Target			Achievement		
Turmeric(120q)			127.75 q			Tomato,Brinjal,Chilli,Cabbage,Cauliflower (1 lakh)			0.21030 lakh		
Niger(3q)			4.00q			Papaya,Drumstick,Banana(0.05 lakh)			0.00686 lakh		
Torria(5q)			5.33q								

Livestock strains and fish fingerlings produced (in lakh)*						Soil, water, plant, manures samples tested (in lakh)					
Target			Achievement			Target			Achievement		
						750			673		

* Give no. only in case of fish fingerlings

Publication by KVKs							
Item	Number	No. circulated	No. of Research papers in NAAS rated Journals	Highest NAAS rating of any publication	Average NAAS rating of the publications	Details of awarded publication, if any	Details of Award given to the publication
Research paper							
Seminar/conference/ symposia papers							
Books	3	1500					
Bulletins							
News letter	1	500	-	-	-	--	-
Popular Articles							
Book Chapter							
Extension Pamphlets/ literature							
Technical reports							
Electronic Publication (CD/DVD etc)							
TOTAL	4	2000					

1 Achievements on technologies assessed and refined

OFT-1

1.	Title of On farm Trial	Assessment of integrated nutrient management in groundnut
2.	Problem diagnosed	Poor plant growth, less effective pod formation, poor peg development and seed filling, low quality produce due to soil acidity and improper nutrient management practices
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Assessed TO1: STBFR + FYM @ 2 t / ha + Lime @ 0.2 LR + S @ 40 kg /ha TO2: sTBFR + FYM @ 7 t / ha + Borax @ 15 kg /ha TO3: STBFR + FYM @ 2 t / ha + lime @ 0.2 LR + Seed inoculation with <i>Rhizobium</i> @ 20 g/kg seed
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	AICRP
5.	Production system and thematic area	Rain-fed Upland , Irrig. Upland INM
6.	Performance of the Technology with performance indicators	Soil test based NPK application, FYM @ 2 t / ha, lime @ 0.2 LR and S @ 40 kg /ha increased the pod yield of groundnut by 28.6 % over farmers practice and a highest net return of Rs. 47950/- and B:C ratio of 2.3 was obtained due to the prtice
7.	Final recommendation for micro level situation	Soil test based NPK application, FYM @ 2 t / ha, lime @ 0.2 LR and S @ 40 kg /ha is the best practice for higher yield and net return for groundnut cultivation
8.	Constraints identified and feedback for research	-
9.	Process of farmers participation and their reaction	Farmers are happy for higher yield and net return and shown their interest for practicing the groundnut cultivation with such technology

Thematic area: INM

Problem definition: Poor plant growth, less effective pod formation, poor peg development and seed filling, low quality produce due to soil acidity and improper nutrient management practices

Technology assessed:

TO1: STBFR + FYM @ 2 t / ha + Lime @ 0.2 LR + S @ 40 kg /ha

TO2: sTBFR + FYM @ 7 t / ha + Borax @ 15 kg /ha

TO3: STBFR + FYM @ 2 t / ha + lime @ 0.2 LR + Seed inoculation with *Rhizobium* @ 20 g/kg seed

Table:

Technology option	No. of trials	No. of pods/plant	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
FP	05	11.5	11.9	33800	65450	31650	1.9
TO-1	05	14.2	15.3	36200	84150	47950	2.3
TO-2	05	12.8	13.6	35300	74800	39500	2.1
TO-3	05	13.1	14.1	34700	77550	42850	2.2

Results: Soil test based NPK application, FYM @ 2 t / ha, lime @ 0.2 LR and S @ 40 kg /ha increased the pod yield of groundnut by 28.6 % over farmers practice and a highest net return of Rs. 47950/- and B:C ratio of 2.3 was obtained due to the practice

OFT-2

1.	Title of On farm Trial	Assessment of Integrated nutrient management in mustard
2.	Problem diagnosed	Poor plant growth, less siliqua and seed formation due to improper nutrient management practices
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Assessed TO1: STBFR +5 t FYM + S @ 25 kg/ha and B @ 1 kg/ha TO2: STBFR + FYM @ 2 t/ha + Soil application of Zn @ 5kg/ha and B @ 1kg/ha along with S @ 40 kg/ha TO3: STBFR + FYM @ 2 t / ha + Biofertilizers (<i>Azotobacter</i> , <i>Azospirillum</i> and <i>PSB</i> @ 1:1:1, 4 kg each per ha
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	AICRP
5.	Production system and thematic area	Irrigated up and medium land INM
6.	Performance of the Technology with performance indicators	STBFR + FYM @ 2 t/ha + Soil application of Zn @ 5 kg/ha and B @ 1kg/ha along with S @ 40 kg/ha increased the seed yield of mustard by 40.4 % over farmers practice and a highest net return of Rs. 17720/- and B:C ratio of 2.1 was obtained due to the practice
7.	Final recommendation for micro level situation	Soil test based NPK application, FYM @ 2 t/ha + Soil application of Zn @ 5 kg/ha and B @ 1kg/ha along with S @ 40 kg/ha is the best practice for higher yield and net return for mustard cultivation
8.	Constraints identified and feedback for research	-
9.	Process of farmers participation and their reaction	Farmers are happy for higher yield and net return and shown their interest for practicing the mustard cultivation with such technology

Thematic area: INM

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

Technology assessed:

TO1: STBFR +5 t FYM + S @ 25 kg/ha and B @ 1 kg/ha

TO2: STBFR + FYM @ 2 t/ha + Soil application of Zn @ 5kg/ha and B @ 1kg/ha along with S @ 40 kg/ha

TO3: STBFR + FYM @ 2 t / ha + Biofertilizers (*Azotobacter*, *Azospirillum* and *PSB* @ 1:1:1, 4 kg each per ha

Table:

Technology option	No. of trials	No. of siliqua/plant	Yield(q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
FP	05	192.4	4.7	13900	24440	10540	1.8
TO-1	05	223.2	6.1	15900	31720	15820	2.0
TO-2	05	248.1	6.6	16600	34320	17720	2.1
TO-3	05	215.8	5.4	14600	28080	13480	1.9

Results: STBFR + FYM @ 2 t/ha + Soil application of Zn @ 5 kg/ha and B @ 1kg/ha along with S @ 40 kg/ha increased the seed yield of mustard by 40.4 % over farmers practice and a highest net return of Rs. 17720/- and B:C ratio of 2.1 was obtained due to the practice

OFT-3

1.	Title of On farm Trial	Assessment Of Horti Based Farming System Model
2.	Problem diagnosed	Low productivity due to single crop farming
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Assessed Vegetable (Bean – Carrot - Green peas - Summer tomato) 1:1 with Banana, Papaya, Drum stick in border + Vermi composting+ Mushroom
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	ICAR-Research Complex for Eastern Region, Patna, Bihar 2021
5.	Production system and thematic area	Pond Base Horticulture and ICM
6.	Performance of the Technology with performance indicators	TO ₂ has highest yield about 599.71 per hectare, Net return of Rs. 449715 / hectare and BC ratio 3.74
7.	Final recommendation for micro level situation	Technological option 2 is the best horticultural crop integration which provides sustainable and throughout the Year vegetable fruit production. It provides better income for small and marginal farmer.
8.	Constraints identified and feedback for research	Appropriate crop selection and testing in every season for better productivity.
9.	Process of farmers participation and their reaction	As it is a new technology tested in the District adoption rate is increasing slowly. Most of the farmers now adopting by observation and profit analysis. This system remove mono horticultural farming and change farmers attitude in to use of pond water for throughout the Year vegetable farming.

Thematic area: ICM

Problem definition: Average land holding of Kandhamal District is 1.01 hectare due to low productivity and irrigation problem it's difficult to maintain livelihood by marginal farmer 31.34 % and small farmer 36.49 %. So Integrated Horticulture base farming system near pond and perennial water bodies could able solve the problem.

Technology assessed:

Table:

Technology option	No. of trials	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
FP: Cultivation of Single crop near pond area	10	120	50000	105500	55500	2.11
TO ₁ : Cultivation of Runner beans in both Kharif & Rabi season	10	210	95000	240000	95000	2.52
TO ₂ : Vegetable (Runner Bean – Carrot - Green peas - Summer tomato) 1:1 with Banana, Papaya, Drum stick in border + Vermi composting+ Mushroom	10	599.71	163337.59	619128.89	455791.30	3.49

OFT-4

1.	Title of On farm Trial	Assessment of Onion varieties
2.	Problem diagnosed	Low productivity due to single crop farming
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	Onion variety ADR bulbs are dark red. Globular in shape bulbs, 46 cm in size with tight skin. Moderately pungent. TSS is 12 to 13%. Plant matures in 95 to 110 days after transplanting. Yield is 30 to 40 t/ha. Average keeping quality. Suitable for export purpose.
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	IIHR - ICAR 2012
5.	Production system and thematic area	Irrigated medium land and Varietal evaluation
6.	Performance of the Technology with performance indicators	TO ₁ Onion Variety ADR has highest yield about 245 per hectare, Net return of Rs. 247500 / hectare and BC ratio 3.06
7.	Final recommendation for micro level situation	Technological option 1 is the best onion variety which highest yield and BC ratio. Small and marginal farming community may adopt this variety of onion as productive crop variety at North Eastern Ghat zone.
8.	Constraints identified and feedback for research	Other onion high market demand varieties need to assessed as alternative variety when recommended variety unavailable. Post harvest loss and storage facility in the need to improve.
9.	Process of farmers participation and their reaction	Farmer adoption towards onion cultivation is high due to production and market demand.

Thematic area: ICM

Problem definition: Average land holding of Kandhamal District is 1.01 hectare due to low productivity and irrigation problem it's difficult to maintain livelihood by marginal farmer 31.34 % and small farmer 36.49 %. So onion will be a suitable crop for Kandhamal farmer as livelihood source.

Technology assessed:

Table:

Technology option	No. of trials	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	BC ratio
FP: Cultivation of Onion variety ALR	10	205	120000	307500	187500	2.5625
TO ₁ : Cultivation of Onion Variety ADR (Source : NHRDF)	10	245	120000	367500	247500	3.0625
TO ₂ : Cultivation of Onion Variety Arka Niketan (Source : IIHR)	10	242	120000	363000	243000	3.025

OFT-5

1.	Title of On farm Trial	Assessment of sweet corn variety for higher profitability
2.	Problem diagnosed	Low market price of maize and opportunity for diversification through sweet corn
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	FP: Cultivation of locally available sweet corn -sugar 75 TO1: Sweet corn var.- VL Sweet corn 1 (FSCH18) TO2: Sweet corn var. - Pusa Super Sweet corn-1
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	TO1: VPKAS, Almora,2016 TO2: IARI,2018-19
5.	Production system and thematic area	Varietal evolution
6.	Performance of the Technology with performance indicators	VL Sweet corn 1- enhanced sweetness with a good grain yield (10.8y/ha) Pusa Super Sweet corn 1- enhanced sweetness with a good grain yield (9.3t/ha) and fodder yield(16.2t/ha)
7.	Final recommendation for micro level situation	TO2: Sweet corn var. - Pusa Super Sweet corn-1
8.	Constraints identified and feedback for research	Difficulty in saving the matured cobs from parrots and birds
9.	Process of farmers participation and their reaction	Farmers are actively participated in the programme and are ready to extend the crop area

Thematic area: Varietal evolution

Problem definition: Low market price of maize and opportunity for diversification through sweet corn

Technology assessed:

FP: Cultivation of locally available sweet corn -sugar 75

TO1: Sweet corn var.- VL Sweet corn 1 (FSCH18)

TO2: Sweet corn var. - Pusa Super Sweet corn-1

Table:

Result	Yield parameters		Yield (q/ha)	%yield increase	Net return	BC ratio
	Length of cob (cm)	Cob weight (gm)				
FP	15.2	192.4	73.9	-	213050	4.7
TO ₁	20.3	228.5	81.2	9.8	238600	5.2
TO ₂	24.6	254.8	86.0	16.4	255400	5.6

OFT- 6

1.	Title of On farm Trial	Assessment of Integrated weed management in direct seeded rice
2.	Problem diagnosed	Low productivity due to higher weed infestation in direct seeded rice, labour intensive
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	FP: One manual weeding at 45 DAS TO1: Application of pyrazosulfuron @ 20 g/ha as pre-emergence stage i.e., 0-3 DAS followed by Bispyribac sodium @ 25 g/ha as post-emergence i.e. 25 DAS TO2: Pre-emergence application of Pendimethalin @ 1000 g/ ha followed by Bispyribac-Na @ 25 g/ ha with one hand weeding at 45 DAS
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	TO1: AICRP on weed management, 2015 TO2: AICRP on weed management, 2014
5.	Production system and thematic area	Weed management
6.	Performance of the Technology with performance indicators	Pyrazosulfuron ethyl:- It is one of the acetolactate synthase (ALS) inhibiting herbicides Pendimethalin:- it controls annual grasses and broadleaf weeds Bispyribac Na:- it is a systemic herbicide that moves throughout the plant tissue & interferes in plant growth, ALS
7.	Final recommendation for micro level situation	TO2: Pre-emergence application of Pendimethalin @ 1000 g/ ha followed by Bispyribac-Na @ 25 g/ ha with one hand weeding at 45 DAS
8.	Constraints identified and feedback for research	Difficulty in weed control
9.	Process of farmers participation and their reaction	Farmers are actively participated in the programme and are ready to continue the herbicidal use

Thematic area: Weed management

Problem definition: Low productivity due to higher weed infestation in direct seeded rice, labour intensive

Technology assessed:

FP: One manual weeding at 45 DAS

TO1: Application of pyrazosulfuron @ 20 g/ha as pre-emergence stage i.e., 0-3 DAS followed by Bispyribac sodium @ 25 g/ha as post-emergence i.e. 25 DAS

TO2: Pre-emergence application of Pendimethalin @ 1000 g/ ha followed by Bispyribac-Na @ 25 g/ ha with one hand weeding at 45 DAS

Table:

Result	Yield parameters		Yield (q/ha)	%yield increase	Net return	BC ratio
	Plant height (cm)	No. of Tillers/hill				
FP	98.6	10.6	28.5	-	33100	1.8
TO ₁	118.5	12.2	32.9	15.4	42720	2.6
TO ₂	122.0	13.4	35.5	24.6	47400	2.9

OFT-7

1.	Title of On farm Trial	Assessment of processing and packaging methods of tender Jackfruit
2.	Problem diagnosed	Poor price realisation from sale of whole tender jackfruit
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	FP- Direct selling of whole tender jackfruit TO1-Peeling of jackfruit by knife/paniki cut into pieces and packaging in polythene TO2-Surface cleaning/dirt removal by washing, peeling and cutting into pieces. Dipping in 0.5% (w/v) citric acid and 0.1% ascorbic acid for 7 minutes, surface drying and packaging in punnet pack or PP pouch with 0.0675% perforation and refrigerated storage at 10°C
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	AICRP on PHET-2016-17
5.	Production system and thematic area	Value addition
6.	Performance of the Technology with performance indicators	TO ₁ . Shelf life 1 day, discoloration TO ₂ . Shelf life 5-7 days, colour retention
7.	Final recommendation for micro level situation	-
8.	Constraints identified and feedback for research	It is a very appreciable technology
9.	Process of farmers participation and their reaction	All the farmers accepted this technology due to low cost and high return

Thematic area: Value addition

Problem definition:Poor price realisation from sale of whole tender jackfruit

Technology assessed:

FP- Direct selling of whole tender jackfruit

TO1-Peeling of jackfruit by knife/paniki cut into pieces and packaging in polythene

TO2-Surface cleaning/dirt removal by washing, peeling and cutting into pieces. Dipping in 0.5% (w/v) citric acid and 0.1% ascorbic acid for 7 minutes, surface drying and packaging in punnet pack or PP pouch with 0.0675% perforation and refrigerated storage at 10°C

Table:

Results	Sensory Parameter (5-point hedonic rating)	Keeping Quality	Gross income (Rs/1 Kg)	Net Income (Rs/10 Kg)	BC Ratio
FP	-	-	18/-	10/-	1.2
TO ₁	4.1	1 Day	30/-	19.5/-	1.8
TO ₂	4.8	5-7 Days	40/-	27/-	2.0

Results: Value addition of tender jackfruit gave higher net return and BC ratio over the farmer practice.

OFT-8

1.	Title of On farm Trial	Assessment of in-situ soil moisture conservation methods in tomato-radish sequence
2.	Problem diagnosed	Due to less moisture, another crop can not be taken after tomato leading to less income/unit area and intensive weed problem results in less productivity
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	FP: Ridge and furrow method (Sole tomato crop) TO ₁ : Ridge and furrow method with organic mulch (T-R) TO ₂ : Broad bed furrow method (T-R) TO ₃ : Broad bed furrow method with organic mulch (T-R)
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	AICRP on Dryland Agriculture, Annual Report, 2017-18.
5.	Production system and thematic area	Soil and water conservation
6.	Performance of the Technology with performance indicators	TO ₁ : Dried sal leaves are used with 6 cm height which are easily available TO ₂ : Flattened beds are made with furrow TO ₃ : Flattened beds are made with furrow and dried sal leaves are used with 6 cm height as organic mulch.
7.	Final recommendation for micro level situation	TO ₁ : Dried sal leaves are used with 6 cm height which are easily available
8.	Constraints identified and feedback for research	-
9.	Process of farmers participation and their reaction	It is a good technology

Thematic area:

Problem definition: Due to less moisture, another crop can not be taken after tomato leading to less income/unit area and intensive weed problem results in less productivity

Technology assessed:

TO₁: Ridge and furrow method with organic mulch (T-R)

TO₂: Broad bed furrow method (T-R)

TO₃: Broad bed furrow method with organic mulch (T-R)

Table:

Result	yield (t/ha)	% change in Yield	Net Income (Rs./ha)	BC Ratio
FP	11.5	-	109500	1.73
TO ₁	24	108.6	250000	2.27
TO ₂	18	56.5	178000	1.93
TO ₃	23	100	235000	2.13

OFT-9

1.	Title of On farm Trial	Assessment of Three row Manual Rice Transplanter
2.	Problem diagnosed	High labour cost and time involved in manal transplanting
3.	Details of technologies selected for assessment/refinement (Mention either Assessed or Refined)	FP: Manual transplanting TO ₁ : Root wash type two row rice transplanter TO ₂ : Transplanting by three row Manual rice transplanter using mat type nursery
4.	Source of Technology (ICAR/ AICRP/SAU/other, please specify)	TO ₁ : AICRP on ESA, CAET, DR BSKKV, Dapoli, Maharastra, 2018 TO ₂ : AICRP on ESA, CAET, OUAT, 2015-16
5.	Production system and thematic area	Farm mechanization
6.	Performance of the Technology with performance indicators	TO ₁ - Root wash type two row rice transplanter has a row to row spacing of 240mm TO ₂ - Three row Manual rice transplanter is a pull type transplanter where mat nursery is transplanted, it has actual field capacity of 0.02 ha/ hr (9 man days/ha), missing hill-3-5%
7.	Final recommendation for micro level situation	TO ₂ : Transplanting by three row Manual rice transplanter using mat type nursery recommended for micro level situation
8.	Constraints identified and feedback for research	-
9.	Process of farmers participation and their reaction	It is very good techonolgy

Thematic area: Farm Mechanization

Problem definition: High labour cost and time involved in manal transplanting

Technology assessed:

TO₁: Root wash type two row rice transplanter

TO₂: Transplanting by three row Manual rice transplanter using mat type nursery

Table:

Result	yield (q/ha)	Field Capacity(ha/hr)	Laour Requirement (man days/ha)	Cost of operation (Rs/ha)	Cost Saving (Rs/ha)
FP	30	0.04	31	9300	-
TO ₁	32	0.013	10	3100	6200
TO ₂	33	0.015	8	2500	6800

OFT 10

Assessing the performances of FPOS with varies level of task and commodity to enhance the net return.

Farmers Practice	TO1	TO2
Farmers market their produce individually through intermediaries	FPO dealing with multiple commodities with multi tasking	FPO dealing with single commodity with single tasking

Selection of FPOs: After categorizing the FPOs (based on commodity and task)

Random Sampling was followed to select the FPO

Selection of the respondents: Proportional sampling was followed (10% of the share holder)

(Among the respondents: 20% BOD members and 80% farmers)

To assess the performance of FPOs a structure schedule was developed to study the opinion of the member about the role of FPO in successful marketing of the produce.

Different aspect were studies in relation of FPOs

(3- point Likert Scale SA-Strongly Agree, PA- Partially Agree, NA- Not agree)

1. Social aspect 2. Technical Aspect 3. Marketing Aspect 4. Organizational Aspect

TOTAL NO. OF FPOs IN THE DISTRICT	TOTAL NO. OF RESPONDENT SELECTED
Promoted & funded by NABARD- 07	TO1: Shareholder 500 (N=50)
Promoted and Funded by SWATI-02	TO2. Shareholder 382 (N=38)

Perception of the respondents about be role of FPO in marketing their produce

Table:

Aspects	TO1(N=50)		TO2(N=38)	
	Mean Score	Gap(%)	Mean Score	Gap (%)
Social aspect	2.08	30.6	2.01	32.89
Technical Aspect	2.11	29.6	1.76	41.22
Marketing Aspect	2.2	26.4	2.09	30.52
Organizational Aspect	2.03	32.2	1.87	37.54

RESULTS:

In TO1 max. gap were observed In organizational aspect where as in TO2 technical gap were maximum. In both the groups responded were satisfied about the marketing aspect of the FPOS. Further T-test (Unpaired) was calculated to evaluate whether there is significant difference among the two groups. As the t-stat value is greater than the tabulated value it implies the null hypothesis is rejected and alternate hypothesis is accepted. As TO1 is performs diversified activities emphasis should be more on strengthening of Organization whereas TO2 should focus more on providing technical advisory and guidance for higher profitability,

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+Cowpea	Organic nutrient management	Application of FYM @ 5 t/ha, Vermicompost @ 2 t/ha, Bio-consortia @ 5 kg/ha incubated with FYM (1:25) and foliar spray of pot-manure @ 2 % for 4 times at 15 days interval (Pot manure: Extract of cow dung 5 kg + Cow urin 5 lit + 1 kg of leaves each of <i>Pingamia pinnata</i> , <i>Calotropis gigantea</i> and <i>Azadiractia indica</i> + 250 gm gaggery formented for 15 days)	01	01	1	0	6	2	1	0	8	2	1	0	-
2.	Sunflower	INM	<ul style="list-style-type: none"> ▪ Soil test based NPK application ▪ Use of FYM @ @ 5 t/ha and ▪ Use of bio-fertilizer (<i>Azotobacter</i>, <i>Azospirillum</i> and <i>PSB</i>, 1:1:1 @ 4 kg each per ha) incubated with FYM @ 1:25 ratio for 7 days 	01	01	0	1	5	3	0	1	5	5	1	0	-
3.	Chilli	INM	<ul style="list-style-type: none"> ▪ Soil test based NPK application ▪ Vermi-compost @ 5 t / ha 	0.4	0.4	0	0	0	0	0	0	0	0	1	0	-

			<ul style="list-style-type: none"> ▪ Bio-fertilizer (Azotobacter, Azospirillum and PSB, 1:1:1 @ 4 kg each per ha) incubated with FYM @ 1:25 ratio 												
4.	Garden pea	INM	<ul style="list-style-type: none"> • Application of FYM @ 5 t / ha • Application of lime @ 0.2 LR at the time of final ploughing • Soil test based NPK application • Seed inoculation with <i>Rhizobium</i> @ 20 gm/kg seed 	01	01	1	1	4	4	0	0	5	5	1	0
5	Cabbage (TSP)	INM and ICM	<ul style="list-style-type: none"> • Hybrid cabbage variety-Hare Krishna, 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 (<i>Azotobacter</i> + <i>Azospirillum</i> + <i>PSB</i>: 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:P₂O₅:K₂O as per soil test results and need based application of plant protection chemicals 	2.5	2.5	0	0	1	0	0	0	1	0	2	5
6	Cauliflower (TSP)	INM and ICM	<ul style="list-style-type: none"> • Hybrid cauliflower variety-Poornima, 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 	2.5	2.5	0	0	1	0	0	0	1	0	2	5

			biofertilizers @ 12 kg/ha (<i>Azotobacter</i> + <i>Azospirillum</i> + 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 ₂ O ₅ :K ₂ O as per soil test results and need based application of plant protection chemicals.														
7	Garden pea (TSP)	INM and ICM	• High yielding variety-GS-10, FYM 5 t/ha, Seed rate 50 kg/ha, seed treatment with Rhizobium 20g/kg of Seed, Spacing 30x10cm, application of biofertilizers @ 12 kg/ha (<i>Azotobacter</i> + <i>Azospirillum</i> +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 ₂ O ₅ :K ₂ O as per soil test results and need based application of plant protection chemicals	2.5	2.5	0	0	2	1	0	0	2	1	3			
								1	1			1	1	2			
8	Rice	Weed management	Post-emergence application of Bispyribac-Na @ 20 g/ha + Almix @ 4 g/ha recorded the lowest weed density and significantly higher yield in transplanted rice.	1	1	2	4	-	6								
						-	-		-								
						0	1		1					7			
9	Rice	Varietal evolution	Cultivation of rice variety Phalguni (CR Dhan 801), Duration - 115-120 days, Average Yield-5-6 t/ha, long	1	1	1	3	-	4								
						-	-		-								
						1	2		3								
									-								
									7								

			slender grains, resistance against leaf blast, gall midge and leaf folder															
10	Ragi	Varietal evolution	Ragi variety <i>Kalua</i> (OEB 532), Line sowing of <i>Kalua</i> variety, 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.	1	1	2 - 1	4 - 2	1 - 0	7 - 3 - 1 0									
11	Garden pea	Weed management	Post-emergence application of Imazethapyr (10% SL) @ 750ml/ha at 20-30 DAS	1	1	3 - 1	5 - 1	-	8 - 2 - 1 0									

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil (Kg/ha)			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P ₂ O ₅	K ₂ O					
Maize+Cowpea	Kharif 2022	RF	Sandy loam	225.8 to 294.3	9.6 to 11.6	229.5 to 305.3	Maize	28.08.2022	26.12.2022	979.4	48
Sunflower	Rabi 2022-23	Irrigated	Sandy loam	189.5 to 223.6	13.6 to 17.5	226.8 to 323.6	Vegetable	18.10.2022	02.02.2023	455.8	22
Chilli	Kharif 2022	RF	Sandy loam	205.4 to 302.1	9.7 to 22.4	154.7 to 198.3	Beans	29.08.2022	16.01.2023	979.4	48
Garden pea	Rabi 2022-23	Irrigated	Sandy loam	166.8 to 257.3	10.1 to 19.2	272.7 to 314.9	Cauliflower	15.09.2022	22.01.2023	455.8	22

Cabbage (TSP)	Rabi 2022-23	Irrigated	Sandy loam	196.8 to 251.7	14.1 to 21.4	177.6 to 304.6	Tomato	02.10.2022	09.02.2023	455.8	2 2
Cauliflower (TSP)	Rabi 2022-23	Irrigated	Sandy loam	201.4 to 277.4	11.8 to 20.4	288.9 to 311.2	Bean	18.10.2022	28.02.2023	455.8	2 2
Garden pea (TSP)	Rabi 2022-23	Irrigated	Sandy loam	218.7 to 303.7	21.6 to 24.8	209.2 to 308.2	brinjal	22.10.2022	04.03.2023	455.8	2 2
Rice	Kharif	Rainfed up & medium land	Red laterite					10.07.2023			
Rice	Kharif	Rainfed up & medium land	Red laterite					15.07.2023			
Ragi	Kharif	Rainfed up & medium land	Red laterite				Vegetables	04.08.2023			
Garden pea	Rabi	Irrigated medium land	Red laterite				vegetables	26.10.2023			

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
Sunflower	INM	INM practices for sunflower	10	01	17.3	12.9	34.1	42800	104059	61259	2.4	38400	77593	39193	2.0
Total															

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

** BCR= GROSS RETURN/GROSS COST

Pulses

Frontline demonstration on pulse crops

Crop	Thematic Area	Name of the technology demonstrated	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Maize + Cow pea	Organic nutrient management	Demonstration on organic nutrient management in Maize + Cowpea (2:2) intercropping system	10	01	MEY - 47.2	MEY - 36.6	29	40450	90603	50153	2.25	36300	70228	33928	1.95
Total															

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

** BCR= GROSS RETURN/GROSS COST

Other crops

Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	Other parameters		*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demonstration	Check		Demo	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Chilli	INM	Demonstration on INM in chilli	10	0.4	124.3	91.3	36.1	No. of fruits/plant-127.8	No. of fruits/plant-89.4	100500	385330	284830	3.8	85400	283030	197630	3.3
Garden pea	INM	Demonstration on INM in garden pea	10	1.0	118.3	82.4	43.6	No. of pods/plant-22.2	No. of pods/plant-13.3	69500	201110	131610	2.9	60600	140080	79480	2.3
Cabbage (TSP)	ICM & INM	Package demonstration on cabbage	25	2.5	329.6	210.4	56.7	Head Wt (kg) – 1.66	Head Wt (kg) – 1.04	67800	329600	261800	4.9	59600	210400	150800	3.5
Cauliflower (TSP)	ICM & INM	Package demonstration on cauliflower	25	2.5	277.5	176.4	57.3	Head Wt (kg) – 1.12	Head Wt (kg) – 0.81	82400	402375	319975	4.9	66900	255780	188880	3.8
Garden pea (TSP)	ICM & INM	Package demonstration on garden pea	32	2.5	117.8	80.4	46.5	No of pods/plant – 22.3	No of pods/plant- 12.9	55900	247380	191480	4.4	48200	168840	120640	3.5

Chilli	Varietal evaluation	Demonstration of chilli variety arka meghana	10	1.0	239.98	180	33.32	135	120	75000	143988	68988/79530	1.91/2.06	70000	108000	38000	1.54
Cucumber	ICM	Demonstration of SLTS in cucumber farming	10	0.16	134	86.7	54.58	12	07	150000	670140	520140	4.47	100000	346800	246800	3.468
Garden Peas	Varietal evaluation	Demonstration on green peas variety sabji matar -14	10	1.0	175	142.2	38.28	10	07	100000	484400	384400	4.84	98000	350000	252000	3.57
Rice	Weed management	Demonstration on weed management in transplanted rice	10	1	31.4	26.4	18.9	13.6	8.4			36220	1.8			25420	1.1
Rice	Varietal evolution	Demonstration of drought tolerant rice variety Phalguni (CR Dhan 801)	10	1								48980	2.4			34940	1.7
Ragi	Varietal evolution	Demonstration on improved Ragi variety, OEB 532	10	1	10.6	7.5	41.3	6.2	3.5			41000	3.4			27500	2.7
Garden pea	Weed management	Demonstration on weed management in Garden pea	10	1	86.4	78.3	10.3	11.2	8.3			220600	5.7			192400	4.5

Other enterprises

Category	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.) or Rs./unit				*Economics of check (Rs.) or Rs./unit			
				Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Oyster mushroom	Cultivation of oyster mushroom var. <i>psizygusulmarius</i> having high market demand	10	10	-	-	-	-	-			170	5.2			120	4.0
Pro tray Nursery	Demonstration on pro tray nursery techniques	10	05	88.2	65.8	34.04	99	95	450000	917280	467280	2.03	280000	388920	108920	1.389
Mango	Preparing of protein rich mango spicy bar- Extract mango pulp (80 gm), heat for 3 mins add corn flour paste (4 gm), sugar (50 gm), chili powder (0.75 gm), asafoetida (0.1 gm) and green gram flour (20gm) heat the mix on medium flame. Cool the pulp to room temp and add 0.1 % KMS (Potassium metabisulfite). Spread the finished pulp evenly in an aluminum tray to a thickness of 0.5 cm for sun drying	10	10	4.2	3.6	16.66										
Groundnut	Use of groundnut decorticator	10	10	85	-	85	114	82	-	31				2.2		
Total																

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

** BCR= GROSS RETURN/GROSS COST

Coconut										
Others (Pl. specify)										
Total										
Fodder crops										
Napier (Fodder)										
Maize (Fodder)										
Total										

Technical Feedback on the demonstrated technologies

Sl. No	Crop	Feed Back
1	Maize+cowpea	Farmers are happy due to higher income
2	Sunflower	Farmers appreciated the technology and will continue in future
3	Chilli	Farmers adopted the technology due to higher yield and net income
4	Garden pea	Farmers adopted the technology due to higher yield and net income
5	Cabbage	Farmers adopted the technology due to higher yield and net income
6	Cauliflower	Farmers adopted the technology due to higher yield and net income
7	Protray Nursery	Survival rate is better than traditional practice, it removes barrier for Kharif vegetable farming due to high mortality rate of seedlings.
8	Chilli	During distress sale of green chilli, it will process for red dry chili and sold in market at the rate Rs. 300 per Kg. This variety has very well characteristics as green chili due to its pungency and as red chili due to attractive colour and size.
9	Cucumber	Crop management in SLTS by HDPE Nylon net is very easy than traditional staking by fire wood, Cucumber fruit size is straight and disease free, easy to harvest fruits.
10	Garden peas	Sabji Matar variety has high adaptation rate at North eastern ghat zone Kandhamal due to maximum number of seeds per pod, Sweet taste and yield potential demand increasing.

Extension and Training activities under FLD

Sl. No.	Activity	Date	No. of activities organized	Number of participants	Remarks
1.	Field days	December 2022 to January 2023,	07	200	
2.	Farmers Training	September 2022 to January 2023, 16.09.22, 05.08.2022, 16.09.2022 & 20.10.2022, 7.7.2022, 22.07.2023	10	225	
3.	Media coverage	-21.12.2022, 16.02.2023, 03.03.2023, 28.03.2023	4	250	
4.	Training for extension functionaries	January 2023, 20-21.12.2022	03	45	

Performance of the demonstration under CFLD on Pulse and Oilseed Crops during Kharif 2022 and Rabi 2022-23:

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.	Niger	Tila	3.9	78	38	72	Use of improved variety Utkalniger 150, Seed rate @ 10 kg/ha, seed treatment with vitavax power @ 2 gm per kg seed, line sowing (with spacing 30×20 cm), application of Boron @ 1 kg/ha, Soil test based fertilizer application (based on the	25	10	6.1	3.8	4.8	41.1	33.6	32.1

							recommended dose of 50:25:25 kg NPK/ha), Integrated disease and pest management								
2.	Toria	Kojisorisa	4.2	4.9	4.4	12.6	Var. Sushree 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, STBFR application Alternate sprayings of Thiomethoxan @ 5gm/15 liter of	25	10	7.2	4.1	5.6	52.3	48.5	43.2

							water and Neem oil @ 5 ml per liter, application of chloropyrif os+cyprom ethrin and metalaxyle +mancozeb								
3.	Horsegram	Chakapad akulthi	4.01	437	448	603	Variety- Indira kulthi-Seed treatment with Vitavax power @ 2 gm per kg seedApplic ation of Boron @ 1kg/ha and WettableSu lphur @ 1.5 kg/ haSpraying of neem oil @ 5 ml/ lit. twice at 15 days interval	25	10	6.24	5.1	5.71	30.66	27.47	5.3

4.	Sunflower	Kaberi champ	4.2	500	600	709	Var. KBSH-44, Seed rate @ 10 kg/ha, Seed treatment with Vitavax power @ 2 gm per kg seed, Line sowing (with spacing 45x60 cm), Application of Boron @ 1kg/ha, Application of sop 10 kg/ha , Spraying of Lambadacy hlothrin 1lt/ha, Soil test based fertilizer application (based on the recommend ed dose of 60:40:40 kg NPK/ ha), and Neem oil @ 5 ml per liter	50	20	6.2	4.2	6.1	22	1.7	14
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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.	Utkal niger 150	8900	19380	10480	2.2	10500	27183	16683	2.6
2.	Toria	11200	20500	9300	1.8	15600	35400	19800	2.3
3.	Horsegram	12100	19243	7143	1.7	14200	28553	14353	2.0
4.	Sunflower	16600	25200	9600	1.5	21200	36600	19800	1.7

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.	Niger, var. utkalniger 150	11500	327.5	50	800	500	Household	25.2
2.	Toria, var.Sushree	5650	480	60	20	5	Household	32.4
3.	Horsegram var. Indira kulthi	57100	779.1	43	628.1	399.7	Household	33
4.	Sunflower var. KBSH-44	15250	450	60	20	5	Household	36.4

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.	Niger	suitable	liked	85%	no	yes	Unavailability of improved variety
2.	Toria	suitable	liked	78.6%	no	yes	Unavailability of improved variety
3.	Sunflower	suitable	liked	75%	no	yes	Unavailability of improved variety

E. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a vis Local Check	Farmers Feedback
New Variety, seed treatment, rhizobium inoculation, application of pp chemicals	Good performance of recommended technology	Demonstrated technology performed better than local check	Farmers happy with higher yield & net return

F. Extension activities under FLD conducted:

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
1	Group meeting	28.08.2022, 15.09.2022, 25.09.2022, 15.10.2022, 30.10.2022, 19.11.2022, 4.10.2022, 02.11.2022 Gamandi of Raikia block , Dakepadar, Raipada	220
2	Training, Greenbadi, kilabadi sriranpanga	18.11.2022 Gamandi of Raikia block	125
3	Field visit	01.09.22, 25.09.22, 19.11.22 Greenbadi, Kilabadi, Pliheri, Daringbadi, Rukanbadi, Takarmal, Siripanga,	100
4	Field day	07.09.2017 & 08.09.2017, Gamandi of Raikia block , Raipada	75
5	Input distribution	03.11.2022, 04.11.2022 Dakepadar, Maazagada Greenbadi, Kilabadi, Pliheri, Daringbadi, Rukanbadi, Takarmal, Siripanga,	150



J. Details of budget utilization

Crop (provide crop wise information)	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Niger	i) Critical input	88800	88800	0
	ii) TA/DA/POL etc. for monitoring			
	iii) Extension Activities (Field day)	12200	12200	0
	iv)Publication of literature			0
	Total	100000	100000	0

Crop (provide crop wise information)	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Torja	i) Critical input	54000	54000	0
	ii) TA/DA/POL etc. for monitoring			
	iii) Extension Activities (Field day)	6000	6000	0
	iv)Publication of literature			0
	Total	60000	60000	0

Crop (provide crop wise information)	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Horsegram	i) Critical input	82000	82000	0
	ii) TA/DA/POL etc. for monitoring			
	iii) Extension Activities (Field day)	8000	8000	0
	iv)Publication of literature			0
	Total	90000	90000	0

Crop (provide crop wise information)	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Sunflower	i) Critical input	108000	108000	0
	ii) TA/DA/POL etc. for monitoring			
	iii) Extension Activities (Field day)	12000	12000	0
	iv)Publication of literature			0
	Total	120000	120000	0

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													
Resource Conservation Technologies	1	-	-	-	-	3	3	8	14	22	8	17	25
Cropping Systems	1	-	-	-	2	1	3	16	6	22	18	7	25
Crop Diversification													
Integrated Farming													
Micro irrigation/irrigation													
Seed production													
Nursery management													
Integrated Crop Management													
Soil & water conservation													
Integrated nutrient Management													
Production of organic inputs													
Others													
Total													
II. Horticulture													
a) Vegetable Crops													
Production of low volume and high value crops													
Off0season vegetables													
Nursery raising													
Exotic vegetables													
Export potential vegetables													
Grading and standardization													
Protective cultivation													
Others													
Total (a)													
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													

iii. Extension Personnel (On and Off Campus)

Thematic Area	No. of Courses	No. of Participants									Grand Total		
		Other			SC			ST			M	F	T
		M	F	T	M	F	T	M	F	T			
Productivity enhancement in field crops	1	-	-	-	-	3	3	9	3	12	9	6	15
Integrated Pest Management													
Integrated Nutrient management	01	3	2	5	1	0	1	8	1	9	12	3	15
Rejuvenation of old orchards													
Protected cultivation technology													
Production and use of organic inputs													
Care and maintenance of farm machinery and implements													
Gender mainstreaming through SHGs													
Formation and Management of SHGs													
Women and Child care													
Low cost and nutrient efficient diet designing													
Group Dynamics and farmers organization													
Information networking among farmers													
Capacity building for ICT application													
Management in farm animals													
Livestock feed and fodder production													
Household food security													
Other													
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
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
Soil Science	RY	Production technique of organic inputs for promotion of organic farming	02	On	12	03	15	11	02	13

Soil Science	F/FW	Use and importance of water soluble fertilizer in major crops grown in Kandhamal district	01	Off	18	7	25	14	06	20
Soil Science	IS	Strategic INM practices for soil health and sustainable agriculture	01	On	12	3	15	10	2	12
Soil Science	F/FW	Importance of soil and water testing for sustainable agriculture	01	On	19	6	25	18	5	23
Soil Science	F/FW	Management of acid soil for higher crop productivity	01	Off	20	5	25	18	4	22
Soil Science	RY	Practices and skill in production of earthworm and maintenance of vermiculture unit	01	Off	21	4	25	21	4	25
Soil Science	F/FW	INM practices for potato cultivation	01	Off	22	3	25	20	2	22
Soil Science	F/FW	Nutrient management practices for inter cropping system	01	Off	17	8	25	14	7	21
Soil Science	F/FW	INM practices for off-season vegetable cultivation	01	Off	15	10	25	13	10	23
Soil Science	F/FW	Nutrient management strategies for enhancing oilseed productivity in kandhamal district	01	Off	21	4	25	19	4	23
Soil Science	F/FW	Use and importance of greenmanuring for soil health management	01	Off	20	5	25	20	4	24
Soil Science	F/FW	INM practices for millet cultivation	01	Off	21	4	25	20	4	24
Soil Science	F/FW	Quality vermicompost production technique	01	Off	22	3	25	20	2	22
Soil Science	F/FW	Organic nutrient management practices for vegetable cultivation	01	Off	17	8	25	17	6	23
Soil Science	F/FW	Nutrient management strategies for enhancing pulse productivity in Kandhamal district	01	Off	20	5	25	19	5	24
Soil Science	F/FW	Inoculation technique , use and importance of biofertilizers for major crops grown in Kandhamal district	01	Off	21	4	25	20	4	24
Soil Science	F/FW	Management of acid soil for higher crop productivity	01	Off	22	3	25	20	3	23

H) Vocational training programmes for Rural Youth

a) 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 elsewhere
				Male	Female	Total	Type of units	Number of units	Number of persons employed	

*training title should specify the major technology /skill transferred

Other														
Total														
Income generation activities														
Vermicomposting														
Production of bioagents, biopesticides, biofertilizers etc.														
Repair and maintenance of farm machinery & imlements														
Rural Crafts														
Seed production														
Mushroom cultivation														
Nursery, grafting etc.														
Tailoring, stitching, embroidery, dying etc.														
Agril. Para-workers, para-vet training														
Total														
Agricultural Extension														
Capacity building and group dynamics														
Total														
Grand Total														

I) Sponsored Training Programmes

a) Details of Sponsored Training Programme

Sl.No	Title	Thematic area	Month	Duration (days)	Client	No. of courses	No. of participants	Sponsoring Agency
					PF/R/EF			
1	Vermicomposting	Production and use of organic inputs	Sept	01	PF	01	50	RESILIENCE Project
2	Organic nutrient management practices for off season cauliflower cultivation	Nutrient management	Oct 2022	01	PF	01	50	RESILIENCE Project
3	Mushroom cultivation	Income generation	Nov 2022	01	PF	01	50	RESILIENCE Project
4	Trelley system in cucurbits	ICM	Dec 2022	01	PF	01	50	RESILIENCE Project

Method Demonstrations	06	56	8	64	64	6	3	9	62	11	73
Farmers Seminar											
Workshop	02	50	40	90	71	10	4	14	60	44	104
Group meetings	10	150	50	160	77	10	2	12	160	7	167
Lectures delivered as resource persons	20	200	100	300	64	20	5	25	220	105	325
Advisory Services											
Scientific visit to farmers field	60	312	108	420	72	40	15	55	352	123	475
Farmers visit to KVK											
Diagnostic visits	70	215	124	339	82	50	10	60	265	134	399
Exposure visits	12		100	300	64	20	5	25	220	105	360
Ex-trainees Sammelan											
Soil health Camp	04	40	15	55	84	4	3	7	44	18	62
Animal Health Camp											
Agri mobile clinic											
Soil test campaigns											
Farm Science Club Conveners meet	10	150	50	160	77	10	2	12	160	7	150
Self Help Group Conveners meetings	15	108	420	72	40	15	55	352	123		375
Mahila Mandals Conveners meetings											
Sankalp Se Siddhi											
Swatchta Hi Sewa	10	50	40	60	71	10	4	14	60	44	250
Mahila Kisan Divas	1										52
Total	242	2235	1408	3277	898	212	117	611	2647	914	4029

B. Other Extension activities

Nature of Extension Activity	No. of activities
Newspaper coverage	03
Radio talks	
TV talks	
Popular articles	
Extension Literature	
Other, if any	

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		
					M	F	M	F	M	F	M	F	
Total													

KVK farm

Crop	Variety	Quantity of seed (q)	Value (Rs)	Number of farmers to whom seed provided							
				SC		ST		Other		Total	
				M	F	M	F	M	F	M	F
Niger	Utkal Niger 150	3.93					52	0	52	0	
Toria	Sushree	5.30					102	0	102	0	
Grand Total											

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	
				M	F	M	F	M	F	M	F
Vegetable seedlings											
Brinjal	Akshita	1000	4000	6	3	20	6	8	6	34	15
Tomato	Surekha	1000	4000	10	0	12	3	9	2	31	5
Chili	Sindur	1000	4000	12	5	42	2	6	5	62	12
Papya	Red lady	200	5000	8	12	4	16	21	7	33	35
Cauliflower	NS 1448	2000	8000	4	18	23	17	6	10	33	45
Brinjal	Akshita	2000	8000	10	2	16	13	18	8	34	23
Tomato	Surekha	2000	8000	12	8	16	41	0	7	28	56

Chili	Sindur	2000	8000	8	6	18	23	8	2	34	31
Papaya	Red lady	100	2500	12	16	15	41	2	13	29	70
Cauliflower	NS 1448	1000	2000	10	8	16	7	19	4	35	19
Onion	ADR, Niketan	65000	9000	12	16	10	17	13	9	35	42
Mushroom spawn bottles	Oyster & Paddy straw mushroom	4000	72000	14	106	12	132	20	25	46	263
Total											

Production of Bio-Products

Name of product	Quantity	Value (Rs.)	No. of Farmers benefitted							
	Kg		SC		ST		Other		Total	
			M	F	M	F	M	F	M	F
Bio-fertilizers	3450	51750	12	10	38	25	10	2	60	37
Bio-pesticide										
Bio-fungicide										
Vermin	8.5	4250	2	1	4	1	0	0	6	2
Total										

Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers benefitted							
				SC		ST		Other		Total	
				M	F	M	F	M	F	M	F
Dairy animals											
Cows											
Buffaloes											
Calves											
Others (Pl. specify)											
Small ruminants											
Sheep											
Goat											
Other, please specify											
Poultry	Kalinga brown/	1000		24	28	52	44	12	25	88	97

Broilers												
Layers												
Duals (broiler and layer)												
Japanese Quail												
Turkey												
Emu												
Ducks												
Others (Pl. specify)												
Piggery												
Piglet												
Hog												
Others (Pl. specify)												
Fisheries												
Indian carp												
Exotic carp												
Mixed carp												
Fish fingerlings												
Spawn												
Others (Pl. specify)												
Grand Total												

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

i) Name of Seed Hub Centre:

Name of Nodal Officer :	
Address :	
e-mail :	
Phone No. : Mobile :	

ii) Quality Seed Production Reports

Season	Crop	Variety	Production (q)			
			Target	Area sown (ha)	Production	Category of Seed (F/S, C/S)
Kharif 2022	Turmeric	Roma	1.2	1.2	127q	TL
Kharif 2022	Niger	Utkal Niger 150	2ha	2 ha	4.1 q	FS
Rabi 2022-23	Toria	Sushree	1 ha	1 ha	5.3 q	FS

iii) Financial Progress

Fund received (2019-20, 2020-21, 2021-22 and 2022-23)	Expenditure (Rs. in lakhs)		Unspent balance (Rs. in lakhs)	Remarks
	Infrastructure	Revolving fund		
2019-20				
2020-21				
2021-22				
2022-23				

iv) Infrastructure Development

Item	Progress
Seed processing unit	Under construction
Seed storage structure	

3.6. (A) Literature

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

Item	Title	Author's name	Number	Circulation
Research paper				
Seminar/conference/ symposia papers				
Books	Mushroom Cultivation, Scientific method of	Sumitra Hembram, Sidhartha Kar,	3	1500

	Cowpea Cultivation, Scientific method of Sunflower Cultivation			
Bulletins				
News letter	The Kalinga	Senior Scientist and Head	1	500
Popular Articles				
Book Chapter				
Extension Pamphlets/ literature				
Technical reports				
Electronic Publication (CD/DVD etc.)				
TOTAL	4		4	2000

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.	District level workshop on Resilience project	Workshop	Dr. S.K.Mukhi	27.10.2022	KVK Kandhamal

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 and contacts of farmer: Mrs. Bhaktimala Nayak, Contact:8280804452, Address: Kanbagiri, G.Udayagiri, Kandhamal

Name and contacts of KVK: Sumitra Hembram, P.A (Home Science), OUATKVKKANDHAMAL. Mob: 8763252414, sumitrahembram2020@gmail.com

Title: Journey of a landless women towards self-dependency

A brief description of the enterprise: Mrs. Bhaktimala Nayak, W/O: Samson Nayak of district Kandhamal was a progressive lady with a zeal to do something substantial to benefit her family and society. As her husband has a marginal land holding, it became very difficult to earn their livelihood from the existing resources. They were living a very harsh life with lots of grief and hunger.

In one of her visit to KVK changed her perception towards integrated farming and the sustainable income opportunities from such systems. Mrs. Nayak approached Krishi Vigyan Kendra, Kandhamal and attended the trainings on Oyster mushroom cultivation and Backyard poultry rearing with high yielding colour breeds during September 2019. Then she started mushroom cultivation within her house as per the guidance and support from the scientists & procured the required number of spawn bottles from KVK. Inspired by the initial success with encouraging support from her husband, she constructed a low cost mushroom production unit attached to her house and started producing mushroom regularly.

Also she made a small night shelter for 50 birds and started poultry rearing. To begin with, KVK from its poultry brooding unit arranged 40 numbers of 28 day-old Vanaraja & Aseel poultry chicks for her.

Detailed information of the training provided by the KVK: She participated in the 5 days' skill development training programme conducted on "Mushroom cultivation and Backyard poultry rearing for doubling income and its management practices at OUATKVKKANDHAMAL.

Income: Mrs. Nayak could able to put around 1600 bags of Oyster mushroom during October to March and produce a total of 28.8 qtls of mushroom during 2019-20. The produce could earn her a total net profit of Rs. 2,24,000/- within 6 months. She sales all the produce from home in retail mode, she also goes for drying the mushroom in case of excess production and less sale. During summer months owing to the reduction in yield of Oyster mushroom, she puts more effort on Backyard poultry rearing by which she could earn an additional income of Rs. 72,000/- from 200 numbers of poultry birds. In total, Mrs. Nayak earns around Rs. 2,96,000/- per annum without having any land resources from these two enterprises.

Coverage/ impact of training:

The training helped her learning appropriate and scientific method of backyard poultry rearing, mushroom cultivation followed by using its byproducts for vermicompost production. She regularly visits KVK and updates herself with new knowledge regularly interacting with scientists which guided herto achieve success.

Horizontal spread: Based on her experience, she started offering hand-on training to farm women groups and youths helping in disseminating the technologies. Inspired by her success, many farm women from the nearby areas started approaching towards KVK during COVID-19 lockdown period for starting these small income generating enterprises at their backyards for sustenance and development of livelihood. Due to her initial effort, many mushroom growers have come up in G. Udayagiri block and for which there was no scarcity of mushroom during the winter season of this year.

Concluding assessment: The initiative taken by her has proved that landless farmer can also have satisfactory income and provide employment opportunity to other house wives by taking certain skill full training of mushroom cultivation and backyard poultry rearing.

Pictures



Mrs Bhaktimala Nayak with husband, Samson Nayak in her Mushroom Production Unit

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	200	18000	900	Y

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

Sl. No.	Brief details of the tool/ methodology followed	Purpose for which the tool was followed

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			
222	432	654	654	19	3270

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	Distribution of soil health card	80	10	Chairman, Zilla Parisada, Kandhamal	40	40

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
5	31

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
04.02.2023	Ayurdehi Mishra, CDAO, Phulbani	Attended SAC meeting
04.02.2023	DDH, Phulbani	Attended SAC meeting
04.02.2023	J K Sahu CDVO, Phulbani	Attended SAC meeting
04.02.2023	Dr. Avijit Halder, Principal Scientist (ATARI, Kolkata)	Attended SAC meeting
04.02.2023	Dr. H. K Sahoo, DDE, OUAT	Attended SAC meeting
04.02.2023	Prof. S. Mishra, Department of Animal Nutrition, OUAT	Attended SAC meeting
01.05.2023	Prof. P.K. Raul, Hon'ble Vice Chancellor, OUAT	Visited KVK

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)
Management of acid soil	80	90	40000	75000
INM in vegetables	105	85	45000	90000
Vermicomposting	200	80	15000	32000
Use of farm machinery	55	50	-	-
Drudgery reducing small implements for women	40	60	-	-
Improved Poultry breeding	60	70	10000	40000
Mushroom cultivation	120	90	16000	65000
Crop diversification	50	65	33750	67500
IWM in different crops	60	45	10000	22000

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
Oyster Mushroom cultivation	40 %
Vermicomposting	70 %
INM in vegetables	65 %

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 2022 by the KVK, which have been financed by ATMA/ Central Govt/ State Govt./NABARD/NHM/NFDB/Other Agencies **(information of previous years should not be provided)**

a) Programmes for infrastructure development

Name of the programme/ scheme	Purpose of programme	Date/ Month of initiation	Funding agency	Amount (Rs.)

(b) Programme for other activities (training, FLD, OFT, Mela, Exhibition etc.)

Name of the programme/ scheme	Purpose of programme	Date/ Month of initiation	Funding agency	Amount (Rs.)

6. PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl. No.	Name of demo Unit	Year of est.	Area(Sq .mt)	Details of production			Amount (Rs.)		Re marks
				Variety/breed	Produce	Qty.	Cost of inputs	Gross income	
1	Vermicompost	2018-19	20 c.meter	<i>E. foetida</i>	Vermicompost	75	37500	112500	
2	Poultry	2015-16	30	Dual purpose	Chicks	5000 nos	116440	123934	
3	Mushroom spawn	2015-16	9	PSM & Oyster	PSM & Oyster spawn	5000 nos	40000	82200	
4	Poly house	2015-16	100	Vegetable & fruits	seedling	80000	24000	120000	
5	Animal Husbandry Unit	2021-22		Duck, poultry, guinea bird, quail bird, turkey	Newly Est.				
6.	Azola Unit	2021-22	25	<i>Azolla Pinnata</i>	Azolla	2.5	1000	2500	
7.	Papaya Unit	2021-22	600	F1-Lunar	Newly Est.				
8	Orhid	2021-22	-	<i>Vanda cristata</i>	Newly Est.				
9	Dragon fruit	2021-22	-	<i>Hylocereus undatus</i>	Newly Est.				
10	Tissue culture bana	2018-19	-	G-9	-	-	-	-	-
11	Guava	2019-19	-	Bihi	-	-	-	-	-
12	Colour fish breeding	2021-22	-	Gopi and molly	Newly Est.				
13	BGA	2021-22	-	-	Newly Est.				

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	
Turmeric	18.05.2022	Harvesting	1.0	Roma and Rasmi	TL	127.75	-	-	Not harvested
Niger	05.08.2022	12.12.2022	1.2	Utkal-Niger 150	FS	4.0	-	-	Not processed
Toria	21.10.2022	24.01.2023	1.0	Sushree	FS	5.33	-	-	Not processed

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

Sl. No.	Name of the Product	Qty. (Kg)	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1.	Vermicompost	3700	18245	56000	
	Vermin	18	1300	1250	

6.3. Performance of instructional farm (livestock and fisheries production)

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1.	Poultry	Kadaknath/Kalinga brown	28 days	1000	76000	82000	
2.							
3.							

6.4. Utilization of hostel facilities

Accommodation available (No. of beds)

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
OCT	10	5	
NOV	80	4	
DEC	150	6	
DEC	30	2	

DEC	25	2	
DEC	25	2	
DEC	20	2	
DEC	25	2	
DEC	6	2	
Total :	371	27	

(For whole of the year)

6.5. Utilization of staff quarters

Whether staff quarters has been completed: Old staff quarter taken over from RRTTS

No. of staff quarters: 4

Date of completion:

Occupancy details:

Months	Q I	Q II	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 -01.04.2023
	Kharif	Rabi	Kharif	Rabi	
CFLD on Oilseed, Niger	100000		100000		0.00
CFLD on Oilseed, Sunflower		120000		120000	0.00
CFLD on Oilseed, Rapeseed & Mustard		60000		60000	0.00

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

Item	Released by ICAR		Expenditure		Unspent balance as on 1 st April 2023
	Kharif	Rabi	Kharif	Rabi	
CFLD on Pulses Horsegram		90000		90000	0.00

7.4 Utilization of KVK funds during the year 2022-23 (Not audited)

Sl. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances			
2	Traveling allowances	110000	110000	110000
3	HRD	30000	30000	30000
4	Contingencies			
A	Rec. Cont. (OE/POL, TRG,FLD, OFT)	965000	965000	965000
B	TSP	1000000	1000000	1000000
C				
D				
E				
F				
G				
J	Swachhta Expenditure	17250	17250	17250
TOTAL (A)		2122250	2122250	2122250
B. Non-Recurring Contingencies				
1	Non- Rec. Office Equipment	175000	175000	175000
2	Works	1100000	1100000	1100000
3	Library	10000	10000	10000
4	Vehicle	900000	900000	900000
TOTAL (B)		2185000	2185000	2185000
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)		4307250	4307250	4307250

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

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance in hand as on 1 st April of each year (Kind + cash)
2020-21	1,44,975	16,87,500	6,38,387.30	11,94,087.70
2021-22	535614	354094	495956	8,23,658
2022-23	8,23,658	7,17738	501842	739554

- 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
Monitoring	24	Kharif/Rabi	5	22	27

8. Other information

8.1. Prevalent diseases in Crops

Name of the disease	Crop	Date of outbreak	Area affected (in ha)	% Commodity loss	Preventive measures taken for area (in ha)

8.2. Prevalent diseases in Livestock/Fishery

Name of the disease	Species affected	Date of outbreak	Number of death/ Morbidity rate (%)	Number of animals vaccinated	Preventive measures taken in pond (in ha)

9.1. Nehru Yuva Kendra (NYK) Training

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

9.2. PPV & FR Sensitization training Programme

Date of organizing the programme	Resource Person	No. of participants	Registration (crop wise)	
			Name of crop	No. of registration

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

Type of message	No. of messages	No. of farmers covered
Crop	23	28915
Livestock	0	0
Fishery	0	0
Weather	5	28915
Marketing	0	0
Awareness	8	28915
Training information	0	0
Other	0	0
Total	36	

9.4. *KVK* Portal and Mobile App

Sl. No.	Particulars	Description
1.	No. of visitors visited the portal	1862
2.	No. of farmers registered in the portal	0
3.	Mobile Apps developed by KVK	0
4.	Name of the App	0
5.	Language of the App	0
6.	Meant for crop/ livestock/ fishery/ others	0
7.	No. of times downloaded	0

9.5. a. Observation of Swachh Bharat Programme

Date/ Duration of Observation	Activities undertaken
20.7.22/1 day	Campus cleaning and awareness program among Farmer
12.8.22/ 1day	Campus cleaning and awareness programm with school student
02.8.22/1 day	Village road cleaning and debate competition among F/FW
22.9.22/1 day	Cleaning of Farm road
1.10.22/1 day	Village road cleaning and awareness programm
19.11.22/1 day	Campus cleaning and village campus cleaning
16.12.22/1 day	Villages road cleaning and awareness programm

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	1000	17,250
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	1000	17,250

9.6. Observation of National Science day

Date of Observation	Activities undertaken

9.7. Programme with Seema Suraksha Bal/ BSF

Title of Programme	Date	No. of participants

9.8. Agriculture Knowledge in rural school

Name and address of school	Date of visit to school	Areas covered	Teaching aids used

Give good quality 1-2 photograph(s)

9.9. Details of 'Pre-Rabi Campaign' Programme

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

9.10. Details of Swachhta Hi Suraksha programme organized

Sl. No.	Activity	No. of villages Involved	No. of Participants	No. of VIPs	Name (s) of VIP(s)
1	Awareness program among student, Institute cleaning, awareness program among Farmer and Farm women, Debate, competition, Quize	14	380		

9.11. Details of Mahila Kisan Divas programme organized

Sl. No.	Activity	No. of villages Involved	No. of Participants	No. of VIPs	Name (s) of VIP(s)
1	Mahila Kisan Divas	04	60	-	-
2	National Girl child day	04	20		

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

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

9.13. Revenue generation

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

9.14. Resource Generation:

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

9.15. Performance of Automatic Weather Station in KVK

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

9.16. Contingent crop planning

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

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 2022-2023

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

b. Fund received under TSP in 2022-23 (Rs. In lakh): 10,00000

c. Achievements of physical outcome under TSP during 2022-2023

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

d. Location and Beneficiary Details during 2022-2023

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

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

Natural Resource Management

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

Crop Management

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

Livestock and fisheries

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

b) Information on Skill Development Training Programme (Other than ASCI or less than 200 hrs., if any) if undertaken during 2022

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

21. Information on NARI Project (if applicable)

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

22. Information on Krishi Kalyan Abhiyan Phase-III, if applicable

a) Training achievements

Name of KVK	Period	No. of Training on diversified farming practices for doubling farmers' income organized	No. of farmers trained	
			Male	Female

b) Other achievements

Sl. No.	Particulars	January, 2022 to December, 2022
1	Number of demonstrations other than oilseeds and pulses	
2	Number of demonstrations on oilseed crops	
3	Number of demonstrations on pulse crops	
4	Number of farmers trained	
5	Number of participants in Extension activities	
6	Number of farmers for Mobile Advisory	
7	Production of seeds (in quintal)	
8	Production of planting material (Number)	
9	Number of soil sample tested	
10	Number of farmers covered in Climate Resilient villages	
11	Number of farm families covered in Farmer FIRST project	
12	ARYA project: Number of youth trained	
13	ARYA project: Number of entrepreneurial activities started	
14	Number of farm families in DFI villages	

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

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

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



Poshan Abhiyan & Plantation Programme



Jal Shakti Abhiyan



Mahila Kisan Diwas



World Soil Day



Swaccha Bharat Abhiyan



World Food Day



Demonstration on Oyster Mushroom



Farmers Fair



Exposure visits



Mushroom training programme