# ANNUAL PROGRESS REPORT April 2013 to March 2014





## KVK KANDHAMAL, ODISHA

## ORISSA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY, BHUBANESWAR-751003

## Contents

Sl.	Particular	Page No
No.		
	Instructions for Filling the Format	2
	Summary of KVK Annual Report (Quantifiable Achievement) for the year 2013-14	3
1	General Information	5
2	On Farm Testing	10
3	Achievements of Frontline Demonstrations	16
4	Documentation of the need assessment conducted by the KVK for the training programme	35
5	Training programmes	37
6	Extension Activities	60
7	Literature Developed/Published (with full title, author & reference)	63
8	Production and supply of Technological products	64
9	Activities of Soil and Water Testing Laboratory	65
10	Rainwater Harvesting	65
11	Utilization of Farmer Hostel facilities	65
12	Utilization of Staff Quarter facilities	66
13	Details of SAC Meeting	66
14	Status of Kisan Mobile Advisory	67
15	Status of Convergence with agricultural schemes	67
16.	Status of Revolving Funds	67
17.	Awards & Recognition	67
18.	Details of KVK Agro-technological Park	68
19.	Farm Innovators	68
20.	KVK interaction with progressive farmers	68
21.	Outreach of KVK	69
22.	Technology Demonstration under Tribal Sub Plan on Pulses/ Programme on Harnessing Pulses/ Quality Protein Maize	69
23.	KVK Ring	69
24.	Important visitors to KVK	69
25.	Status of KVK Website	70
26.	Status of E-connectivity	70
27.	Status of RTI	70
28.	Status of Citizen Charter	70
29.	Attended HRD activities organized by ZPD	70
30.	Attended HRD activities organized by DES	71
31.	Attended HRD activities by KVK Staff	71
32	Agri Alert report	71
33.	Details of Technological Week Celebration	71
34.	Interventions on Drought Mitigation	72
35.	Proposal of NICRA	74
36.	Proposed works under NAIP	74
37.	Case study / Success Story to be developed	75
38.	Action Photographs	80

### **Instructions for Filling the Format**

- 1. Do not change/modify/ delete any column of any of the table. However, additional rows can be created, if required.
- 2. Do not merge columns, rows.
- 3. Please repeat the name of KVK in each table in the column "Name of KVK"
- 4. Do not fill the non-numerical values in numeric field
- 5. Do not repeat the unit while reporting data as it is already mentioned in the heading row
- 6. Strictly fill the data in desired unit only. If it is reported in other unit, convert it in the desired unit
- 7. Please mention only standard English names of crops (Do not mention Urd, Arhar, Til, Kulthi, Moong, Bajra, etc.)
- 8. Additional relevant information may be provided at the end of Format by creating heading "Additional Information"
- 9. Also read the instructions mentioned just below the table
- **10.** Your suggestions for improvement in the format for your simplicity as well as data compilation may be given at the end of the format
- **11.Do not press any Enter Key in any of the columns while making entry in the columns of the table.** Use only arrow key /Tab key/ mouse pointer while movement from one column/row to another.
- 12. Gray color cells in summary table need not to be filled.
- 13. Crop name should be spelled correct and standard English name should be used i.e Cereals, Pulses, Oilseed:- Rice (not use Paddy), Wheat, Barley, Kodo, Kutki, Maize, Jwar, Bajra, Pigeon pea (not use Tur, Arhar, Red gram), Blackgram (not use Urd), Greengram (not use Moong/Moongbean), Chickpea (not use Horse gram, Gram, Chana), Field pea, Horse gram (Kulthi), Lentil, Mustard (not use Rai, Sarsoan), Soybean, Linseed, Groundnut, Sesame (not use Til), Niger (not use Ram Til), Safflower (not use Kusum).

Vegetable :- Vegetable pea, Bottle guard, Bitter guard, Okra (not use Bhindi or Ladies finger).

Fruits :- Mango, Guava, Custard apple, Pear etc.

**Spices :- Black Peeper, Turmeric, Ginger, Cardamom etc.** 

## **REPORTING PERIOD – April 2013 to March 2014**

Summary of <b>KVK</b> Annual Report (Quantinaple Achievement) for the year 20	Summarv	of KVK Annual	Report	(Ouantifiable Achievement)	) for	the vear	2013-1
---	---------	---------------	--------	----------------------------	-------	----------	--------

S.N.	Quantifiable Achievement	Number	Beneficiarie	s (nos.)
1	On Farm Testing	·		
	Proposed OFT	17	221	
	On Going OFT	01	13	
	Technologies assessed (Completed OFT)	14	182	
	Technologies refined			
	On farm trials conducted	15	195	
2	Frontline demonstrations			
	Proposed Frontline demonstrations	30	570	
	On Going Frontline demonstrations	01	10	
	FLDs conducted on crops	22	270	
	Area under crops (ha.)	61	270	
	FLD on farm implement and tools			
	FLD on livestock/ AH enterprises (Dairy/ Sheep and Goat/Poultry/ Duckery/ Piggery etc.)	02	215	
	FLD on Fisheries - Finger lings			
	FLD on other enterprises (Bee keeping, lac, mushroom, sericulture, value addition, vermi	03	65	
	compost, etc.)			
	FLD on Women in Agriculture - (Nutritional garden, Income generation, Value addition,	02	10	
	Drudgery reduction, etc.)			
3	Training programmes	No. of Course	Duration (days)	Participants
	Farmers	54	54	1620
	Farm women	10	17	225
	Rural youth	24	37	445
	Extension personnel/ In service	08	11	120
	Vocational trainings	10	40	185
	Sponsored Training			
	Total	106	159	2595
		No. of programmes	Participa	ints
4	Extension Programmes	1153	5111	
5	Production of technology inputs etc	Qty	Beneficiarie	s (nos.)
	Seed (qt.)	80	25	
	Planting material produced (nos.)	30585	80	
6	Livestock	Qty	Beneficiarie	s (nos.)
	Livestock strains (Nos)	3350	240	
	Milk Yield - Cow, Buffelo etc. (in liter)			
	Fish (Kg.)			
	Fingerlings (nos.)			
	Poultry-Eggs (nos.)			
	Ducks (nos.)			
	Chicks etc. (nos.)			

7	Bio Products	Qty	Beneficiario	es (nos.)	
	Bio Agents -Earth worm (Kg.)	05	10		
	Trichoderma (kg.)				
	Bio Fertilizers- Vermi compost, Rhizobium, PSB , BGA , Mycorriza , Azotobacter , Azospirillum etc. (Kg.)	1798	30		
	Bio Pesticide-Panchgavya, Neem Extract, Neem oil etc.(lit.)				
8	Any other significant achievement in the Zone	Nos.	Participants/ b	eneficiaries	
	Award (Best KVK award and scientist and farmer's award)	01	01		
	Publications (Res. Paper/ pop. Art./Bulletin,etc.)	02	200	0	
	KVK News letter	04	200	0	
	SAC Meetings conducted	01	28		
	Soil sample tested	1127	725	5	
	Water sample tested	10	07		
	RWH System (Special training and field visit on RWH structure and MIS in KVKs)	02	60		
	KVK-KMA (Message and beneficiaries)	64	100	7	
	Convergence programmes	02	200	)	
	Sponsored programmes				
	KVK Progressive Farmers interaction	03	150	)	
	No. of Technology Week Celebrations	01	336	6	
	Attended HRD activities organized by ZPD	01	01		
	Attended HRD activities organized by DES	07	07		
	Attended HRD activities by KVK Staff(Refresher /Short course, Training programme etc.)				
9	Current status of Revolving Funds (Amt. in Rs.)		196542.00		
10		No. of blocks	No. of vi	llages	
	Outreach of KVK in the District	10	246	6	
11		ICAR	SAU	Others	
	No. of important visitors to KVK (nos.)		06	14	
12		Working (Yes/No)	No. of U	pdate	
	Status of KVK Website	Yes	12		
13		Application received	Application	disposed	
	Status of RTI (nos.)				
14		Query received	Query dis	solved	
	Citizen Charter (nos.)	635	635	5	
15		Working (Yes/No)	No. of progran	nme viewed	
	E-connectivity	No			
16		Filled	Vaca	nt	
	Staff Position	12	04		
17	Workshop/ Seminar/ Conference attended by staff of KVK (nos)		05		
18	Publication received from ICAR /other organization (nos.)		57		
19		Particulars	Organization		
	Agri alerts (epidemic, high serious nature problem, Cyclone etc. reported first time to ZPD, SAU, Agri. Deptt. and ICAR)	01	Agri.Deptt., SAU, Z	PD and ICAR	

## **GENERAL INFORMATION**

## **1.1. Staff Position (as on date)**

### Summary of Staff position in KVKs on March, 2014

Name of KVK	Sanctioned	PC	(1)	SMS	S (6)	PA	(3)	Adm	n. (6)	То	tal
	Posts	Sanc.	Filled								
Kandhamal	16	1	1	6	4	3	2	6	5	16	12

Name of KVK	Sanction post	Name of the incumbent	Discipline	Higist degree	Subject of specializatio n	Pay scale	Present pay	Date of joining	Per./Tem p.	Categor y
Kandhamal	Programme Coordinator	Dr. D. V. Singh	Agrl.	Ph.D.	Agrl. Extn.	15600-	24310	05.12.2013	Permanent	Other
			Extension			39100				
Kandhamal	Subject Matter Specialist1	Sujit Kumar Mukhi	Soil Science	M.Sc.(Ag.)	Soil Fertility	15600-	24320	23.10.2009	Permanent	Other
						39100				
Kandhamal	Subject Matter Specialist2	Jayanta Kumar Mahalik	Plant	M.Sc.(Ag.)	Nematology	15600-	24320	08.03.2011	Permanent	Other
			Protection			39100				
Kandhamal	Subject Matter Specialist3	Gouri Sankar Singh	Agronomy	M.Sc.(Ag)	Crop	15600-	23610	29.03.2011	Permanent	other
					production	39100				
Kandhamal	Subject Matter Specialist4	Mrs Anupama Samal	Home	M.HSc.	Food Science	15600-	22920	01.02.2014	Permanent	SC
			Science		and Nutrition	39100				
Kandhamal	Subject Matter Specialist5	-	-	-	-	-	-	-	-	-
Kandhamal	Subject Matter Specialist6	-	-	-	-	-	-	-	-	-
Kandhamal	Programme Assistant	Satya Niranjan Mishra	Horticulture	M. Sc.	Floriculture	9300-	13910	30.07.2012	Permanent	Other
	_					34800				
Kandhamal	Farm Manager	-	-	-	-	-	-	-	-	-
Kandhamal	Computer Programmer	Bishnu Ranjan Padhi	Computer Sc.	B.E	Computer Sc.	9300-	18320	22.08.2005	Permanent	Other
						34800				
Kandhamal	Accountant /	Gopabandhu Pradhan		10 <sup>th</sup> Pass		9300-	17010	28.10.2013	Permanent	ST
	superintendent					34800				
Kandhamal	Stenographer	-	-	-		-	-	-	-	-
Kandhamal	Driver	Jagannath Sahoo		8 <sup>th</sup> Pass		5200-	8010	16.12.2013	permanent	Other
						20200				
Kandhamal	Driver	Maheswar Pradhan				5200-	7100	13.02.2014	Permanent	Other
						20200				
Kandhamal	Supporting staff	Aparti Chhatai		7 <sup>th</sup> pass		4440-	6290	28.07.08	Permanent	Other
	_	Aparti Cimator		_		7440				
Kandhamal	Supporting staff	Ariuni Ch. Swain		11 <sup>th</sup> pass		4440-	6290	02.08.08	Permanent	Other
	_	Arjuill Cli. Swalli		-		7440				

### 1.2. DISTRICT PROFILE (detail of geographical area, cultivation, Land, resources, opportunities, irrigation, populations etc.)-

KVK Name	Agro-	No.of	No. of	Population	Literacy	SC and ST	No. of	Average land
	climatic zone	Blocks	Panchayats			Population	farmers	holding
Kandhamal	North-Eastern Ghat Zone	12	153	732000	65.12	505000	90979	0.428 ha

#### A. GEOGRAPHICAL AREA OF KANDHAMAL

Total Area	:	802,000 ha
Longitude	:	$83^\circ$ 30' to $84^\circ$ 35' E
Latitude	:	$19^\circ$ 34' to $20^\circ$ 34' N

	Land Area (000')ha										
Sl.No	Forest Area	Misc. tree & Groves	Permanent Pasture	Culturable waste	Non agricultural use	Barren & Un culturable land	Current fallow	Other fallow	Sown Area		
1	571	34	10	14	9	30	19	06	109		

#### B. CENSUS (2011) OF KANDHAMAL

Sl. No	Male(000')	Female(000')	Total	Population Density/Km <sup>2</sup>	Population Decadal Growth	Literacy rate(%)
1	359	373	732	91	12.92	65.12

#### C. AREA, PRODUCTION AND PRODUCTIVITY OF MAJOR CROPS IN THE KANDHAMAL DISTRICT

Sl. No	Сгор	A-Area in ('000ha)	P-Production in ('000 Mts)	Y-Yield rate in kg/ha
1	Rice	37.64	43.11	1709
2	Maize	17.36	27.77	1600
3	Blackgram	5.15	1.20	233
4	Arhar	4.51	4.42	980
5	Field Pea	0.50	0.25	498
6	Groundnut	1.12	1.85	1652
7	Niger	11.52	3.40	295
8	Mustard	18.34	4.49	245
9	Turmeric	12.64	121.88	9642
10	Ginger	3.15	33.16	10527
11	Kulthi	18.12	4.40	243

#### **1.3. DETAILS OF ADOPTED VILLAGE** during the reporting period (Approved by competent Authority in meetings/workshops)

KVK Name	Village Name	Year of adoption	Block Name	Distance from KVK	Population	Number of farmers (having land in the village)
Kandhamal	Burbinaju	2012-13	Tikabali	21	552	125
Kandhamal	Bandaguda	2011-12	K. Nuagaon	32	450	70
Kandhamal	Magariguda	2011-12	G.Udayagiri	10	201	27
Kandhamal	Kalanaju	2012-13	G.Udayagiri	22	295	35
Kandhamal	Kambrikia	2009-10	Chakapada	27	380	110

### 1.4. THRUST AREAS identified by KVK (Approved by competent Authority in meetings/workshop)

KVK Name	THRUST AREA
Kandhamal	Dry land farming
Kandhamal	Organic farming
Kandhamal	Backyard poultry and animal production
Kandhamal	Farm mechanization
Kandhamal	Bee-keeping improvement.
Kandhamal	Soil and water conservation
Kandhamal	Fruit and vegetable cultivation
Kandhamal	Low cost production technique
Kandhamal	Spice crop cultivation
Kandhamal	Agro forestry development
Kandhamal	Process & value addition
Kandhamal	Safe storage
Kandhamal	Pest and disease management
Kandhamal	Crop substitution & cropping system
Kandhamal	Marketing awareness

### **1.4. PROBLEM IDENTIFIED** by KVK (Approved by competent Authority in meetings/workshop)

KVK	Problem identified	Methods of problem	Location Name of Village & Block				
Name		identification	Location Name of Vinage & Diock				
Kandhamal	Sloppy and uneven topography	Socio resource Map ,Transact work	Village-Bandaguda,Baibali,Magarguda,Kalanaju				
		& secondary statistical data	Block-K.Nuagaon,G.Udayagiri,Raikia				
Kandhamal	Soil degradation	Transact map & Secondary information.	Village-Bandaguda,Baibali,Magarguda,Burbinaju Block-K.Nuagaon,G.Udayagiri,Raikia,Tikabali				
Kandhamal	Acidic nature of soil	Soil sample analysis & secondary data	Village-Bandaguda,Baibali,Magarguda,Kambrikia Block-K.Nuagaon,G.Udayagiri,Raikia,Tikabali				
Kandhamal	Low Percentage of irrigation	Secondary source & village survey	Village-Baibali,Magarguda,Bandaguda,Burbinaju Block-,G.Udayagiri,Raikia,Tikabali				
Kandhamal	Mono cropping in hilly terrain	Village survey & Group meetings with villagers	Village-, Magarguda,Kambrikia,Bandaguda,Burbinaju Block-G.Udayagiri,Raikia,Tikabali				
Kandhamal	Small, Marginal and Landless Farmers	PRA survey & district statistical report	Village-Bandaguda,Baibali,Magarguda,Kalanaju Block- K.Nuagaon,G.Udayagiri,Raikia,Tikabali,Phulbani,Baliguda				
Kandhamal	Stray Cattle menace	Village survey & group discussion	Village-Bandaguda,Baibali,Magarguda,,Penala,Braneguda Block-K.Nuagaon,G.Udayagiri,Raikia,Tikabali				
Kandhamal	Pest and disease incidence in field crop and storage	Problem prioritization through PRA & Root cause analysis	Village-Bandaguda,Baibali,Magarguda,,Penala,Braneguda Block-K.Nuagaon,G.Udayagiri,Raikia,Tikabali				
Kandhamal	Poverty, Illiteracy and poor health of Farmers	Problem cause analysis & group discussion.	Village-Bandaguda,Baibali,Magarguda,,Penala,Braneguda Block-K.Nuagaon,G.Udayagiri,Raikia,Tikabali				
Kandhamal	Prevalence of diseases in Livestock animals	Feedback from farmers & Village survey	Village- Bandaguda,Baibali,Magarguda,Kambrikia,Penala,Braneguda Block-K.Nuagaon,G.Udayagiri,Raikia,Tikabali				
Kandhamal	Distress sale of farm produce (Perishable vegetables)	Market research & price of commodities in local market	Village- Bandaguda,Baibali,Magarguda,Katadaganda,Penala,Braneguda Block-K.Nuagaon,G.Udayagiri,Raikia,Tikabali				
Kandhamal	Lack of improved varieties of fruits and vegetables	Focused group discussion with vegetable growers	Village- Bandaguda,Baibali,Magarguda,Katadaganda,Penala,Braneguda Block-K.Nuagaon,G.Udayagiri,Raikia,Tikabali				
Kandhamal	Drudgery in farm operations	PRA & root cause analysis & time analysis of farm women	ne Village- Bandaguda,Baibali,Magarguda,Kalanaju,Penala,Braneguda Block-K.Nuagaon,G.Udayagiri.Raikia.Tikabali				
Kandhamal	Weed menace in up land crops	Problem cause analysis & PRA	Village- Bandaguda,Baibali,Magarguda,Kalanaju,Penala,Braneguda Block-K.Nuagaon,G.Udayagiri,Raikia,Tikabali				
Kandhamal	Sloppy and uneven topography	Socio resource Map ,Transact work & secondary statistical data	Village-Bandaguda,Baibali,Magarguda,Kalanaju Block-K.Nuagaon,G.Udayagiri,Raikia				

## **On Farm Testing**

Note-

\* Thematic area should be spelled correct and follow standard pattern i.e. Integrated Nutrient Management in place of INM or Inte. Nutrient Mngt. Etc.

\*Crop name should be spelled correct and standard English name should be used i.e Chick pea in place of gram/chana , Paddy in place of Rice/chawal , brinjal in place of egg plant/bhata/baigan etc.

\*Don't press enter key to navigate among column use arrow or tab key

\*don't add space before or after statement within the table cell

2.1 Information about OFT

					Catego ry of		Crop/ enterp	Farmi ng		Results	(q/ha)	Net Ro (Rs.	eturns /ha)	
KVK name	Year	Season	Problem diagnose	Title of OFT	techno logy (Asses sment/ Refine ment)	Themat ic Area	rise	Situati ons	No. of trial s	<b>FP</b> ( <b>T</b> <sub>1</sub> )	<b>RP</b> ( <b>T</b> <sub>2</sub> )	<b>FP</b> ( <b>T</b> <sub>1</sub> )	<b>RP</b> ( <b>T</b> <sub>2</sub> )	Recommendations
Kandha mal	2013	Kharif	Poor and instability in yield	Assessment of short duration HYV Rice Sahabhagidhan	Assess ment	Varietal evaluati on	Crop	Rainfe d-up land	13	35.2	45.4	20260	32320	HYV paddy Sahabhagidhan gave an yield of 45.4qt/ha, with 28.9 % increase over farmers practice
Kandha mal	2013	Kharif	Poor yield due to severe weed infestation in upland Kharif Rice	Assessment of herbicide Oxadiargyl for weed management	Assess ment	Integrat ed weed manage ment	Crop	Rainfe d-up land	13	32.4	40.7	17790	27670	Application of Oxadiargyl 80 WP, 0.06 kg a.i/ha as pre emergence reduces weed infestation by 79.7 %
Kandha mal	2013	Kharif	Poor yield and not profitable	Assessment aromatic rice variety –Nuadhusera(CR- Sugandhadhan-3)	Assess ment	Varietal evaluati on	Crop	Rainfe d-Mid and low land	13	18.2	28.9	16662	36780	Aromatic rice variety –Nuadhusera Rice gave an yield of 28.88qt/ha, with 58.8 % increase in yield over farmers practice
Kandha mal	2013	Kharif	Poor bunch and finger size giving low yield	Assessment of Tissue culture Banana – Bantala (Continuing)	Assess ment	Varietal evaluati on	Crop	Rainfe d-Mid land	13	-	-	-	-	-
Kandha mal	2013	Kharif	Low yield due to stem borer	Assessment of IPM for stem borer	Assess ment	Integrate d Pest	Crop	Rainfed- Mid	13	34.78	44.1	20934	30030	Application of Fipronil 0.3G @ 2.5

			infestation in Paddy	management in Rice.		Manage ment		land						kg in the nursery for one hectare area 7 to 10 days before transplanting, Clipping of leaf tip, Foliar spraying of Indoxacarb 14.5 SC @ 1ml/lit at 30 and 60 DAT and installation of pheromone trap @ 20/ha gave an yield of 44.1q/ha with an increase of 26.7% over local practice.
Kandha mal	2013	Kharif	Low yield due to Dimond Back Moth infestation in Cabbage	Assessment of IPM for DBM management in Cabbage	Assess ment	Integrate d Pest Manage ment	crop	Rainfed upland	13	220.1	302.8	65100	98620	Foliar spraying of Emamectin Benzoate 5%SG @200 gm/ha 2 to 3 times at 10 days interval alternate with BT @ 2gm/lit and installation of Pheromone trap gave an yield of 302.8 q/ha with an increase of 37.6% over local practice
Kandha mal	2013	Kharif	Low yield due to poor economic status of farmer to purchase and use the chemical fertilizers	Assessment of organic source of nutrients in scented rice.	Assess ment	Integrat ed nutrient manage ment	Crop	Rainfe d-Mid and low land	13	18.4	29.2	16680	33740	Green manuring with Dhaincha and incorporated it into the soil at 15 days before transplanting followed by application of FYM @3 tons/ha and vermicompost @ 2.0 tons /ha before planting of rice gave an yield of 29.2q with an increase in yield of 39.3%
Kandha mal	2013	Kharif	Poor yield due to continuous	Assessment of biofertilizes in	Assess ment	Integrat ed	Crop	Rainfe d mid	13	135.6	208.3	37610	70880	The biofertilizer <i>Azotobacter</i> ,

		and erratic use of chemical fertilizer in imbalance form leads to decline in soil fertility	brinjal.		nutrient manage ment		land						Azospirillum and PSB (1:1:1) @ $3+3+3 = 9$ kg/ha mixed with prelimed (5%) FYM (1:25) and incubated at ordinary prevailing temperature under shade at 30% moisture for 7 days and applied at the time of planting with application of recommended dose of NPK as per soil test based gave an yield of 208.3 q/ha with an increase in yield of 53.6 % over local practice.
Kandha mal	2013- Rabi 14	Poor yield due to use of degenerated local cultivars	Assessment of quality protein Maize Var- HQPM-1.	Assess ment	Varietal evaluati on	Crop	Irrigate d- Upland	13	27.8	47.8	15420	36780	Quality protein Maize Var-HQPM- 1gave an yield of 40.8 q/ha with an increase in yield of 71.9 % over farmers practice also increase nutritive value.
Kandha mal	2013- Rabi 14	Poor yield due to use of degenerated seeds	Assessment of HYV Tomato- Utkal Pragyan	Assess ment	Varietal evaluati on	Crop	Irrigate d- Midlan d	13	204	312	27400	65500	HYV Tomato- Utkal Pragyan gave an yield of 312 q/ha with an increase of yield 52.94 % over farmers practice.
Kandha mal	2013- Rabi 14	Cultivationofchiliwhichisnotmuchremunerativeduetoduetolowmarketvalue.	Assessment of Capsicum var.California wonder.	Assess ment	Varietal evaluati on	Сгор	Irrigate d- Midlan d	13	112	162	75900	122000	Capsicum var. California wonder gave an yield of 162 q/ha with an increase of yield 44.64 % over farmers practice.
Kandha mal	2013- Rabi 14	Poor yield due to leaf curl virus incidence in Tomato	Assessment of IPM for leaf curl virus management in Tomato	Assess ment	Integrate d pest manage ment	crop	Irrigated -Upland	13	221.7	302.1	43930	69570	Foliar spraying of Thiacloprid 21.7 EC @1.5 ml/lit at 15 days interval 2-3 times alternate with

														neem oil @ 5ml/lit, Installation of yellow sticky trap gave an yield of 302.1 q/ha with an increase of 36.3% over local practice
Kandha mal	2013- 14	Rabi	Low yield due to heavy incidence of powdery mildew in Pea	Assessment of IDM for powdery mildew management in Pea.	Assess ment	Integrate d disease manage ment	crop	Irrigated -Upland	13	74.7	102.4	53610	84890	Seed treatment with vitavax power @ 2 gm /kg, Foliar spraying of Tridemorph 80%EC @250ml/ha twice at 10 days interval gave an yield of 102.4q/ha with an increase of 37.1 % over local practice
Kandha mal	2013- 14	Rabi	Poor yield and low oil content of mustard due to imbalance use of fertilizer application	Assessment of sulphur application in mustard	Assess ment	Integrat ed nutrient manage ment	Crop	Irrigate d- Midlan d	13	7.8	12.3	9600	20100	FYM @ 2 t/ha applied in furrows and fertilizer NPK applied as per soil test based with sulphur @ 40 kg/ha as gypsum at the time of sowing gave an yield of 12.38q/ha with an increase of 57.7 % over farmers practice.
Kandha mal	2013-14	Rabi	Poor yield due to imbalanced use of nutrients.	Assessment of integrated nutrient management in potato.	Assess ment	Integrat ed nutrient manage ment	Crop	Irrigate d- Midlan d	13	140.5	198.6	61100	96780	Application of 25 % recommended dose of nitrogen through FYM and 75% recommended dose of N,P and K through chemical fertilizer. The N:P <sub>2</sub> O <sub>5</sub> :K <sub>2</sub> O applied as per soil test based gave an yield of 198.6q/ha with an increase of 41.3 % over farmers practice.

KVK name	OFT Title	Pa	rameters		Av cult	Average Cost of cultivation (Rs/ha)			Average Gross Return (Rs/ha)			Average Net Return (Rs/ha)				Benefit-Cost Ratio (Gross Return / Gross Cost)		
		Name and unit of Parame ter	<b>FP</b> ( <b>T</b> 1)	<b>RP</b> (T <sub>2</sub> )	FP (T1)	<b>RP</b> (T <sub>2</sub> )	Refine d Practic e, if any (T <sub>3</sub> )	<b>FP</b> ( <b>T</b> <sub>1</sub> )	<b>RP</b> (T <sub>2</sub> )	Refine d Practi ce, if any (T <sub>3</sub> )	FP (T1)	<b>RP</b> ( <b>T</b> <sub>2</sub> )	Refin ed Practi ce, if any (T <sub>3</sub> )	FP (T1)	RP (T <sub>2</sub> )	Refin ed Pract ice, if any (T <sub>3</sub> )		
Kandha mal	Assessment of short duration HYV Rice Sahabhagidhan	No. of tillers/hi ll	8.4	16.2	25500	26700		45760	59020		20260	32320		1.8	2.2			
Kandha mal	Assessment of herbicide Oxadiargyl for weed management	Dry weight of weeds inkg/ha	646.2	131.0	24330	25240		42120	52910		17790	27670		1.7	2.1			
Kandha mal	Assessment aromatic rice variety – Nuadhusera(CR- Sugandhadhan-3)	No. of tillers/hi ll	5.5	11.6	23378	26800		40040	63580		16662	36780		1.7	2.4			
Kandha mal	Assessment of Tissue culture Banana – Bantala (Continuing)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Kandha mal	Assessment of IPM for stem borer management in Rice.	% of dead heart	17.8	2.7	24280	27300		45214	57330		20934	30030		1.8	2.1			
Kandha mal	Assessment of IPM for DBM management in Cabbage	No. of DBM larvae /plant	2.42	0.9	44950	52780		110050	151400		98620	65100		2.4	2.9			
Kandha mal	Assessment of Organic source of nutrients in scented rice.	No. of tillers/hill	5.4	11.3	23800	30500		40480	64240		16680	33740		1.7	2.1			
Kandha mal	Assessment of biofertilizes in brinjal.	No. of fruits/plant	16.7	24.8	43750	54100		81360	124980		37610	70880		1.8	2.3			
Kandha	Assessment of quality	No. of	286.8	408.0	23500	30140		38920	66920		15420	36780		1.6	2.2			

### 2.2 Economic Performance

mal	protein Maize Var- HOPM-1.	grains/cob											
Kandha mal	Assessment of HYV Tomato- Utkal Pragyan	No. of fruit per plant	19.1	23.1	54200	59300	 81600	124800	 27400	65500	 1.5	2.1	
Kandha mal	Assessment of Capsicum var .California wonder.	No. of fruit per plant	8.01	10.02	47300	56200	 123200	178200	 75900	122000	 2.6	3.2	
Kandha mal	Assessment of IPM for leaf curl virus management in Tomato	No. of white fly per plant	15.81	2.5	44750	51270	 88680	120840	 43930	69570	 2.0	2.4	
Kandha mal	Assessment of IDM for powdery mildew management in Pea.	Percentage disease incidence	51.42	15.06	43500	48230	 97110	133120	 53610	84890	 2.2	2.8	
Kandha mal	Assessment of sulphur application in mustard	No. of Siliqua per plant	218.5	297.8	13800	16800	 23400	36900	 9600	20100	 1.7	2.2	
Kandha mal	Assessment integrated nutrient management in potato.	No. of tubers per hill	5.25	7.98	51300	62100	 112400	158880	 61100	96780	 2.2	2.5	

**3 Information about Home Science OFT:** 

KVK Name	Year Season	Problem diagnose	Title of OFT	Category of technology (Assessment/ Refinement)	Thematic Area	Details of Technology Selected for Assessment	Characteristics of Technology / Variety / Product / Enterprise	Farming / Enterprise Situation	No. of trials	Recommendations

### 2.4 Economic Performance Home Science OFT:

KVK	OFT Title									P	erforn	nance l	Indicate	or / P	aram	eter							
name	Title	Ou	tput	Est. E	Energy	WHR %				%	% Production		Cost Incremental		mental	Yield(Kg/ha)		Net		Saving	BC		
		m	2/h	Exper	nditure	beat/min		reduc	reduction increas		ease	per	unit	0	of	inc	ome			Ret	urn	in Rs	ratio
				<b>kj</b> /1	in dwydaowy offi							inp	out										
								drudg	gery	effici	ency												
		T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	<b>T1</b>	T2	T1	T2	T1	T2	<b>T1</b>	T2		

#### 2.5 Feedback from KVK to Research System

Name of KVK	Feedback

### **3.** Achievements of Frontline Demonstrations

3.1. Follow-up f	for results of FLDs	implemented	during previous years	
------------------	---------------------	-------------	-----------------------	--

List of technologies demonstrated and popularized during previous years and recommended for large scale adoption in the district

	Crop/			Details of	Horizontal	spread of tecl	nnology
KVK Name	Enterprise	Thematic Area	Technology demonstrated	popularization methods suggested to the Extension system	No. of villages	No. of farmers	Area in ha
Kandhamal	Rice	Integrated pest management	Application of Fipronil 0.3g @1.25 kg in 1000 m <sup>2</sup> of nursery area seven days before transplanting. Release of trichocard ,spraying of multi neem @ 5ml per litre of water & installation pheromone trap, needbased spraying of Fipronil 5SC @ 2ml/lit.	FLD, Training, Field days, group discussion, CD shows	152	742	466
Kandhamal	Rice	Varietal evaluation	Variety-Nua kalazeera, seed rate 50 kg/ha, Duration - 140-145 days, long slender grains, average yield 20- 22q/ha with RDF@ 60:30:30 NPK kg/ha.	FLD, Training, Field days, group discussion, CD shows	24	122	86
Kandhamal	Rice	Varietal evaluation	Var- Pratikshya ,Seed treatment with Bavistin 2gm/kg of seed ,Spacing 20X10 cm ,fertilizer 80:40:40 NPK kg/ha	FLD, Training, Field days, , CD shows	257	826	526
Kandhamal	Maize	Varietal evaluation	Sweet corn var – Madhuri, Plucking the green cobs at 60-65 days with RDF@ 80:40:40 NPK kg/ha.	FLD, Training, Field days, , CD shows	23	112	62
Kandhamal	Rice	Varietal evaluation	Variety-Manaswini ,Maturity Medium(125-132 days),spacing 20x10 cm , with recommended dose of fertilizer 80:40:40 NPK kg/ha	FLD, Training, Field days, , CD shows	128	532	324
Kandhamal	Brinjal	Integrated pest management	Spraying of Spinosad 45% SC @ 75 ml/acre ,3-4 times at 10 days interval ,hand clipping & destruction of infected shoots & fruits for fruit	FLD, Training, Field days, group discussion, CD shows	35	146	77
Kandhamal	Brinjal	Integrated Nutrient management	Seed treatment with Bavistin 2gm/kg of seed ,Spacing 75 x60 cm,FYM 15 ton/Ha ,fertilizer 120:80:60,50 % N ,100 % P ,100 % K at transplanting time ,25 % N at 25 DAT, Rest 25 % N at 40 DAT	FLD, Training, Field days, group discussion, CD shows	93	421	97
Kandhamal	Tomato	Integrated Nutrient management	Application of lime as PMS @5q/ha at final ploughing followed by use of incubated & inoculated FYM at planting time. (Bio-inoculation (BI)= Azotobacter +Azospirillum+PSB(1:1:1) , 2+2+2=6 kg/ha)	FLD, Training, Field days, group discussion, CD shows	154	629	253
Kandhamal	Cabbage	Integrated Pest management	Intercropping with mustard (One row mustard with 10 rows cabbage),installation of Pheromene trap,application of neem cake 250kg/ha ,spraying of Bt @ 2gm /lit & Cartap Hydrochoride @ 1.25Gm /Lit	FLD, Training, Field days, group discussion, CD shows	188	792	366

			alternatively at 15 days interval.				
Kandhamal	Vegetables	Integrated Crop Management	Planning, layout and management of nutritional garden	FLD, Training, Field days, group discussion, CD shows	64	294	38
Kandhamal	Potato	Integrated Nutrient Management	Bioinoculation of Azotobacter ,Azospirillum & PSB @ 1:1:1 (2+2+2=6 kg/ha) & incubated with 150 kg FYM for 7 days at 30 % moisture content and applpy at the time of planting.	FLD, Training, Field days, group discussion, CD shows	68	502	321
Kandhamal	Toria	Varietal evaluation	HYV seeds(Annuradha), seed inoculation with Azotobacter @ 20 gm/kg, with soil test based fertilizer application and pest and disease control measures.	FLD, Training, Field days, group discussion, CD shows	117	525	247
Kandhamal	Field pea	Integrated Nutrient Management	Lime application 5qt/ha ,Rhizobium inoculation @ 20gm /kg seed ,Integrated nutrient management, RDF @25:50:25 NPK/ha with need based crop protection measures.	FLD, Training, Field days, group discussion, CD shows	83	379	266
Kandhamal	Back yard poultry	Small Scale Income generating enterprises	Introduction of improved poultry breed Banaraj,	FLD, Training, CD shows	367	854	15988 Nos.
Kandhamal	Oyster mushroom	Mushroom cultivation	Cultivation of Oyster mushroom var-P.sajarcaju.	FLD, Training, Field days, group discussion, CD shows,	72	468	8045 Nos.
Kandhamal	Apiary	Small Scale Income generating enterprises	ISI Bee Box <i>Apis cerena indica</i> & improved management practices.	FLD, Training, Field days, group discussion, CD shows	215	518	1432 boxes
Kandhamal	Turmeric	Value addition	Improved turmeric boiling drum with perforated grill. Capacity – 40kg/grill	FLD, Training, Field days, group discussion, CD shows	112	527	
Kandhamal	Turmeric	Integrated Nutrient Management	Lime application @ 5q/ha at the time of final ploughing with fYM @ 15 t /ha , Spacing 30x20 cm, seedrate-18q /ha.	FLD, Training, Field days, group discussion, CD shows	237	1023	739
Kandhamal	Maize	Drudgery reduction	Use of Maize Sheller for shelling	FLD, Training, Field days, group discussion, CD shows	38	139	
Kandhamal	Groundnut	Drudgery reduction	Groundnut stripper reduces drudgery of farm women & increases efficiency by 83 % of Groundnut stripping	FLD, Training, Field days, group discussion, CD shows	22	86	
Kandhamal	Rice	Drudgery reduction	Weeding in Rice using cono weeder is very effective & very economical.	FLD, Training, Field days, group discussion, CD shows	213	823	

Note-

\* Thematic area should be spelled correct and follow standard pattern i.e. Integrated Nutrient Management in place of INM or Inte. Nutrient Mngt. Etc.

\*Crop name should be spelled correct and standard English name should be i.e Chick pea in place of gram, Paddy in place of Rice , brinjal in place of egg plant etc.

\*Don't press enter key to navigate among col use arrow or tab key

\*don't add space before or after statement within the table cell

### **3.2 Details of FLDs implemented**

					Name of	Name of	Crop- Area	Res (q/	sults ha)			N	o. of far	mers	
KVK Name	year	Season	Thematic area	Technology demonstrated	Crop/ Enterprise	Variety/Tec hnology/Ent reprizes	(ha) / Entrep - No.	<b>FP</b> ( <b>T</b> <sub>1</sub> )	<b>RP</b> (T <sub>2</sub> )	change	sc	ST	Others	General	Total
Kandhamal	2013	Kharif	Varietal evaluati on	HYV rice var –Ranidhan, duration -140-145 days, grain –medium slender, registant to BLB and leaf folder, yield potential 60 q/ha, spacing 20x15 cm with recommended dose of fertlizer as per soil test values.	Rice	Ranidhan	1.0	32.8	46.0	40.2		5			5
Kandhamal	2013	Kharif	Varietal evaluati on	Variety-Nuakalazeera, seed rate 50 kg/ha ,Duration -140-145 days, long slender grains, Average yield 20-22q/ha, RDF as per soil test values.	Rice	Nua Kalazeera	1.0	18.2	27.4	50.5		5			5
Kandhamal	2013	Kharif	Varietal evaluati on	Variety-CRHR-7 (Ajay) ,seed rate 12kg/ha, Duration 125-130 days, spacing 20X15 cm, long slender grains, average yield 6-6.5 ton/ha,RDF as per soil test values	Rice	Ajaya	1.0	32.4	58.7	81.2	1	2	2		5
Kandhamal	2013	Kharif	Varietal evaluati on	Sweet corn var – Madhuri , Plucking the green cobs at 60-65 days , Yield potential 60,000 cobs /ha.RDF as per soil test values.	Maize	Madhuri	1.0	50252 (No.)	52444 (No.)	4.3	1	4			5
Kandhamal	2013	Kharif	Varietal Evaluati on	Raised Bed 15 cm, Spacing 30x20 cm, FYM @10ton/ha, Seed treatment with Trichoderma viridae @ 5gm/lit for 30 minutes, Neem cake 250 kg/ha, Mulching 10 ton/ha	Ginger	Suprava	1.0	57.2	89.3	56.1		5			5
Kandhamal	2013	Kharif	Varietal Evaluati on	Ridge method of planting, spacing at 60x20cm ,soil test based fertilizer application, ridge making at 45 days after planting	Sweet Potato	Kisan	1.0	120	200	66.7		5			5
Kandhamal	2013	Kharif	Integrat ed Disease manage ment	Seed treatment with Tricyclazole @1gm per kg ,three spraying of Tricyclazole @ 0.6 gm per litre of water one each at tillering ,boot leaf stage & grain formation stage for blast disease management in rice.	Rice	Lalat	1.0	34.9	44.2	26.7		4	1		5
Kandhamal	2013	Kharif	Integrat ed pest manage ment	Hand clipping & destruction of infected shoots & fruits, Spraying of Spinosad 45% SC @ 75 ml/acre 2-3 times at 15 days interval for fruit and shoot borer management in Brinjal.	Brinjal	Blue Star	1.0	124.6	196.3	57.4	2	3			5

Kandhamal	2013	Kharif	Integrat ed nutrient manage ment	Lime as PMS @ 0.2 LR & FYM 10 tons per hectare applied at the time of final ploghing .One third of N ,full dose of P,K & S @ 30 kg /ha applied at the time of sowing & rest two third of N applied in two equal splits at 21 & 45 DAS.The nutrients NPK is applied as per the soil test results.	Maize	Nilesh 51	1.0	36.9	58.3	58.0	3	2	-	-	5
Kandhamal	2013	Kharif	Integrat ed nutrient manage ment	The seed rhizome (20-30gm) of turmeric placed 3.5-5 cm deep . FYM @ 15 tons per ha are spread evenly on beds & incorporate manually in to the soil. Application of bio-fertilizers (Azospirillum +PSB ,1:1 ,10+10 = 20 kg /ha in 500 kg FYM) and recommended dose of NPK applied as per soil test values.	Turmeric	Lakdong	1.0	108.9	166.3	52.7	-	5	-	-	5
Kandhamal	2013	Kharif	Integrat ed weed manage ment	Soil test based NPK fertilizer application, pre emergence application of weedicide pendimethalin @ 1.5 kg/ ha, hand weeding at 30DAS with need based application of plant protection chemicals.	Niger	Deomali	5.0	4.1	6.2	51.2	-	10	-	-	10
Kandhamal	2013- 14	Rabi	Varietal evaluati on	FYM @ 5qtl./ha, seed treatment with Rhizobium @ 20g/kg of Seed, Spacing 30x10cm, Dwarf plant ,45-60 cm tall ,pod length 9 cm , 8-9 grains/pod	Graden Pea	Azad P-3	1.0	73.1	110.6	51.3	-	3	2		5
Kandhamal	2013 -14	Rabi	Varietal evaluati on	Var- Utkal Raja, duration 95-100 days, tolerant to bacterial wilt, cluster bearing ,average yield 350-400 q/ha, planting in ridges, staking at flowering.	Tomato	Utkal Raja	1.0	195	318	63.0	1	4			5
Kandhamal	2013 -14	Rabi	Integrat ed Disease manage ment	Tuber treatment with T.viridae @ 5gm per kg,,application of Tricoderma viridae @2.5 kg/ha & Two spraying of Mancozeb @ 3gm/litre at 30 & 40 DAP for early blight management in Potato.	Potato	Kufri Jyoti	1.0	110.3	174.3	58.0	-	5	-	-	5
Kandhamal	2013 -14	Rabi	Integrat ed pest manage ment	Instalation of pheromone trap @20/ha, Foliar spraying of Spinosad 45 % SC @ 75 ml per acre three times at 10 days interval alternate with BT @ 2 gm/lit at ETL level of DBM population. for DBM management in Cauliflower.	Cauliflo wer	Madhuri	1.0	160.2	221.6	38.3	-	5	-	-	5
Kandhamal	2013 -14	Rabi	Integrat ed nutrient manage ment	Use of improved variety Rachana, seed treatment, soil test based fertilizer application and need based application of plant protection chemicals.	Field Pea	Rachana	10.0	13.8	22.6	63.8	-	25			25

Kandhamal	2013 -14	Rabi	Integrat ed nutrient manage ment	Use of improved variety Anuradha with spraying of imidachlopid @ 3ml/10 liter alternate with Neem oil @ 5 ml per liter with soil test based fertilizer application	Toria	Anuradha	5.0	5.6	12.1	116.1	3	12	-	-	15
Kandhamal	2013 -14	Rabi	Integrat ed nutrient manage ment	Application of lime @ 0.2 LR at the time of final ploughng with FYM @ 15ton/ha ,Soil test based fertilizer application with 2 kg Boron/ha at the time of planting.	Cauli flower	Madhuri	1.0	160.1	258.7	61.6	1	3	1	-	5
Kandhamal	2013 -14	Rabi	Integrat ed nutrient manage ment	Lime @ 0.2 LR as PMS applied at the time of final ploughing, Bioinoculation of Azotobacter ,Azospirillum & PSB @ 1:1:1 (3+3+3=9 kg/ha) & incubated with 225 kg FYM for 7 days at 30 % moisture content and apply at the time of planting with recommended dose of NPK as per soil test result.	Runner Bean	Raikia bean (Local)	1.0	82.4	139.6	69.4	-	4	1	-	5
Kandhamal	2013 -14	Rabi	Integrat ed nutrient manage ment	Application of FYM 5 t/ha ,Seed rate 80 kg/ha, seed treatment with Rhizobium 20g/kg of Seed,Spacing 30x10cm, application of recommended dose of N:P <sub>2</sub> O <sub>5</sub> :K <sub>2</sub> O as per soil test results, application of boron @ 1 kg/ha at the time of sowing, application of PSB @ 6 kg/ha at the time of sowing, application of Trichoderma viridie @ 2.5 kg/ha, spraying of neem oil @ 5 ml/lit of water alternate with Bt @ 2 g/lit. of water at 15 days interval with need based spraying of triazophos @ 2 ml/ lit water, spraying of wettable sulphur @ 5 g/lit (2.5 kg/ha) for powdery mildew disease management.(TSP)	Garden Pea	Azad P-3	10.0	76.7	118.9	55.0	_	70	-	-	70

Kandhamal	2013	Rabi	Integrat	Application of FYM 15 t/ha ,Seed rate 500	Cabbage	Hare	10.0	197.7	332.7	68.3	-	40	-	-	40
	-14		ed	g/ha, spacing 45x30 cm, seed treatment with	_	Krishna									
			nutrient	vitavax power @ 2 gm /kg seed, application of											
			manage	recommended dose of N:P <sub>2</sub> O <sub>5</sub> :K <sub>2</sub> O as per soil											
			ment	test results, full P and K and Boron @ 1 kg/ha											
				as basal, half dose of N at 15 days after											
				planting and the remaining half of N after 45											
				days of planting, application of biofertilizers											
				like Azotobacter, Azospirillum and PSB @ 4											
				kg each/heactare at the time of planting of											
				seedlings, installation of pheromen trap @ 20											
				nos./ha and lure @ 40 nos./ ha, spraying of											
				neem oil @ 5 ml/lit of water alternate with Bt											
				@ 2 g/lit. of water, spraying of catap											
				hydrochloride @ 1.25 g/ lit. of water at ETL											
				with need based application of ridomil MZ @											
				2.5 g/ lit. of water for root rot											
				management(TSP)											
Kandhamal	2013	Rabi	Integrat	FYM 15 t/ha ,Seed rate 10 kg/ha, spacing	Onion	Agri found	5.0	164.7	325.4	97.6	-	30	-	-	30
	-14		ed	15x10 cm, seed treatment with vitavax power		light red									
			nutrient	@ 2.5 gm /kg seed, application of biofertilizers											
			manage	like Azotobacter, Azospirillum and PSB @ 4											
			ment	kg each/heactare at the time of planting of											
				seedlings, application of recommended dose of											
				N:P <sub>2</sub> O <sub>5</sub> :K <sub>2</sub> O as per soil test results, full P and											
				K and half dose of N as basal, one fourth dose											
				of N at 30 days after planting and the											
				remaining half of N after 45 days of planting,											
				spraying of neem oil @ 5 ml/lit of water											
				alternate with rogor @ 2 ml/ lit of water need											
				based application of ridomil MZ @ 2.5 g/ lit.											
				or mancozeb @ 3 g/lit. for rot and blight											
				management(TSP)											
Kandhamal	2013	Rabi	Bee	ISI Bee Box ,Apis cerena indica & improved	Bee	Apis cerena	50	3.2kg/t	7.1	121.8	-	-	10	-	10
	-14		keeping	management practices.(TSP)	keeping	indica		OX	kg/box						

## **3.3 Economic Impact of FLD**

		Name of Crop/ Enterpri se	Par	ameters		Cost cultiva (Rs/h	of ition na)	Gross R (Rs/h	eturn a)	Average Retur (Rs/h	e Net rn a)	Benef Ratio Ret Gross	it-Cost (Gross urn / s Cost)
K V K Name	Technology demonstrated		Name and unit of Param eter	<b>FP</b> ( <b>T</b> <sub>1</sub> )	<b>RP</b> (T <sub>2</sub> )	<b>FP</b> ( <b>T</b> <sub>1</sub> )	<b>RP</b> (T <sub>2</sub> )	<b>FP</b> ( <b>T</b> <sub>1</sub> )	<b>RP</b> (T <sub>2</sub> )	<b>FP</b> ( <b>T</b> <sub>1</sub> )	<b>RP</b> (T <sub>2</sub> )	<b>FP</b> ( <b>T</b> <sub>1</sub> )	<b>RP</b> (T <sub>2</sub> )
Kandhamal	HYV rice var –Ranidhan , duration -140-145 days , grain – medium slender , registant to BLB and leaf folder, yield potential 60 q/ha, spacing 20x15 cm with recommended dose of fertlizer as per soil test values.	Rice	No. of Tillers/ hill	12.6	24.2	23340	27160	42640	59800	19300	32640	1.8	2.2
Kandhamal	Variety-Nuakalazeera, seed rate 50 kg/ha ,Duration -140-145 days, long slender grains, Average yield 20-22q/ha, RDF as per soil test values.	Rice	No. of Tillers/ hill	5.6	11.8	23800	27340	40040	60280	16240	32940	1.7	2.2
Kandhamal	Variety-CRHR-7 (Ajay) ,seed rate 12kg/ha, Duration 125-130 days, spacing 20X15 cm, long slender grains, average yield 6- 6.5 ton/ha.RDF as per soil test values	Rice	No. of Tillers/ hill	13.4	28.4	24800	31700	42120	76310	17320	44610	1.7	2.4
Kandhamal	Sweet corn var – Madhuri , Plucking the green cobs at 60-65 days , Yield potential 60,000 cobs /ha.RDF as per soil test values.	Maize	No. of grains per cob	341.6	480.4	25450	31400	50252	104888	24802	73488	2.0	3.3
Kandhamal	Raised Bed 15 cm ,Spacing 30x20 ,Seed treatment with Trichoderma viridae 5gm/lit/30 minutes, Neem cake 250 kg/ha ,Mulching 10 ton/ha.	Ginger	Single culm weight in gm	72	114	114200	128300	228800	357200	114600	228900	2.0	2.8
Kandhamal	Ridge method of planting, spacing at 60x20cm ,soil test based fertilizer application, ridge making at 45 days after planting	Sweet Potato	No. of tuber/p lant	1.5	3.2	42200	49600	120000	200000	77800	150400	2.8	4.0

Kandhamal	Seed treatment with Tricyclazole @1gm per kg ,three spraying of Tricyclazole @ 0.6 gm per litre of water one each at tillering ,boot leaf stage & grain formation stage for blast disease management in rice.	Rice	Percen tage of disease inciden ce	58.1	17.2	22750	24200	45370	57460	22620	33260	2.0	2.4
Kandhamal	Hand clipping & destruction of infected shoots & fruits,Spraying of Spinosad 45% SC @ 75 ml/acre 2-3 times at 15 days interval for fruit and shoot borer management in Brinjal.	Brinjal	No. of fruit damage (%)	51.96	17.92	35410	46150	99680	157040	64270	110890	2.8	3.4
Kandhamal	Lime as PMS @ 0.2 LR & FYM 10 tons per hectare applied at the time of final ploghing .One third of N ,full dose of P,K & S @ 30 kg /ha applied at the time of sowing & rest two third of N applied in two equal splits at 21 & 45 DAS.The nutrients NPK is applied as per the soil test results.	Maize	No. of grains per cob	316.6	487.6	33500`	38750	51660	81620	18160	42870	1.5	2.1
Kandhamal	The seed rhizome (20-30gm) of turmeric placed 3.5-5 cm deep . FYM @ 15 tons per ha are spread evenly on beds & incorporate manually in to the soil. Application of bio- fertilizers (Azospirillum +PSB ,1:1 ,10+10 = 20 kg /ha in 500 kg FYM) and recommended dose of NPK applied as per soil test values.	Turmeric	Rhizo me weight per plant in gm	305.9	472.3	70400	80200	119790	182930	49390	102730	1.7	2.3
Kandhamal	Soil test based NPK fertilizer application, pre emergence application of weedicide pendimethalin @ 1.5 kg/ ha, hand weeding at 30DAS with need based application of plant protection chemicals	Niger	Weed infestat ion at 60 DAS per M <sup>2</sup>	16.8	1.8	7300	9230	14350	21700	7050	12470	2.0	2.3

Kandhamal	FYM @ 5qtl./ha ,seed treatment with Rhizobium @ 20g/kg of Seed,Spacing 30x10cm, Dwarf plant ,45-60 cm tall ,pod length 9 cm ,8-9 grains/pod	Graden Pea	No. of pods per plant	15	22	40100	53300	109650	165900	69550	112600	2.7	3.1
Kandhamal	Var- Utkal Raja, duration 95-100 days, tolerant to bacterial wilt, cluster bearing ,average yield 350-400 q/ha, planting in ridges, staking at flowering.	Tomato	No. of fruits per plant	15.2	24.4	52300	57700	78000	127200	25700	69500	1.5	2.2
Kandhamal	Tuber treatment with T.viridae @ 5gm per kg,,application of Tricoderma viridae @2.5 kg/ha & Two spraying of Mancozeb @ 3gm/litre at 30 & 40 DAP for early blight management in Potato.	Potato	Percen tage of disease inciden ce	37.37	10.12	44150	55100	77000	122010	32850	66910	1.7	2.2
Kandhamal	Instalation of pheromone trap @20/ha, Foliar spraying of Spinosad 45 % SC @ 75 ml per acre three times at 10 days interval alternate with BT @ 2 gm/lit at ETL level of DBM population. for DBM management in Cauliflower.	Cauliflo wer	Larvae popula tion per plant	6.02	0.08	35310	45750	80100	110800	44790	65050	2.3	2.4
Kandhamal	Use of improved variety Rachana, seed treatment, soil test based fertilizer application and need based application of plant protection chemicals.	Field Pea	No. of pods per plant	15.2	26.7	23300	32870	55200	90400	31900	57530	2.4	2.7
Kandhamal	Use of improved variety Anuradha with spraying of imidachlopid @ 3ml/10 liter alternate with Neem oil @ 5 ml per liter with soil test based fertilizer application	Toria	No. of siliqua per plant	156	316	8260	14520	16800	36300	8540	21780	2.0	2.5

Kandhamal	Application of lime @ 0.2 LR at the time of final ploughng with FYM @ 15ton/ha ,Soil test based fertilizer application with 2 kg Born/ha at the time of planting.	Cauli flower	Curd weight in gm	543.7	857.5	48700	58400	112070	181090	63370	122690	2.3	3.1
Kandhamal	Lime @ 0.2 LR as PMS is applied at the time of final ploughing , Bioinoculation of Azotobacter ,Azospirillum & PSB @ 1:1:1 (3+3+3=9 kg/ha) & incubated with 225 kg FYM for 7 days at 30 % moisture content and apply at the time of planting with recommended dose of NPK as per soil test result.	Runner Bean	No. of Pods per plant	22.3	38.6	44900	55400	98880	167520	53980	112120	2.2	3.0
Kandhamal	FYM 5 t/ha ,Seed rate 80 kg/ha, seed treatment with Rhizobium 20g/kg of Seed,Spacing 30x10cm, application of recommended dose of N:P <sub>2</sub> O <sub>5</sub> :K <sub>2</sub> O as per soil test results, application of boron @ 1 kg/ha at the time of sowing, application of PSB @ 6 kg/ha at the time of sowing, application of Trichoderma viridie @ 2.5 kg/ha, spraying of neem oil @ 5 ml/lit of water alternate with Bt @ 2 g/lit. of water at 15 days interval with need based spraying of triazophos @ 2 ml/ lit water, spraying of wettable sulphur @ 5 g/lit (2.5 kg/ha) for powdery mildew disease management.	Azad P-3	No. of pods per plant	15.3	22.8	44740	57500	115050	178350	70310	120850	2.6	3.1

Kandhamal	FYM 15 t/ha ,Seed rate 500	Hare	Single	0.771	1.23	42900	59400	98850	166350	55950	106950	2.3	2.8
	g/ha, spacing 45x30 cm, seed	Krishna	head										
	treatment with vitavax power @		weight										
	2 gm /kg seed, application of		in Kg.										
	recommended dose of												
	N:P <sub>2</sub> O <sub>5</sub> :K <sub>2</sub> O as per soil test												
	results, full P and K and Boron												
	@ 1 kg/ha as basal, half dose of												
	N at 15 days after planting and												
	the remaining half of N after 45												
	days of planting, application of												
	biofertilizers like Azotobacter,												
	Azospirillum and PSB @ 4 kg												
	each/heactare at the time of												
	planting of seedlings, installation												
	of pheromen trap @ 20 nos./ha												
	and lure @ 40 nos./ ha, spraying												
	of neem oil @ 5 ml/lit of water												
	alternate with Bt @ 2 g/lit. of												
	water, spraying of catap												
	hydrochloride @ 1.25 g/ lit. of												
	water at ETL with need based												
	application of ridomil MZ @ 2.5												
	g/ lit. of water for root rot												
	management												

Kandhamal	FYM 15 t/ha ,Seed rate 10	Agri	Average	52.8	101.3	62700	76500	131760	260320	69060	183820	2.1	3.4
	kg/ha, spacing 15x10 cm, seed	found	bulb										
	treatment with vitavax power @	light red	weight /										
	2.5 gm /kg seed, application of	-	plant in										
	biofertilizers like Azotobacter,		gram										
	Azospirillum and PSB @ 4 kg												
	each/heactare at the time of												
	planting of seedlings, application												
	of recommended dose of												
	N:P <sub>2</sub> O <sub>5</sub> :K <sub>2</sub> O as per soil test												
	results, full P and K and half												
	dose of N as basal, one fourth												
	dose of N at 30 days after												
	planting and the remaining half												
	of N after 45 days of planting,												
	spraying of neem oil @ 5 ml/lit												
	of water alternate with rogor @												
	2 ml/ lit of water need based												
	application of ridomil MZ @ 2.5												
	g/ lit. or mancozeb @ 3 g/lit. for												
	rot and blight management												
Kandhamal	ISI Bee Box ,Apis cerena indica	Bee											
1	& improved management	keeping											
	practices.(TSP) (Continuing)												

### **3.4 Information about Home Science FLDs**

KVK	Year	Season	Them	Problem Identified	Technology to be	Crop/	Name of	Farming	Proposed	No. of
name			atic		Demonstrated as	Enterprise	Variety/Te	Situatio	area (ha)	Beneficiaries
			Area		Solution to the	(In which	chnology/E	n		
					Identified Problem	crop	ntreprizes			
						Enterprise				
						or				
						Farming				
						Activity)				
Kandhamal	2013-14	Kharif	House	Low yield due to local	Plot size -10 cent,	Different	Kitchen	Rainfed	0.4	10
			hold	seeds and poor	developing crop schedule	vegetables in	garden in			
			food	management of nutritional	on rotation basis, layout of	kitchen	household			
			securi	garden	nutritional garden with crop	garden	backyard			
			ty		management					
Kandhamal	2013-14	Kharif	Drudg	Low efficiency & high	Groundnut stripper reduces	Groundnut	Groundnut		1.0	05
			ery	drudgery of farm women	drudgery of farm women &		stripper			
			reduct	during Groundnut	increases efficiency (87%)					

			ion	Stripping	of Groundnut stripping					
Kandhamal	2013-14	Rabi	Incom e gener ating activit y	Low income from non land based agricultural activities	Cultivation of Oyster mushroom var. P. sajarcaju on paddy straw.	Oyster Mushroom	P. Sajarcaju	Homestead	50 nos.	05
Kandhamal	2013-14	Rabi	Drudg ery reduct ion	Heavy drudgery, consumption of more time, water and fuel in boiling of Turmeric also non uniform boiling of turmeric resulting in poor pigmentation & less curcumin content.	Improved turmeric boiling drum with perforated grill. Capacity-40kg/grill	Improved Turmeric boiling drum	Turmeric boiling drum	Homestead	5nos	05
Kandhamal	2013-14	Rabi	Poultr y mana geme nt	Low yield of egg and meat due to local poultry bird rearing	Rearing of Vanaraja breed of poultry in household backyard	Poultry	Banaraja	Homestead	150	15
Kandhamal	2013-14	Rabi	Incom e gener ating activit y	Low income from non land based agricultural activities	Cultivation of Oyster mushroom var. P. sajarcaju on paddy straw.	Oyster Mushroom	P. Sajarcaju	Homestead	1125	50
Kandhamal	2013-14	Rabi	Poultr y mana geme nt (TSP)	Low yield of egg and meat due to local poultry bird rearing	Rearing of Vanaraja and blackrock breed of poultry in household backyard (TSP)	Poultry	Banaraja and Black rock	Homestead	3000	200

### **3.5 Economic Performance Home Science FLDs:**

KVK	Technology		Performance Indicator / Parameter																				
name	to be Demonstrate d	Ou m	tput 2/h	Est. F Exper kj/r	Energy 1diture min.	W] beat	HR /min	redu i drud	% iction in lgery	% incre in efficio	ease ase ancy	Produ per	uction unit	Cos inp	t of out	inc	remen tal come	Yield(	Kg/ha)	N Ref	let turn	Savi ng in Rs	BC rati 0
		T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	<b>T1</b>	T2	T1	T2	Т 1	T2	T1	T2	<b>T1</b>	T2		
Kandh amal	Plot size 10 cent, developing crop schedule on rotation basis, layout of nutritional garden with crop management	-	-	-	-	-	-	-	-	-	-	2.91 q	4.66 q	163	235	332	514	7200	11500	173	279	279	2.18
Kandh amal	Groundnut stripper reduces drudgery of farm women & increases efficiency (87%) of Groundnut stripping	-	-	-	-	-	-	-	-	-	92	5.3 kg/hr	10.2 kg/hr	-	-	-	-	-	-	-	-	-	-
Kandh amal	Cultivation of Oyster mushroom var. P. sajarcaju on paddy straw.	-	-	-	-	-	-	-	-	-	-	-	-	-	25				1.4 kg/be d	-	59 /bed	59	3.36
Kandh amal	Improved turmeric boiling drum with perforated grill. Capacity- 40kg/grill	-	-	-	-	-	-	-	-		300	10 kg/hr	40 kg/hr	-	-	-	-	-	-	-	-	-	-
Kandh amal	Rearing of Banaraja breed of poultry in household backyard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.29	4.4	206 2	799 9	5937	6.4
Kandh amal	Cultivation of Oyster mushroom var. P. sajarcaju on	-	-	-	-	-	-	-	-	-	-	-	-	-	25				1.5 kg/be d	-	65 /bed	65	3.4

	paddy straw(TSP)													
Kandh	Rearing of													
ama	improved dual													
	purpose								13					
	Banaraja and								1.5 ka/bi	4.5	207	806		
	blackrock	 -	-	 	-	 	-	-	rd/vo	kg/bir	207	200	5984	6.4
	breed of								ar	d/year	0	2		
	poultry in													
	household													
	backyard(TSP)													

## **3.6 Training and Extension activities proposed under FLD**

KVK Name	Сгор	Activity	No. of activities organized	Number of participants	Remarks
Kandhamal	Nutritional garden	Field days	1	20	
Kandhamal		Farmers Training	2	60	
Kandhamal		Media coverage	-	-	
Kandhamal		Training for extension functionaries	-	-	
Kandhamal	Oyster mushroom	Field days	1	20	
Kandhamal		Farmers Training	2	30	
Kandhamal		Media coverage			
Kandhamal		Training for extension functionaries	1	15	
Kandhamal	Groundnut	Field days	-	-	
Kandhamal		Farmers Training	1	30	
Kandhamal		Media coverage	-	-	-
Kandhamal		Training for extension functionaries	-	-	-
Kandhamal	Turmeric	Field days	-	-	
Kandhamal		Farmers Training	1	30	-
Kandhamal		Media coverage	-	-	-
Kandhamal		Training for extension functionaries	-	-	-
Kandhamal	Rice	Field days	1	20	
Kandhamal		Farmers Training	2	60	-
Kandhamal		Media coverage			-
Kandhamal		Training for extension functionaries	1	15	-
Kandhamal	Rice	Field days	1	20	
Kandhamal		Farmers Training	1	30	-
Kandhamal		Media coverage	-	-	-
Kandhamal		Training for extension functionaries	-	-	-
Kandhamal	Rice	Field days	1	20	-
Kandhamal		Farmers Training	1	30	-

Kandhamal		Madia covaraga			
Kandhamal		Training for extension functionaries			
Kandhamal	Maize	Field days			
Kandhamal	WIUIZC	Farmers Training	3	90	
Kandhamal		Madia coverage	5	20	
Kandhamal		Training for extension functionaries		15	
Kandhamal	Cingor	Field days	1	20	-
Kandhamal	Ulliger	Formers Training	1	20	
Kandhamal		Madia acuerage	1	30	-
Kandhamal		Media coverage			
Kandhamal	C ( D. t. t.	Fining for extension functionaries			
Kandhamal	Sweet Potato	Field days			
Kandhamal		Farmers Training	1	30	
Kandhamal		Media coverage			-
Kandhamal		Training for extension functionaries			
Kandhamal	Rice	Field days	1	20	
Kandhamal		Farmers Training	2	60	-
Kandhamal		Media coverage			-
Kandhamal		Training for extension functionaries			-
Kandhamal	Brinjal	Field days	1	20	
Kandhamal		Farmers Training	1	30	-
Kandhamal		Media coverage			-
Kandhamal		Training for extension functionaries			-
Kandhamal	Maize	Field days	1	20	
Kandhamal		Farmers Training	1	20	-
Kandhamal		Media coverage			-
Kandhamal		Training for extension functionaries			-
Kandhamal	Turmeric	Field days	1	20	-
Kandhamal		Farmers Training	1	30	-
Kandhamal		Media coverage			-
Kandhamal		Training for extension functionaries			-
Kandhamal	Niger	Field days	1	20	
Kandhamal	0	Farmers Training	1	30	_
Kandhamal		Media coverage			_
Kandhamal		Training for extension functionaries			
Kandhamal	Garden Pea	Field days			
Kandhamal		Farmers Training	1	30	_
Kandhamal		Media coverage			_
Kandhamal		Training for extension functionaries			_
Kandhamal	Tomato	Field days			
Kandhamal	1 oniuto	Farmers Training	1	30	
Kandhamal		Media coverage	1	50	
Kandhamal		Training for extension functionaries			-
ixanunannal		ranning for extension functionalies			- 1

Kandhamal	Potato	Field days	1	20	
Kandhamal		Farmers Training	1	30	-
Kandhamal		Media coverage			-
Kandhamal		Training for extension functionaries			-
Kandhamal	Cauliflower	Field days	1	20	
Kandhamal		Farmers Training	1	30	-
Kandhamal		Media coverage			-
Kandhamal		Training for extension functionaries			-
Kandhamal	Field Pea	Field days	1	20	
Kandhamal		Farmers Training	1	30	-
Kandhamal		Media coverage			-
Kandhamal		Training for extension functionaries			-
Kandhamal	Toria	Field days	1	20	-
Kandhamal		Farmers Training	1	30	-
Kandhamal		Media coverage	-	-	-
Kandhamal		Training for extension functionaries	-	-	-
Kandhamal	Cauliflower	Field days	1	20	-
Kandhamal		Farmers Training	1	30	
Kandhamal		Media coverage			
Kandhamal		Training for extension functionaries			
Kandhamal	Runner Bean	Field days	1	20	
Kandhamal		Farmers Training	1	30	
Kandhamal		Media coverage	-	-	-
Kandhamal		Training for extension functionaries	-	-	-
Kandhamal	Garden Pea	Field days	1	30	
Kandhamal		Farmers Training	2	60	
Kandhamal		Media coverage	1	Mass	-
Kandhamal		Training for extension functionaries	-	-	-
Kandhamal	Cabbage	Field days	1	30	
Kandhamal		Farmers Training	2	60	
Kandhamal		Media coverage	1	Mass	-
Kandhamal		Training for extension functionaries	-	-	-
Kandhamal	Onion	Field days	1	30	
Kandhamal		Farmers Training	2	60	
Kandhamal		Media coverage	1	Mass	-
Kandhamal		Training for extension functionaries	-	-	-

### 3.7 Details of FLD on crop hybrids.

S. No.	Name of the KVK	Name of the Crop	Name of the Hybrids	Source of Hybrid (Institute/Firm)	No. of farmers	Area in ha.
1	Kandhamal	Rice	Ajay	CRRI,Cuttack	5	1.0

# 4. Feedback System4.1. Feedback of the Farmers to KVK

Name of			Feedback	
KVK	Technology appropriations	Methodology used	Benefits of OFT/FLD	Future Adoption
Kandhamal	HYV rice var –Ranidhan , duration -140- 145 days , grain –medium slender , registant to BLB and leaf folder, yield potential 60 q/ha, spacing 20x15 cm with recommended dose of fertlizer as per soil test values	Group discussion, Field day, farmer interaction.	Farmers get higher income than their own practice. Pest & disease incidence reduced in the scientific method of cultivation.farmers are able to know the newly developed technologies.	The farmers adopted the technology & framers of near by villages are convinced for future adoption
Kandhamal	Seed treatment with Tricyclazole @1gm per kg ,three spraying of Tricyclazole @ 0.6 gm per litre of water one each at tillering ,boot leaf stage & grain formation stage in paddy	Group discussion, Field day, farmer interaction.	Farmers get higher income than their own practice. Pest & disease incidence reduced in the scientific method of cultivation.farmers are able to know the newly developed technologies.	The farmers adopted the technology & framers of near by villages are convinced for future adoption
Kandhamal	Hand clipping & destruction of infected shoots & fruits,Spraying of Spinosad 45% SC @ 75 l/acre 2-3 times at 15 days interval in brinjal	Group discussion, Field day, farmer interaction.	Farmers get higher income than their own practice. Pest & disease incidence reduced in the scientific method of cultivation.farmers are able to know the newly developed technologies.	The farmers adopted the technology & framers of near by villages are convinced for future adoption
Kandhamal	The seed rhizome (20-30gm) of turmeric placed 3.5-5 cm deep. FYM @ 15 tons per ha are spread evenly on beds & incorporate manually in to the soil. Application of bio- fertilizers (Azospirillum +PSB ,1:1 ,10+10 = 20 kg /ha in 500 kg FYM) and	Group discussion, Field day, farmer interaction.	Farmers get higher income than their own practice. Pest & disease incidence reduced in the scientific method of cultivation.farmers are able to know the newly developed technologies.	The farmers adopted the technology & framers of near by villages are convinced for future adoption

Kandhamal	Var- Utkal Raja, duration 95-100 days,	Group discussion, Field	Farmers get higher income than their own	The farmers adopted the
	tolerant to bacterial wilt, cluster bearing	day, farmer interaction.	practice. Pest & disease incidence reduced in	technology & framers of near by
	,average yield 350-400 q/ha, planting in		the scientific method of cultivation.farmers are	villages are convinced for future
	ridges, staking at flowering.		able to know the newly developed	adoption
			technologies.	-
			C C	
Kandhamal	Use of improved variety Parvati with	Group discussion, Field	Farmers get higher income than their own	The farmers adopted the
	spraying of imidachlopid @ 3ml/10 liter	day, farmer interaction.	practice. Pest & disease incidence reduced in	technology & framers of near by
	alternate with Neem oil @ 5 ml per liter		the scientific method of cultivation.farmers are	villages are convinced for future
	with soil test based fertilizer application		able to know the newly developed	adoption
			technologies.	1
			6	

### 4.2. Feedback from KVK to Research System.

Name of KVK	Feedback basic of OFT on Technology Tested

## 4. Documentation of the need assessment conducted by the KVK for the training programme

Name of KVK	Category of the training	Methods of need assessment	Date and place	No. of participants involved
Kandhamal	Practicing farmers &	Focused group discussion	25.09.12 ,Burbinaju	300
	farm women	,Interaction & diagnostic visit	08.01.13 ,Sakadi	
			04.03.13 ,Kalanaju	
Kandhamal	Farm women	Interaction with farm women	16.10.12 ,Magariguda	
		Diagnostic visit & PRA.	08.03.13,G.Udayagiri	550
			04.12.12,KVK ,Campus	
Kandhamal	Rural Youth	Personnel interview, PRA &	06.06.12 ,KVK Campus	500
		group discussion		
### **Abbreviation Used**

FW	(A) Farmers & Farm Women
RY	(B) Rural Youths
IS	(C) Extension Personnel
ONC	On Campus Training Programme
OFC	Off Campus Training Programme
М	Male
F	Female
Т	Total
Thematic A	Areas for Training
CRP	Crop Production
HOV	Horticulture – Vegetable Crops
HOF	Horticulture-Fruits
HOO	Horticulture- Ornamental Plants
HOP	Horticulture- Plantation crops
HOT	Horticulture- Tuber crops
HOS	Horticulture- Spices
HOM	Horticulture- Medicinal and Aromatic Plants
SFM	Soil Health and Fertility Management
LPM	Livestock Production and Management
WOE	Home Science/Women empowerment
AEG	Agril. Engineering
PLP	Plant Protection
FIS	Fisheries
PIS	Production of Inputs at site
CBD	Capacity Building and Group Dynamics
AGF	Agro-forestry
OTH	Others
RYH	Rural Youth
EXP	Extension Personnel

# 5. TRAINING PROGRAMMES

1. Training programmes should be strictly covered under above mentioned thematic areas only,

2. For category, training type and thematic area, mention code/abbreviations only

 Table 5.1. Details of Training programmes conducted by the KVKs

Name of	Cate-	Training	Thematic	Training Title	No. of	Duratio	atio Participants							
KVK	gory	Туре	area		Cours	n (Days)	G	en		SC		ST	Ot	hers
					es		Μ	F	Μ	F	Μ	F	Μ	F
	•	2	+	-	-	0	0	10	11	10	10	14	1.5	16
1	2	3	4	5	7	8	9	10	11	12	13	14	15	16
Kandha mal	FW	ONC	WOE	Paddy straw mushroom cultivation	1	2	-	-	-	3	-	12	-	-
Kandha mal	FW	ONC	WOE	Oyster Mushroom Cultivation	1	1	-	-	-	-	-	15	-	-
Kandha mal	FW	OFC	CRP	Agro technique for sowing of Maize	1	1	-	-	5	1	11	10	1	2
Kandha mal	FW	OFC	CRP	Weed Management in transplanted Rice	1	1	-	-	1	-	17	12	-	-
Kandha mal	FW	OFC	CRP	Integrated weed management in Maize	1	1	-	-	3	-	22	4	1	-
Kandha mal	FW	OFC	CRP	Integrated weed management in oilseed crops	1	1	-	-	1	-	15	14	-	-
Kandha mal	FW	OFC	CRP	Agro-techniques for oilseed crops	1	1	-	-	4	8	11	7	-	-
Kandha mal	FW	OFC	CRP	Importance of crop rotation.	1	1	-	-	1	-	17	12	-	-
Kandha mal	FW	OFC	CRP	Maize based intercropping system	1	1	-	-	2	1	15	10	2	-
Kandha mal	FW	OFC	CRP	Water management in rice	1	1	-	-	-	-	30	-	-	-
Kandha mal	FW	OFC	PLP	Integrated disease management in rice	1	1	-	-	-	-	30	-	-	-
Kandha mal	FW	OFC	PLP	Integrated disease management in Turmeric	1	1	4	-	-	-	21	5	-	-
Kandha mal	FW	OFC	PLP	Integrated disease management in Groundnut	1	1	-	-	-	-	22	8	-	-

Kandha	FW	OFC	PLP	Integrated pest	1	1	-	-	-	-	30	-	-	-
Kandha	FW	OFC	PLP	Integrated Pest	1	1	-	-	-	-	27	3	-	-
Kandha	FW	OFC	PLP	Integrated Pest	1	1	-	-	3	-	27	-	-	-
mal Kandha	FW	OFC	PI P	Integrated disease	1	1	-	-	_	-	25	5	-	_
mal	1.11			management in Raikia Bean	1	1						-		
Kandha mal	FW	OFC	PLP	Integrated disease management in pea	1	1	-	-	2	-	25	3	-	-
Kandha mal	FW	OFC	PLP	Integrated disease management in Potato	1	1	-	-	-	-	30	-	-	-
Kandha mal	FW	OFC	PLP	Integrated pest management in Mustard	1	1	-	-	-	-	30	-	-	-
Kandha mal	FW	OFC	PLP	Integrated pest management in tomato	1	1	-	-	1	-	24	5	-	-
Kandha	FW	OFC	PLP	Post harvest management	1	1		-	1	1	22	6	-	-
mai				and sale storage of Onger										
Kandha mal	FW	OFC	WOE	Management and layout of Nutritional garden	2	2	-	-	-	5	-	36	-	19
Kandha mal Kandha mal	FW     FW	OFC OFC	WOE WOE	And safe storage of OngelManagement and layout ofNutritional gardenUse of Cono weeder inSRI Paddy cultivation	2	2	-	-	-	5	-	36 29	-	-
Kandha mal Kandha mal Kandha mal	FW FW FW	OFC OFC OFC	WOE WOE WOE	And safe storage of OngelManagement and layout of Nutritional gardenUse of Cono weeder in SRI Paddy cultivationUse of Paddy winnower and thresher	2 1 1	2 1 1	-	-	-	5 1 6	-	36 29 24	-	-
Kandha mal Kandha mal Kandha mal Kandha mal	FW FW FW FW	OFC OFC OFC OFC	WOE WOE WOE WOE	And safe storage of OngelManagement and layout ofNutritional gardenUse of Cono weeder inSRI Paddy cultivationUse of Paddy winnowerand thresherPost harvest managementof Turmeric	2 1 1 1	2 1 1 1	-	-	-	5 1 6 5	-	36 29 24 25	-	- - -
Kandha mal Kandha mal Kandha mal Kandha mal Kandha mal	FW FW FW FW FW	OFC OFC OFC OFC OFC	WOE WOE WOE WOE HOS	And safe storage of GrigerManagement and layout of Nutritional gardenUse of Cono weeder in SRI Paddy cultivationUse of Paddy winnower and thresherPost harvest management of TurmericProduction technique of organic ginger cultivation	2 1 1 1 1	2 1 1 1 1 1	-		- - - 7	5 1 6 5 -	- - - 17	36 29 24 25 6	-	- - - -
Kandha mal Kandha mal Kandha mal Kandha mal Kandha mal	FW FW FW FW FW	OFC OFC OFC OFC OFC OFC	WOE WOE WOE HOS HOT	And safe storage of OngelManagement and layout of Nutritional gardenUse of Cono weeder in SRI Paddy cultivationUse of Paddy winnower and thresherPost harvest management of TurmericProduction technique of organic ginger cultivationProduction technique of sweet potato cultivation	2 1 1 1 1 1 1	2 1 1 1 1 1 1	-	-	- - - 7 13	5 1 6 5 - 6	- - - 17 6	36 29 24 25 6 5	-	- - - - -
Kandha mal Kandha mal Kandha mal Kandha mal Kandha mal Kandha mal	FW FW FW FW FW FW	OFC OFC OFC OFC OFC OFC OFC	WOE WOE WOE HOS HOT HOS	And safe storage of OngelManagement and layout of Nutritional gardenUse of Cono weeder in SRI Paddy cultivationUse of Paddy winnower and thresherPost harvest management of TurmericProduction technique of organic ginger cultivationProduction technique of sweet potato cultivationProduction technique of organic Turmeric	2 1 1 1 1 1 1 1	2 1 1 1 1 1 1 1	- - - - -		- - 7 13 -	5 1 6 5 - 6 -	- - - 17 6 27	36 29 24 25 6 5 3	-	- - - - -

Kandha mal	FW	OFC	НОТ	Production technique of Yam	1	1	-	-	3	2	10	15	-	-
Kandha mal	FW	OFC	HOV	Production technique of garden pea cultivation	1	1	-	-	1	4	14	11	-	-
Kandha mal	FW	OFC	HOV	Nursery raising technique of vegetable	1	1	-	-	1	-	17	12	-	-
Kandha mal	FW	OFC	HOV	Production technique of Cole crop	1	1	-	-	-	-	23	7	-	-
Kandha mal	FW	OFC	SFM	Technique of soil sample collection	2	2	-	-	4	2	45	9	-	-
Kandha mal	FW	OFC	SFM	Integrated nutrient management practices in turmeric	1	1	-	-	-	-	23	7	-	-
Kandha mal	FW	OFC	SFM	Reclamation of acid soil for higher crop productivity	1	1	-	-	1	2	17	10	-	-
Kandha mal	FW	OFC	SFM	Nutrient management in transplanted rice	1	1	-	-	4	-	16	-	10	-
Kandha mal	FW	OFC	SFM	Methodology for biofertilizer application in vegetable	1	1	-	-	4	-	26	-	-	-
Kandha mal	FW	OFC	SFM	Nutrient management in tuber crops	1	1	-	-	2	3	13	12	-	-
Kandha mal	FW	OFC	SFM	Nutrient management in cole crops	1	1	-	-	5	-	14	-	10	1
Kandha mal	FW	OFC	SFM	Nutrient management in oil seed crops	1	1	-	-	1	-	24	5	-	-
Kandha mal	FW	OFC	SFM	Package & practices of Niger cultivation (Oil seed & Pulse)	1	1	-	-	-	-	24	6	-	-
Kandha mal	FW	OFC	SFM	Package & practices of toria cultivation (Oil seed & Pulse)	1	1	-	-	-	1	22	7	-	-
Kandha mal	FW	OFC	SFM	Package & practices of field pea cultivation (Oil seed & Pulse)	1	1	-	-	-	-	23	7	-	-

Kandha mal	FW	OFC	SFM	Package & practices of garden pea cultivation (TSP)	2	2	-	-	-	-	47	13	-	-
Kandha mal	FW	OFC	SFM	Package & practices of Onion cultivation (TSP)	2	2	-	-	-	-	47	13	-	-
Kandha mal	FW	OFC	SFM	Package & practices of cabbage cultivation (TSP)	2	2	-	-	-	-	44	16	-	-
Kandha mal	FW	OFC	LPM	Improved method of backyard poultry rearing (TSP)	1	1	-	-	-	-	25	5	-	-
Kandha mal	FW	OFC	LPM	Feed & disease management for backyard poultry (TSP)	1	1	-	-	-	-	29	1	-	-
Kandha mal	FW	OFC	OTH	Bee keeping(TSP)	4	4	-	-	-	-	86	34	-	-
Kandha mal	FW	OFC	OTH	Vermi composting(TSP)	2	2	-	-	-	-	52	8	-	-
Kandha mal	FW	ONC	WOE	Oyster mushroom cultivation	3	9	-	-	-	-	-	45	-	-
Kandha mal	RY	ONC	RYH	Bio-fertilizer application in pulse crop	1	2	-	-	2	-	10	3	-	-
Kandha mal	RY	ONC	RYH	Weed Management in Pulse crop	1	2	-	-	1	-	14	-	-	-
Kandha mal	RY	ONC	RYH	Package and practices of mustard cultivation	1	2	_	-	2	-	13	-	-	-
Kandha mal	RY	ONC	RYH	Method and application of Bio pesticides.	1	2	-	-	-	-	15	-	-	-
Kandha mal	RY	ONC	RYH	Safe and judicious use of pesticide.	1	2	-	-	1	-	14	-	-	-
Kandha mal	RY	ONC	RYH	Processing, preservation and value addition of Mango and other fruits	2	4	-	-	-	6	-	23	-	1
Kandha mal	RY	ONC	RYH	Processing, preservation and value addition of Mango and other fruits	1	4	-	-	-	-	-	15	-	-
Kandha mal	RY	ONC	RYH	Oyster Mushroom cultivation	2	4	-	-	-	4	-	25	-	1

Kandha mal	RY	ONC	RYH	Seed production technique in tomato	1	2	-	-	-	-	15	-	-	-
Kandha mal	RY	ONC	RYH	Management of high density mango orchard	1	2	-	-	2	-	13	-	-	-
Kandha mal	RY	ONC	RYH	Micro and secondary nutrient management in maize	1	1	-	-	1	-	16	-	3	-
Kandha mal	RY	ONC	RYH	Methodology for preparation of enriched compost	1	2	-	-	1	-	14	-	-	-
Kandha mal	RY	OFC	RYH	Nursery Management in Paddy	1	1	-	-	1	2	15	5	7	-
Kandha mal	RY	OFC	RYH	Integrated weed management in Kharif Groundnut	1	1	-	-	4	-	16	10	-	-
Kandha mal	RY	OFC	RYH	Bio control of pest and diseases in solanecious vegetable	1	1	-	-	2	-	16	2	-	-
Kandha mal	RY	OFC	RYH	Use of Groundnut stripper for stripping of Groundnut	1	1	-	-	-	-	-	15	-	15
Kandha mal	RY	OFC	RYH	Preparation of leaf plates by stitching machine	1	1	-	-	-	3	-	27	-	-
Kandha mal	RY	OFC	RYH	Improved package and practices of tissue culture banana.	1	1	-	-	1	-	15	14	-	-
Kandha mal	RY	OFC	RYH	Methodology for quality vermicompost production	1	1	-	-	3	1	14	4	8	-
	RY	OFC	RYH	Rain water management for increased crop productivity	1	1	-	-	-	-	12	18	-	-
Kandha mal	IS	ONC	EXP	Integrated Weed Management practices in Paddy	1	1	6	-	-	-	9	-	-	-
Kandha mal	IS	ONC	EXP	Productivity enhancement in field crops	1	1	3	-	-	-	12	-	-	-
Kandha mal	IS	ONC	EXP	Method and application of New generation Pesticides.	1	2	1	-	-	-	11	-	3	-

Kandha	IS	ONC	EXP	Preservation of Tomato	1	1	-	3	-	1		11	-	-
mal				and value addition of fruits										
Kandha	IS	ONC	EXP	Nutrient management in	1	2	5	-	5	-	5	-	-	-
mal				vegetables										
Kandha	IS	ONC	EXP	Nutrient management in	1	2	3	-	2	-	10	-	-	-
mal				fruit crops										
Kandha	IS	ONC	EXP	Methodology for	1	1	10	1	-	-	4	-	-	-
mal				fertilizer calculation for										
				crops										
Kandha	IS	ONC	EXP	Problematic soils and	1	1	6	-	-	-	4	-	5	-
mal				their management for										
				higher crop productivity										

### Table 5.2. Details of Vocational training programmes for Rural Youth conducted by the KVKs

				Duration	Nun	nber of	Ben	eficiar	ies			
Name of KVK	Training title	Crop / Enterprise	Identified Thrust Area	of training	Gen		SC		ST		Othe	ers
				(days)	Μ	F	Μ	F	Μ	F	Μ	F
Kandhamal	Processing, Preservation and value addition of Minor fruit crops and vegetables	Enterprise	Value addition	4	-	-	-	-	-	15	-	-
Kandhamal	Bee keeping	Enterprise	Bee keeping	4	-	-	2	-	12	1	-	-
Kandhamal	Vermicomposting	Enterprse	Organic farming	4	-	-	3	-	9	3	-	-
Kandhamal	Bee keeping (TSP)	Enterprise	Bee keeping	8					40			
Kandhamal	Vermicomposting (TSP)	Enterprise	Organic farming	8	-	-	-	-	38	2	-	-
Kandhamal	Oyster mushroom cultivation (TSP)	Enterprise	Small scale income generating activities	8	-	-	-	-	-	40	-	-
Kandhamal	Technique of propagation of mango & litchi(TSP)	Crop	Fruit cultivation	4	-	-	-	_	20	-	-	-

#### Table 5.3. Details of training programme conducted for livelihood security in rural areas by the KVKs

Name of	Training title		Self employed after training		Number of
KVK		Type of units	Number of units	Number of persons employed	persons employed else where
Kandhamal	Vermicomposting	Vermin	5	4	
Kandhamal	Bee keeping	Bee Boxes	50	16	
Kandhamal	Processing ,preservation & value				
	addition of minor fruit crops &	Preservatives	-	2	
	vegetables				

### Table 5.4. Sponsored Training Programmes

		Thomatic area	Sub-theme	Client			No.	of I	Parti	cipan	ts					Fund
Name of KVK	Title	(as given in abbreviation	(as per column no 5 of Table	(FW/ RY/	Dura- tion (days)	No. of courses	Ge	en	Otl	hers	5	SC	s	Т	Sponsoring Agency	received for training (Rs.)
		table)	T1)	15)			Μ	F	Μ	F	Μ	F	Μ	F		

### Table 5.5 Training Programmes for Panchayatiraj Institutions Office-bearers & members

		Thomatic area	Sub-theme	Client			No	. of l	Parti	cipan	ts					Fund
Name of KVK	Title	(as given in abbreviation	(as per column no 5 of Table	(FW/ RY/	Dura- tion (days)	No. of courses	G	Gen (		ners	5	SC	S	Т	Sponsoring Agency	received for training (Rs.)
		table)	T1)	13)			Μ	F	Μ	F	Μ	F	Μ	F		

Name of	Title of the training	No. of trainees	Change i knowled (Score)	in ge	Change i Producti	in on (q/ha)	Change in (Rs)	n Income	Impact on1. Area expanded (ha)2. No. of farmers adopted (no.)
KVK			Before	After	Before	After	Before	After	3. % change in knowledge, production & Income
Kandhamal	Paddy straw mushroom cultivation	15	14	25	.8 kg	1.1 kg	35	45	<ol> <li>No. of village -5</li> <li>Out of 15 trainees, 10 farmers adopted the technology.</li> <li>(i) Knowledge: 78.5.(After- Before)/Before *100         <ul> <li>(ii) Production: 37.5</li> <li>(iii) Income: 28</li> </ul> </li> </ol>
Kandhamal	Oyster mushroom cultivation	30	50	75	1.25	1.4	65	80	<ol> <li>No. of villages-10</li> <li>Out of 30 trainees, 24 trainees adopted the technologies.</li> <li>(i) Knowledge: 50.(After- Before)/Before *100         <ul> <li>(ii) Production: 17</li> <li>(ii) Income: 23</li> </ul> </li> </ol>
Kandhamal	Management and layout of nutritional garden	60	30	45	72	115	9000	12000	<ol> <li>05 ha</li> <li>Out of 60 trainees, 44 have accepted the technology.</li> <li>(i) Knowledge: 50.(After- Before)/Before *100         <ul> <li>(ii) Production: 59</li> <li>(ii) Income: 54.8</li> </ul> </li> </ol>
Kandhamal	Use of Cono weeder in SRI paddy cultivation	30	25	39	-	-	-	-	<ol> <li>No. of villages-8</li> <li>Out of 30 trainees, 24 trainees adopted the technology.</li> <li>(i) Knowledge: 56.(After- Before)/Before *100         <ul> <li>(ii) Production:</li> <li>(ii) Income:</li> </ul> </li> </ol>

Table 5.6Evaluation/Follow up & Impact of the training programmes conducted by the KVK (all types of trainings)

Kandhamal	Use of Paddy winnower and thresher	30	20	30	-	-	-	-	<ol> <li>No. of SHG -15</li> <li>Out of 30 trainees, 24 trainees accepted technology.</li> <li>(i) Knowledge: 50.(After-Before)/Before *100         <ul> <li>(ii) Production:</li> <li>(ii) Income:</li> </ul> </li> </ol>
Kandhamal	Post harvest management of Turmeric	30	38	75	75	105	60	75	<ol> <li>No. of SHG-12</li> <li>Out of 30 trainees, 28 trainees accepted the technology.</li> <li>(i) Knowledge: 97.(After- Before)/Before *100         <ul> <li>(ii) Production: 40</li> <li>(ii) Income: 25</li> </ul> </li> </ol>
Kandhamal	Processing, Preservation and value addition of Mango and other fruits	30	20	60	-	-	1800	4200	<ol> <li>No. of SHG-21</li> <li>Out of 30 trainees, 21 trainees accepted the technology.</li> <li>(i) Knowledge: 200.(After- Before)/Before *100         <ul> <li>(ii) Production: -</li> <li>(ii) Income: 120</li> </ul> </li> </ol>
Kandhamal	Use of Groundnut stripper for stripping of Groundnut	30	22	38	-	-	-	-	<ol> <li>No. of SHG-4</li> <li>Out of 30 trainees, 25 farm women accepted the technology.</li> <li>(i) Knowledge: 72.(After- Before)/Before *100         <ul> <li>(ii) Production:</li> <li>(ii) Income:</li> </ul> </li> </ol>
Kandhamal	Preparation of leaf plates by stitching machine	30	30	60	-	-	1200	1800	<ol> <li>No. of SHG-12</li> <li>Out of 30 trainees, 24 farm women adopted the new technology.</li> <li>(i) Knowledge: 100.(After- Before)/Before *100         <ul> <li>(ii) Production:</li> <li>(ii) Income: 50</li> </ul> </li> </ol>

Kandhamal	Preservation of Tomato and value addition of fruits	15	25	55	-	-	1000	1200	<ol> <li>No. of SHG-18</li> <li>Out of 15 trainees, 10 farm women adopted the technology.</li> <li>(i) Knowledge: 120.(After- Before)/Before *100         <ul> <li>(ii) Production:</li> <li>(ii) Income: 20</li> </ul> </li> </ol>
Kandhamal	Integrated disease management in paddy	30	28	43	32	41	45214	57330	<ol> <li>1. 165 ha</li> <li>2. Out of 30 trainees, 20 farmers adopted the technology.</li> <li>3. (i) Knowledge: 53.5.(After- Before)/Before *100         <ul> <li>(ii) Production: 28.1</li> <li>(iii) Income: 26.7</li> </ul> </li> </ol>
Kandhamal	Integrated disease management in Turmeric	30	18	38	102	147	110270	180540	<ol> <li>202 ha</li> <li>Out of 30 trainees, 15 farmers adopted the technology.</li> <li>(i) Knowledge: 111.(After- Before)/Before *100         <ul> <li>(ii) Production: 44                <ul> <li>(iii) Income: 38</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Integrated disease management in Groundnut	30	32	51	10.1	14.3	25010	35750	<ol> <li>78 ha</li> <li>Out of 30 trainees, 18 farmers adopted the technology.</li> <li>(i) Knowledge: 59.3.(After- Before)/Before *100         <ul> <li>(ii) Production: 41.5                 <ul> <li>(ii) Income: 30</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Integrated pest management in Cabbage	30	23	56	172	152	86600	143200	<ol> <li>215 ha</li> <li>Out of 30 trainees, 17 farmers adopted the technology.</li> <li>(i) Knowledge: 143.4.(After- Before)/Before *100         <ul> <li>(ii) Production: 46.5             <li>(ii) Income: 65.35</li> </li></ul> </li> </ol>

Kandhamal	Integrated Pest 30 management in Brinjal	36	61	125	172	35410	46200	<ol> <li>1. 155 ha</li> <li>Out of 30 trainees, 16 farmers adopted the technology.</li> <li>3. (i) Knowledge: 69.9.(After- Before)/Before *100         <ul> <li>(ii) Production: 37.6                 <ul> <li>(ii) Income: 30.4</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Integrated Pest 30 management in Paddy	22	46	34	43	46210	58510	<ol> <li>255 ha</li> <li>Out of 30 trainees, 20 farmers adopted the technology.</li> <li>(i) Knowledge: 109.(After- Before)/Before *100         <ul> <li>(ii) Production: 24.47             <ul> <li>(ii) Income: 26.6</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Integrated disease 30 management in Raikia Bean	21	47	82.4	130.8	120200	202300	<ol> <li>1. 135 ha</li> <li>Out of 30 trainees, 16 farmers adopted the technology.</li> <li>(i) Knowledge: 123.8.(After- Before)/Before *100         <ul> <li>(ii) Production: 58.7                 <ul> <li>(ii) Income: 68.3</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Integrated disease 30 management in pea	18	37	76.1	104.2	98210	134350	<ol> <li>86 ha</li> <li>Out of 30 trainees, 19 farmers adopted the technology.</li> <li>(i) Knowledge: 105.5.(After- Before)/Before *100         <ul> <li>(ii) Production: 36.9                 <ul> <li>(ii) Income: 36.7</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Integrated disease 30 management in Potato	25	48	110	174	77000	122010	<ol> <li>1. 126 ha</li> <li>Out of 30 trainees, 18 farmers adopted the technology.</li> <li>3. (i) Knowledge: 92.(After- Before)/Before *100         <ul> <li>(ii) Production: 58.1</li> <li>(ii) Income: 58.4</li> </ul> </li> </ol>

Kandhamal	Integrated pest 30 management in Mustard	29	53	6.1	10.6	24400	40400	<ol> <li>287 ha</li> <li>Out of 30 trainees, 18 farmers adopted the technology.</li> <li>(i) Knowledge: 82.7.(After- Before)/Before *100         <ul> <li>(ii) Production: 73.7                 <ul> <li>(ii) Income: 65.5</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Integrated pest 30 management in tomato	27	64	212	297	84800	118800	<ol> <li>96 ha</li> <li>Out of 30 trainees, 16 farmers adopted the technology.</li> <li>(i) Knowledge: 137.(After- Before)/Before *100         <ul> <li>(ii) Production: 40</li> <li>(ii) Income: 42</li> </ul> </li> </ol>
Kandhamal	Post harvest 30 management and safe storage of Ginger	32	61	72	112	185200	245400	<ol> <li>1. 182 ha</li> <li>Out of 30 trainees, 18 farmers adopted the technology.</li> <li>(i) Knowledge: 90.(After- Before)/Before *100         <ul> <li>(ii) Production: 55                 <ul> <li>(ii) Income: 32.5</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Method and 15 application of Biopesticides.	16	38					<ol> <li></li> <li>Out of 15 trainees, 09 farmers adopted the technology.</li> <li>(i) Knowledge: 153.3.(After- Before)/Before *100         <ul> <li>(ii) Production:                 <ul> <li>(ii) Income:</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Safe and judicious 15 use of pesticide.	27	67	-	-	-	-	<ol> <li>1.</li> <li>Out of 15 trainees, 12 farmers adopted the technology.</li> <li>(i) Knowledge: 148.(After- Before)/Before *100         <ul> <li>(ii) Production:                 <ul> <li>(ii) Income:</li> </ul> </li> </ul> </li> </ol>

Kandhamal	Bio control of pest and diseases in solanecious vegetable	20	19	43	-	-	-	-	<ol> <li>240 ha</li> <li>Out of 20 trainees, 11 farmers adopted the technology.</li> <li>(i) Knowledge: 126.3.(After- Before)/Before *100         <ul> <li>(ii) Production:                 <ul> <li>(ii) Income:</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Method and application of New generation Pesticides.	15	57	82	-	-	_	-	<ol> <li>315 ha</li> <li>Out of 15 trainees, 13 farmers adopted the technology.</li> <li>(i) Knowledge: 43.8.(After- Before)/Before *100         <ul> <li>(ii) Production:                 <ul> <li>(ii) Income:</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Bee keeping	15	62	87	4kg/box	7kg/box	800per box	1400 per box	<ol> <li>No. of villages-40</li> <li>Out of 15 trainees, 11 farmers adopted the technology.</li> <li>(i) Knowledge: 40.3.(After- Before)/Before *100         <ul> <li>(ii) Production:75                 <ul> <li>(ii) Income:75</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Agro technique for sowing of Maize	30	35	53	22	35	44000	70000	<ol> <li>55 ha</li> <li>Out of 30 trainees, 26 farmers adopted the technology.</li> <li>(i) Knowledge: 51.(After- Before)/Before *100         <ul> <li>(ii) Production:51                 <ul> <li>(ii) Income:59</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Weed Management in transplanted Paddy	30	30	52	17	36	20400	43200	<ol> <li>80 ha</li> <li>Out of 30 trainees, 24 farmers adopted the technology.</li> <li>(i) Knowledge: 68.7.(After- Before)/Before *100         <ul> <li>(ii) Production:111.7</li> <li>(ii) Income:113.7</li> </ul> </li> </ol>

Kandhamal	Integrated weed management in Maize	30	35	50	20	35	40000	70000	<ol> <li>1. 105 ha</li> <li>Out of 30 trainees, 22 farmers adopted the technology.</li> <li>(i) Knowledge: 43.(After- Before)/Before *100         <ul> <li>(ii) Production: 75                 <ul> <li>(ii) Income:75</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Integrated weed management in oilseed crops	30	25	45	03	09	9000	27000	<ol> <li>65 ha</li> <li>Out of 30 trainees, 18 farmers adopted the technology.</li> <li>(i) Knowledge: 80.(After- Before)/Before *100         <ul> <li>(ii) Production: 200                 <ul> <li>(ii) Income:200</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Agro-techniques for oilseed crops	30	27	47	03	08	9000	24000	<ol> <li>85 ha</li> <li>Out of 30 trainees, 21 farmers adopted the technology.</li> <li>(i) Knowledge: 74.(After- Before)/Before *100         <ul> <li>(ii) Production:166                 <ul> <li>(ii) Income:166</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Importance of crop rotation.	30	20	40	22	32	26400	38400	<ol> <li>1. 105 ha</li> <li>Out of 30 trainees, 25 farmers adopted the technology.</li> <li>(i) Knowledge: 100.(After- Before)/Before *100         <ul> <li>(ii) Production: 45.4             <ul> <li>(ii) Income:45.4</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Maize based intercropping system	30	25	45	18	34	36000	68000	<ol> <li>1. 125 ha</li> <li>2. Out of 30 trainees, 22 farmers adopted the technology.</li> <li>3. (i) Knowledge: 80.(After- Before)/Before *100         <ol> <li>(ii) Production:45.5             <li>(ii) Income:88.8</li> </li></ol> </li> </ol>

Kandhamal	Water management in paddy	30	30	52	20	32	24000	38400	<ol> <li>200 ha</li> <li>Out of 30 trainees, 21 farmers adopted the technology.</li> <li>(i) Knowledge: 73.(After- Before)/Before *100         <ul> <li>(ii) Production:60                <ul> <li>(ii) Income:60</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Bio-fertilizer application in pulse crop	15	23	35	08	10	20000	25000	<ol> <li>50 ha</li> <li>Out of 15 trainees, 12 farmers adopted the technology.</li> <li>(i) Knowledge: 52.(After- Before)/Before *100         <ul> <li>(ii) Production:25                 <ul> <li>(ii) Income:25</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Weed Management in Pulse crop	15	23	42	05	09	15000	27000	<ol> <li>85 ha</li> <li>Out of 15 trainees, 10 farmers adopted the technology.</li> <li>(i) Knowledge: 82.(After- Before)/Before *100         <ul> <li>(ii) Production: 80                 <ul> <li>(ii) Income:80</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Package and practices of mustard cultivation	15	27	45	04	08	16000	32000	<ol> <li>65 ha</li> <li>Out of 15 trainees, 13 farmers adopted the technology.</li> <li>(i) Knowledge: 66.(After- Before)/Before *100         <ul> <li>(ii) Production: 100                 <ul> <li>(ii) Income:100</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Nursery Management in Paddy	30	25	38	22	36	26400	43200	<ol> <li>415 ha</li> <li>Out of 30 trainees, 23 farmers adopted the technology.</li> <li>(i) Knowledge: 52.(After- Before)/Before *100         <ul> <li>(ii) Production: 63.6             <li>(ii) Income:63.6</li> </li></ul> </li> </ol>

Kandhamal	Integrated weed management in Kharif Groundnut	30	26	50	12	18	36000	54000	<ol> <li>1. 150 ha</li> <li>2. Out of 30 trainees, 25 farmers adopted the technology.</li> <li>3. (i) Knowledge: 92.3.(After- Before)/Before *100         <ol> <li>(ii) Production: 50                <ul> <li>(ii) Income:69.2</li> </ul> </li> </ol></li> </ol>
Kandhamal	Integrated Weed Management practices in Paddy	15	45	75	-	-	-	-	<ol> <li>315 ha</li> <li>Out of 15 trainees, 13 farmers accepted the technology.</li> <li>(i) Knowledge: 66.6.(After- Before)/Before *100         <ul> <li>(ii) Production:                 <ul> <li>(ii) Income:</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Productivity enhancement in field crops	15	40	65	-	-	-	-	<ol> <li>1.</li> <li>Out of 15 trainees, 13 trainees accepted the technology.</li> <li>(i) Knowledge: 62.5.(After- Before)/Before *100         <ul> <li>(ii) Production:                 <ul> <li>(ii) Income:</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Technique of soil sample collection	60	22	39					<ol> <li>ha</li> <li>Out of 60 trainees, 44 farmers adopted the technology.</li> <li>(i) Knowledge: 77.2.(After- Before)/Before *100         <ul> <li>(ii) Production:                 <ul> <li>(ii) Income:</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Integrated nutrient management practices in turmeric	30	18	32	92.8	137.5	102080	151250	<ol> <li>1. 120 ha</li> <li>2. Out of 30 trainees, 22 farmers adopted the technology.</li> <li>3. (i) Knowledge: 77.7.(After- Before)/Before *100         <ul> <li>(ii) Production:48.2                 <ul> <li>(ii) Income:48.2</li> </ul> </li> </ul> </li> </ol>

Kandhamal	Reclamation of acid soil for higher crop productivity	30	20	31	9.2	13.6	21160	31280	<ol> <li>1. 105 ha</li> <li>2. Out of 30 trainees, 24 farmers adopted the technology.</li> <li>3. (i) Knowledge: 55.(After- Before)/Before *100         <ul> <li>(ii) Production:47.8                 <ul> <li>(ii) Income:47.8</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Nutrient management in transplanted rice	30	19	33	28.7	44.2	34440	53040	<ol> <li>218 ha</li> <li>Out of 30 trainees, 19 farmers adopted the technology.</li> <li>(i) Knowledge: 73.6.(After- Before)/Before *100         <ul> <li>(ii) Production:54                <ul> <li>(ii) Income:54</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Methodology for biofertilizer application in vegetable	30	19	30	129.9	180.7	77940	108420	<ol> <li>1. 155 ha</li> <li>2. Out of 30 trainees, 21 farmers adopted the technology.</li> <li>3. (i) Knowledge: 57.8.(After- Before)/Before *100         <ul> <li>(ii) Production:50.8                 <ul> <li>(ii) Income:50.8</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Nutrient management in tuber crops	30	15	24	109.9	172.3	65940	103380	<ol> <li>92 ha</li> <li>Out of 30 trainees, 24 farmers adopted the technology.</li> <li>(i) Knowledge: 60.(After- Before)/Before *100         <ul> <li>(ii) Production:56.77             <li>(ii) Income:56.77</li> </li></ul> </li> </ol>
Kandhamal	Nutrient management in cole crops	30	20	39	176.1	232.4	88050	116200	<ol> <li>87 ha</li> <li>Out of 30 trainees, 26 farmers adopted the technology.</li> <li>(i) Knowledge: 95.(After- Before)/Before *100         <ul> <li>(ii) Production:31.97                 <ul> <li>(ii) Income:31.97</li> </ul> </li> </ul> </li> </ol>

Kandhamal	Nutrient management in oil seed crops	30	18	27	8	11.8	24000	35400	<ol> <li>1. 115 ha</li> <li>Out of 30 trainees, 21 farmers adopted the technology.</li> <li>(i) Knowledge: 50.(After- Before)/Before *100         <ul> <li>(ii) Production:47.5                 <ul> <li>(ii) Income:47.5</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Micro and secondary nutrient management in maize	20	15	27	29.3	48.2	49810	81940	<ol> <li>92 ha</li> <li>Out of 20 trainees, 16 farmers adopted the technology.</li> <li>(i) Knowledge: 80.(After- Before)/Before *100         <ul> <li>(ii) Production:64.5                 <ul> <li>(ii) Income:64.5</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Methodology for preparation of enriched compost	15	17	29	124.3	155.8	62150	77900	<ol> <li>52 ha</li> <li>Out of 15 trainees, 12 farmers adopted the technology.</li> <li>(i) Knowledge: 70.5.(After- Before)/Before *100         <ul> <li>(ii) Production: 25.34             <li>(ii) Income:25.34</li> </li></ul> </li> </ol>
Kandhamal	Methodology for quality vermicompost production	30	20	33					<ol> <li>Out of 30 trainees, 27 farmers adopted the technology.</li> <li>(i) Knowledge: 65.(After- Before)/Before *100         <ul> <li>(ii) Production:                 <ul> <li>(ii) Income:</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Rain water management for increased crop productivity	30	12	22	7.8	9.2	23400	27600	<ol> <li>42 ha</li> <li>Out of 30 trainees, 22 farmers adopted the technology.</li> <li>(i) Knowledge: 83.3.(After- Before)/Before *100         <ul> <li>(ii) Production:17.9</li> <li>(iii) Income:17.9</li> </ul> </li> </ol>

Kandhamal	Methodology for fertilizer calculation for crops	15	21	40					ha 1. Out of 15 trainees, 15 farmers adopted the technology. 2. (i) Knowledge: 90.4.(After- Before)/Before *100 (ii) Production: (iii) Income:
Kandhamal	Problematic soils and their management for higher crop productivity	15	24	46					<ol> <li>Out of 15 trainees, 14 farmers adopted the technology.</li> <li>(i) Knowledge: 91.66.(After- Before)/Before *100         <ul> <li>(ii) Production:                 <ul> <li>(iii) Income:</li> </ul> </li> </ul> </li> </ol>
Kandhamal									
Kandhamal	Production technique of organic ginger cultivation	30	25	37	57.2	89.3	238800	343700	<ol> <li>62 ha</li> <li>Out of 30 trainees, 24 farmers adopted the technology.</li> <li>(i) Knowledge: 48.(After- Before)/Before *100         <ul> <li>(ii) Production:56.11             <li>(iii) Income:43.92</li> </li></ul> </li> </ol>
Kandhamal	Production technique of sweet potato cultivation	30	12	21	115.5	168.2	57500	84000	<ol> <li>52 ha</li> <li>Out of 30 trainees, 23 farmers adopted the technology.</li> <li>(i) Knowledge: 75.(After- Before)/Before *100         <ul> <li>(ii) Production:46                <ul> <li>(iii) Income:46.08</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Production technique of organic Turmeric cultivation	30	28	38	92.1	126.78	138000	189000	<ol> <li>475 ha</li> <li>Out of 30 trainees, 27 farmers adopted the technology.</li> <li>(i) Knowledge: 35.71.(After- Before)/Before *100         <ul> <li>(ii) Production:36.95             <li>(iii) Income:36.95</li> </li></ul> </li> </ol>

Kandhamal	Production technique of Pointed gourd	30	8	17	62.3	92.4	62300	92400	<ol> <li>1. 12 ha</li> <li>2. Out of 30 trainees, 17 farmers adopted the technology.</li> <li>3. (i) Knowledge: 88.88.(After- Before)/Before *100         <ul> <li>(ii) Production:48.31</li> <li>(iii) Income:48.31</li> </ul> </li> </ol>
Kandhamal	Production technique of Yam	30	11	26	110.3	171.7	55150	85850	<ol> <li>42 ha</li> <li>Out of 30 trainees, 22 farmers adopted the technology.</li> <li>(i) Knowledge: 118.(After- Before)/Before *100         <ul> <li>(ii) Production:55.66             <li>(iii) Income:55.66</li> </li></ul> </li> </ol>
Kandhamal	Production technique of garden pea cultivation	30	26	42	93.5	116.6	187000	233200	<ol> <li>82 ha</li> <li>Out of 30 trainees, 25 farmers adopted the technology.</li> <li>(i) Knowledge: 61.53.(After- Before)/Before *100         <ul> <li>(ii) Production:24.65             <li>(iii) Income:24.65</li> </li></ul> </li> </ol>
Kandhamal	Nursery raising technique of vegetable	30	12	21					<ol> <li>Out of 30 trainees, 23 farmers adopted the technology.</li> <li>(i) Knowledge: 75.(After- Before)/Before *100         <ul> <li>(ii) Production:                 <ul> <li>(iii) Income:</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Production technique of Cole crop	30	16	28	160.1	220.4	160100	220400	<ol> <li>1. 156 ha</li> <li>2. Out of 30 trainees, 25 farmers adopted the technology.</li> <li>3. (i) Knowledge: 75.(After- Before)/Before *100         <ul> <li>(ii) Production:37.66             <li>(iii) Income:37.66</li> </li></ul> </li> </ol>
Kandhamal	Seed production technique in tomato	15	9	15					<ol> <li>Out of 15 trainees, 09 farmers adopted the technology.</li> <li>(i) Knowledge: 66.66.(After- Before)/Before *100         <ul> <li>(ii) Production:                 <ul> <li>(iii) Income:</li> </ul> </li> </ul> </li> </ol>

Kandhamal	Management of high density mango orchard	15	22	35	82	112.5	41000	56250	<ol> <li>72 ha</li> <li>Out of 15 trainees, 12 farmers adopted the technology.</li> <li>(i) Knowledge:59.09.(After- Before)/Before *100         <ul> <li>(ii) Production:37.19                <ul> <li>(iii) Income.37.19</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Improved package and practices of tissue culture banana.	30	15	26	215.1	325.9	430200	651800	<ol> <li>46 ha</li> <li>Out of 30 trainees, 25 farmers adopted the technology.</li> <li>(i) Knowledge: 73.33.(After- Before)/Before *100         <ul> <li>(ii) Production:51.51             <li>(ii) Income:51.51</li> </li></ul> </li> </ol>
Kandhamal	Nutrient management in vegetables	15	19	32	84.6	108.5	42300	54250	<ol> <li>93 ha</li> <li>Out of 15 trainees, 12 farmers adopted the technology.</li> <li>(i) Knowledge: 68.42.(After- Before)/Before *100         <ul> <li>(ii) Production:28.25             <li>(ii) Income:28.27</li> </li></ul> </li> </ol>
Kandhamal	Nutrient management in fruit crops	15	26	38					<ol> <li>Out of 30 trainees, 21 trainees adopted the technology.</li> <li>(i) Knowledge: 46.15.(After- Before)/Before *100         <ol> <li>(ii) Production:                 <ul> <li>(ii) Income:</li> </ul> </li> </ol></li> </ol>
Kandhamal	Vermicomposting	15	24	45					<ol> <li>Out of 15 trainees, 12 farmers adopted the technology.</li> <li>(i) Knowledge: 87.5.(After- Before)/Before *100         <ol> <li>(ii) Production:                 <ul> <li>(ii) Income:</li> </ul> </li> </ol></li> </ol>
Kandhamal	Package & practices of Niger cultivation (Oil seed & Pulse)	30	22	47	3.6	5.8	7750	13200	<ul> <li>3. 225 ha</li> <li>4. Out of 30 trainees, 18 farmers adopted the technology.</li> <li>5. (i) Knowledge: 113.6.(After-Before)/Before *100 <ul> <li>(ii) Production:61</li> <li>(ii) Income:70.3</li> </ul> </li> </ul>

Kandhamal	Package & practices of Toria cultivation (Oil seed & Pulse)	30	25	52	4.9	10.3	8325	20258	<ol> <li>312 ha</li> <li>Out of 30 trainees, 20 farmers adopted the technology.</li> <li>(i) Knowledge: 108.(After- Before)/Before *100         <ul> <li>(ii) Production:110                 <ul> <li>(ii) Income:143.3</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Package & practices of field pea cultivation (Oil seed & Pulse)	30	32	61	14.2	22.2	29300	56200	<ol> <li>58 ha</li> <li>Out of 30 trainees, 17 farmers adopted the technology.</li> <li>(i) Knowledge: 90.(After- Before)/Before *100         <ul> <li>(ii) Production:56.3                 <ul> <li>(ii) Income:91.8</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Bee keeping (TSP)	160	65	83	3.2kg/b ox/year	6.5kg/b ox/year			<ol> <li>No. of villages -225</li> <li>Out of 160 trainees, 124 farmers adopted the technology.</li> <li>(i) Knowledge: 27.69.(After- Before)/Before *100         <ul> <li>(ii) Production:103                 <ul> <li>(ii) Income:</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Vermicomposting (TSP)	100	25	65					<ol> <li>No. of villages- 152</li> <li>Out of 100 trainees, 71 farmers adopted the technology.</li> <li>(i) Knowledge: 160.(After- Before)/Before *100         <ul> <li>(ii) Production:                 <ul> <li>(ii) Income</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Package & practices of garden pea cultivation (TSP)	60	18	32	80.8	122.5	129280	196000	<ol> <li>62 ha</li> <li>Out of 60 trainees, 44 farmers adopted the technology.</li> <li>(i) Knowledge: 77.7.(After- Before)/Before *100         <ul> <li>(ii) Production:51.6                 <ul> <li>(ii) Income:51.6</li> </ul> </li> </ul> </li> </ol>

Kandhamal	Package & practices of Onion cultivation (TSP)	60	15	26	15.5	28.9	155000	289000	<ol> <li>24 ha</li> <li>Out of 60 trainees, 40 farmers adopted the technology.</li> <li>(i) Knowledge: 73.3.(After- Before)/Before *100         <ul> <li>(ii) Production: 86.45             <li>(ii) Income:86.45</li> </li></ul> </li> </ol>
Kandhamal	Package & practices of cabbage cultivation (TSP)	60	22	41	197.7	332.7	98850	166350	<ol> <li>92 ha</li> <li>Out of 60 trainees, 52 farmers adopted the technology.</li> <li>(i) Knowledge: 86.3.(After- Before)/Before *100         <ul> <li>(ii) Production:68.2                 <ul> <li>(ii) Income:68.2</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Improved method of backyard poultry rearing(TSP)	30	18	28					<ol> <li>Out of 30 trainees, 25 farmers adopted the technology.</li> <li>(i) Knowledge:55.5.(After- Before)/Before *100         <ul> <li>(ii) Production:                 <ul> <li>(ii) Income:</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Feed & disease management for backyard poultry (TSP)	30	12	20					<ol> <li>Out of 30 trainees, 22 farmers adopted the technology.</li> <li>(i) Knowledge: 66.6.(After- Before)/Before *100         <ul> <li>(ii) Production:                 <ul> <li>(ii) Income:</li> </ul> </li> </ul> </li> </ol>
Kandhamal	Oyster mushroom cultivation(TSP)	40	42	72					<ol> <li>Out of 40 trainees, 37 farmers adopted the technology.</li> <li>(i) Knowledge: 71.42(After- Before)/Before *100         <ol> <li>(ii) Production:                 <ul> <li>(ii) Income:</li> </ul> </li> </ol></li> </ol>

#### 6. EXTENSION ACTIVITIES

Name of the		_		Detail of Participants Remarks								
KVK	A	No. of	No. of	Farmers		SC/ST		Extensi	ion			
	Activity	activities	activities	(Others)		(Farme	ers)	Officia	ls	Purpose	Topic s	Crop
		(Targeted)	(Acineved)	Μ	F	Μ	F	Μ	F	•	-	Stages
Kandhamal	Field Day	20	20	27	6	360	57	53	1	Technology dissemination		1 Harvest stage
Kandhamal	Kisan Mela	2	2	42	21	369	118	15	1	Awareness programmme and technology dissemination to the farmers	Popularization of various production technologies & To aware the farmers about various govt. scheme like RKVY ,NFSM & NHM.	
Kandhamal	Exhibition	2	2	Mass						Technology dissemination & Awareness programmme	Exhibition at Village Bandaguda & Burbimaju	-
Kandhamal	Film Show	36	36	40	23	614	209	33	3	Technology dissemination	Agricultural technologies & allied.	-
Kandhamal	Method Demonstrations	15	15	4	-	62	21	16	2	Technology dissemination	IPM INM	Flowering stage
Kandhamal	Group meetings	18	18	15	3	252	74	32	6	-	Plant protection measures Soil health Agronomy practices Farm implement	-
Kandhamal	Lectures delivered as resource persons	56	56	-	-	-	-	-	-	Technology dissemination	1.Vermicomposting 2.Mushroom Cultivation 3.Acid Soil management 4.Agro forestry 5. IPM 6.IDM 7. Crop production	

Name of the		Detail of Participants Remarks					Remarks					
KVK	Activity	No. of activities	No. of activities	Farmers		SC/ST	<b>, , , , , , , , , , , , , , , , , , , </b>	Exten	sion			G
		(Targeted)	(Achieved)	(Others)	F	(Farme M	F	M	F	Purpose	T opic s	Crop Stages
Kandhamal	Newspaper coverage	5	5	Mass	-	-	-	-	-	Technology dissemination	1.Kisan Mela 2.SAC meeting 3.Farmer-scientist interaction programme 4.International womens day in agriculture 5. Exhibition at OUAT	Technolo gy dissemina tion
Kandhamal	Popular articles	9	9	Mass								
Kandhamal	Extension Literature	2	2	Mass	-	-	-	-	-	Technology dissemination	Pest & Disease management in Turmeric and Ginger	-
Kandhamal	Farm advisory Services	65	65	Mass	-	-	-	-	-	Identifies disease ,pest & its management	<ol> <li>Spodoptera in Cabbage</li> <li>Fruit &amp; shoot borer in Brinjal</li> </ol>	
Kandhamal	Scientific visit to farmers field	195	195	178	31	381	66	-	-	To give time based technical advice	Diagnostic visit	
Kandhamal	Farmers visit to KVK	635	635	116	54	347	118	82	4	To get advice on various agricultural aspects.	Disease & pest incidence Fertilizer application.	
Kandhamal	Diagnostic visits	67	67	76	19	192	33	1	1	Identifies disease ,pest & its management	Stem borer in Paddy Wilting in Brinjal Aphid in Mustard	crop growth stage
Kandhamal	Exposure visits	3	3	1	2	9	18	-	-	To Enrich Knowledge		
Kandhamal	Ex-trainees Sammelan	2	2	2	1	30	7	-	-	Collection of feedback	-	-
Kandhamal	Soil health Camp	4	4	43	29	92	26	16	-	Soil fertility status	Soil health campaign	-
Kandhamal	Animal Health Camp	1	1	2	1	17	10	1	-	-	-	-
Kandhamal	Agri mobile clinic	2	2	12	7	22	4	6	-	To give time based advice on	1. IPM in Paddy 2. IPDM in Tomato	

Name of the					Particip	ants				Remarks		
KVK	A _ 4 • _ • • 4	No. of	No. of	Farmers		SC/ST		Extens	ion			
	Activity	activities (Targeted)	activities	(Others)		(Farm	ers)	Officia	ls	Purpose	Topic s	Crop
		(Targeteu)	(Acineved)	Μ	F	Μ	F	Μ	F	-	-	Stages
										disease & pest management	3. Fruit & shoot borer in Brinjal	
Kandhamal	Soil test campaigns	2	2	10	4	35	17	5	1	To create awreness on soil fertility management.		Pre sowing
Kandhamal	Farm Science Club conveners meet	1	1	3	1	12	3	1	-			
Kandhamal	Self Help Group conveners meetings	1	1	-	-	-	92	4	1		To know about different government schemes	
Kandhamal	Mahila Mandals conveners meetings	1	1		3		17	-	1	Women Empowerment		
Kandhamal	Celebration of important days	9	9	57	19	116	142	23	8	Awareness programme	1.Banostav2.Earth Day3.Partheniumawareness week4.UniversityFoundation Day5. Akshya Trutiya6.World food day7.Womens Day inAgriculture8.Internationalwomens day inAgriculture9.WorldEnvironment day	

# 7. Literature Developed/Published (with full title, author & reference)

#### 7.1 KVK Newsletters

KVK Name	Date of start	Periodicity	Number of copies printed	Number of copies distributed
Kandhamal	June 2013	Quarter	500	500
Kandhamal	September 2013	Quarter	500	500
Kandhamal	December 2013	Quarter	500	500
Kandhamal	March 2014	Quarter	500	500

#### 7.2 Literature developed/published

KVK Name	Туре	Title	Author's name	Number of copies
Kandhamal	Booklet	Mushroom Cultivation for health & wealth in Odia	Dr. Shradhanjali Mohapatra	1000
Kandhamal	Pocket Booklet	Information on various government schemes &		1000
		programmes.		

#### 7.3 Details of Electronic Media Produced

KVK Name	Type of media (CD / VCD / DVD / Audio-	Title of the programme	Number
	Cassette)		
Kandhamal			

# 8. Production and supply of Technological products

#### 8.1 SEED production

KVK Name	Major group/class	Сгор	Variety	Quantity (qt.)	Value (Rs.)	Provided to No. of Farmers	Expected area coverage (ha.)
Kandhamal	Spices	Turmeric	Roma	80	200000	26	5

#### 8.2 Planting Material production

KVK Name	Major group/class	Сгор	Variety	Nos.	Value (Rs.)	Provided to No. of Farmers	Expected area coverage (ha.)
Kandhamal	Vegetable	Tomato	BT-10	8435	3374	18	0.152
Kandhamal		Brinjal	Pusa Purple cluster	7900	3160	21	0.27
Kandhamal		Cabbage	Disha	2500	1000	11	0.068
Kandhamal		Cauliflower	Megha	3800	1520	8	0.10
Kandhamal		Chili	Surya Mukhi	7950	3180	22	0.14

#### 8.3 Production Units (bio-agents / bio pesticides/ bio fertilizers etc.) \* Name of product should follow same pattern and spelled correct

KVK Name	Major Group Bio agent/Bio fertilizers/Bio Pesticides	Name of the Product	Qty (In Kg)	Qty (In No)	Value (Rs.)	Provided to No. of Farmers	Expected area coverage (ha.)
Kandhamal	Bio Fertilizer	Vermicompost	1798		8990	30	4

#### 8.4 Livestock and fisheries production

KVK Name	Name of the animal / bird / aquatics	Breed	Type of Produce	Qty. (kg/qt./litre )	Value (Rs.)	No. of Beneficiaries
Kandhamal	Poultry	Banaraja	Chicks	200	7600	22
Kandhamal						

### 8. Activities of Soil and Water Testing Laboratory

KVK Name	Status of establishment of Lab	Year of establishment	Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized	Soil report distributed to the farmers (Nos)
Kandhamal	Working	2004-05	Analysis of Soil pH,EC,Organic carbon,available N,P,K and soil textural class	1127	725	52	11515	1127

#### 9.1 Details of soil samples analyzed so far:

#### 9.2 Details of water samples analyzed so far :

KVK Name	Status of establishment of Lab	Year of establishment	Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized	Water report distributed to the farmers (Nos)
Kandhamal	Working	2004-05	Water pH and EC	10	7	3		10

#### 10. Rainwater Harvesting

### Training programmes conducted by using Rainwater Harvesting Demonstration Unit

Name of KVK	Date	Title of the training course	Client (PF/RY/EF)	No. of	No. of Participants including SC/ST			No. of SC/ST Participants		
				Courses	Male	Female	Total	Male	Female	Total
Kandhamal	10.01.2014	Rain water management for increased crop productivity	RY	1	18	12	30	18	12	30
Kandhamal	16.09.2013	Water management in Paddy	PF	1	30	-	30	30	-	30

#### 11. Utilization of Farmers Hostel facilities

KVK Name	Months	Year	Title of the training course	Duration of training	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)	Accommodation available (No. of beds)
			Farmers hostel is not available and it will be constructed shortly					

### 12. Utilization of Staff Quarters facilities

KVK Name	Year of construction	Year of allotment	No. of quarters occupied	No. of quarters vacant	Reasons for vacant quarters, if any
Kandhamal		Four old quarters of	4	Nil	
		RRTTS,G.Udayagiri have been			
		handed over to KVK,Kandhamal			
		in the year 2012			

## 13. Details of SAC Meeting

KVK Name	Date of SAC meeting	No. of SAC members attended	Major Recommendations
Kandhamal	09.10.2013	28	<ol> <li>He also suggested to popularize short duration(65-70 days) potato like kufri jyoti and to cultivate non paddy crops like maize</li> <li>Cultivation of Groundnut,mustard in the upland situation.</li> <li>Trials should be conducted on capsicum to popularize the cultivation to get more profit</li> <li>Soil analysis of all the blocks of the district should be done to know the status of the soil fertility of the district</li> <li>Suggested to multiply the cultivation of Raikia bean so that farmers will get more profit from the unique beans.</li> <li>Conduct trials on Turmeric cultivation.</li> <li>Mulching should be substituted with collection of dry leaves of trees like Mango &amp; Jackfruits</li> <li>Trials on colocasia for more income, soil &amp; water conservation and use of farm machinery</li> <li>Create awareness among the farming community by conducting training programme on income generating activities like post harvest management of fruit crops.</li> </ol>

### 14. Status of Kisan Mobile Advisory (KVK-)

KVK Name	No. of messages	No. of beneficiary		Sponsoring agency (NIC, Farmers Portal, etc.)	Major recommendations	
	sent	Farmers	Ext. Pers.			
Kandhamal	64	1007	12	Farmers Portal	<ol> <li>Integrated Pest management in Vegetable</li> <li>Nutrient management and cultural packages in field crops</li> <li>Soil fertility management &amp; market information</li> <li>Value addition &amp; post harvest technologies</li> <li>Small scale income generating activities.</li> <li>Weather based cultural practices.</li> <li>Recommendation of suitable varieties of different crops.</li> <li>Organic spice cultivation.</li> <li>Mushroom cultivation</li> <li>Use of low cost agricultural equipments.</li> </ol>	

### **15.** Status of Convergence with various agricultural schemes (Central & State sponsored)

KVK Name	Name of scheme	Name of Agency (Central/state)	Funds received (Rs.)	Activities organized	<b>Operational Area</b>	Remarks
Kandhamal	ATMA	Central	40000	1		Farmer Scientist
						Interaction
						programme
Kandhamal	BGREI	Central	50000		G.Udayagiri,Raikia,Tikabali	Visiting &
					& Phulbani	Monitoring BGREI
						activities.

### 16. Status of Revolving Funds (Rs.)

KVK Name	Account No.	Opening balance (Rs.)	Closing balance (Rs.)	Current status (Rs.)
Kandhamal	11754367222	132563	196542.00	196542.00

### **17. Awards & Recognitions**

KVK Name	Name of award /awardee	Type of award (Ind./Group/Inst./Farmer)	Awarding Organizations	Amount received			
Kandhamal	State level progressive farmer award	Farmer	OUAT				

#### 18. Details of KVK Agro-technological Park.

### a) Have you prepared layout plan, where sent?

S.No.	Name of KVK	Technology park proposal developed(yes/no)	If yes, where sent ? (ZPD/DES/any other, pl. sp.)
1	Kandhamal	Yes	ZPD

### b) Details about Technology Park

Name of KVK	Name of Component of Park	Detail Information (If established)
Kandhamal	Crop Cafeteria	
Kandhamal	Technology Desk	
Kandhamal	Visitors Gallery	
Kandhamal	Technology Exhibition	
Kandhamal	Technology Gate-Valve	

#### c). Crop Cafeteria-

Sr. No.	Theme of Crop Cafeteria	No. of Crop Cafeteria

### **19. Farm Innovators- list of 10 Farm Innovators from the District**

Sr. No.	Name of KVK	Name of Farm Innovator	Name of the Innovation	Address of the farmer with Mobile No.
1	Kandhamal	Dauda Mallick	Raikia Bean seed production	At-Bearpanga,Block-G.Udayagiri,Dist-Kandhamal
2.	Kandhamal	Dinabandhu Pradhan	Preparation of Ayurvedic medicines	At-Bandaguda,Block-K.Nuagaon,Dist-Kandhamal,Mob- 9439312248
3.	Kandhamal	Rama Chandra Pradhan	Horticulture based farming system	At-Budhiapanga,Block-Raikia,Dist-Kandhamal, Mob-
4	Kandhamal	Baldev Pradhan	Off-season vegetable cultivation	At-Penala,Block-Tikabali,Dist-Kandhamal, Mob-9437075528

#### 20. KVK interaction with progressive farmers

Sr. No.	Date and month of interaction programme with progressive farmers	No. of progressive farmers to be participated
1	06.02.2014	100
2	07.08.2013	25
3	22.04.2013	25

#### 21. Outreach of KVK

Name of VVV	Number	Number of Villages		
Name of KVK	Intensive	Extensive	Intensive	Extensive
Kandhamal	5	10	74	246

Intensive- OFTS, FLDS etc

Extensive- Literatures, Publications, Awareness programmes etc.

# 22. Technology Demonstration under Tribal Sub Plan on Pulses/ Programme on Harnessing Pulses/ Quality Protein

### Maize, if applicable.

Sr.	Name of crop under Technology	Area under the	No. of Extension	Remarks / Lessons learnt
No.	demonstration	programme	Activities	
1				

#### 23. KVK Ring

Sr. No.	Name of Ring Partner	Sharing Activity	Lessons learnt/ Experiences gained.
1	KVK ,Ganjam-I	Resource person	
2	KVK, Nayagarh	Soil sample analysis providing	
		recommendation	

#### 24. Important visitors to KVK

Name of	Name of Visitor	Date of Visit	ICAR	SAUs	Others	Remarks
KVK						
Kandhamal	Prof. Manoranjan Kar, Hon'ble Vice-Chancellor, OUAT,	05.03.2014		SAU		
	Bhubaneswar					
Kandhamal	Prof. Sankarsan Nanda, Dean Extension Education, OUAT,	09.10.2013 &		SAU		
	Bhubaneswar	05.03.2014				
Kandhamal	Dr. Rabindra Kumar Raj, Joint Director, Extension Education,	04.04.2013		SAU		
	OUAT, Bhubaneswar					
Kandhamal	Prof. Jatin Das ,Prof. Dept. of Horticulture, OUAT,	06.02.14		SAU		
	Bhubaneswar					

Kandhamal	Dr. Bijoy Kumar Mahapatra , Joint Director, Extension	06.02.2014	 SAU	
	Education, OUAT, Bhubaneswar			
Kandhamal	Dr.S.S Mohapatra, Dept. of plant Pathology, OUAT,	06.02.2014	 SAU	
	Bhubansewar			
Kandhamal	Dr.R.K Nayak, Assoc. Prof., Dept. of Soil Science & Agriculture	06.02.2014	 SAU	
	chemistry, OUAT, Bhubaneswar			

#### 25. Status of KVK Website:

Sr.	Name of KVK	Date of start of website	No. of updates since inception	No. of visitors
No.				
1	Kandhamal	11.10.2011	12	78

### **26. E-CONNECTIVITY**

Name of KVK	Name of KVK Number and Date of Lecture delivered from KVK Hub				No. of lectors	Brief	Remarks
	Date	No. of Staff attended	No. of call received from Hub	No. of Call mate to Hub by KVK	organized by KVK	achievements	
Kandhamal							E-Linkage facility is not functioning since 25.08.2012

### 27. Status of RTI

Sr. No.	Name of KVK	No. of RTI applications received	No. of RTI appeals	Remarks
	Kandhamal			

### 28. Status of Citizen Charter

Sr.	Name of KVK	Query received( Nos)	Query Disposed( Nos)	Remarks
No.				
1.	Kandhamal	635	635	

### 29. Attended HRD Programmes organized by ZPD

Name of KVK Name of Staff	Post held	Pro	gramme attended	Remarks

			(Nos)	
Kandhamal	Sri Sujit Kumar Mukhi	SMS (Soil Sc.)	1	
	Total		1	

Name of KVK	Total Number of staff Attended HRD Programme organized by ZPD (nos)	Total Number of Programme attended (Nos)
Kandhamal	1	1

### **30.** Attended HRD Programmes organized by DES

Name of KVK	Name of Staff	Post held	Programme attended	Remarks
			(Nos)	
Kandhamal	Dr. Dharam Vir Singh	Programme Co-ordinator	1	
Kandhamal	Sri Sujit Kumar Mukhi	SMS (Soil Sc.)	1	
Kandhamal	Sri Gouri Shankr Singh	SMS (Agro.)	1	
Kandhamal	Sri Jayanta Kumar Mahalik	SMS (PP.)	1	
Kandhamal	Mrs.Anupama Samal	SMS(Home Sc.)	1	
Kandhamal	Sri S.N Mishra	P.A (Hort.)	1	
Kandhamal	Sri B.R Padhi	P.A (Computer)	1	

Name of KVK	Total Number of staff Attended HRD Programmes organized by DES (nos)	Total Number of Programmes attended (Nos)
Kandhamal	7	7

#### **31.** Attended HRD Programmes by KVK Staff (Refresher course, Short course, Training programme etc.)

Name of KVK	Name of Staff	 Post held	Programmes attended (Nos)	Remarks

Name of KVK         Total Number of staff Attended HRD Programmes           by KVK staff (nos)		Total Number of Programmes attended (Nos)	

### 32. Agri alert report (Epidemic, high serious nature problem, Cyclone etc. reported first time to ZPD, SAU, Agri. Deptt. and ICAR)

Name of KVK	Alert observed	Particulars	Reported to organization
Kandhamal	Cyclonic storm	Crop damaged & contingent plan.	ZPD,SAU
# **33. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS**

Name of KVK	Types of Activities	No. of	Number of	Related crop/livestock technology
		Activities	Participants	
Kandhamal	Film show	9	165	Off-season vegetable cultivation, Backyard poultry,
				Honeybee & water management
Kandhamal	Lectures organized	6	126	
Kandhamal	Exhibition of farm implement	1	35	Seed drill ,Turmeric boiling drum ,cono weeder ,M.B
				plough ,Rake weeder ,Groundnut decorticator
				,Groundnut stripper ,Maize sheller
Kandhamal	Farmers Scientist inter action programme	2	50	SRI method of Paddy cultivation.
			10	
Kandhamal	Diagnostic Practical's	3	60	INM & IPM in Cauli flower, cabbage, paddy

# **34. INTERVENTIONS ON DROUGHT MITIGATION**

# Introduction of alternate crops/varieties

Name of KVK	Crops/cultivars	Area (ha)	Number of beneficiaries

#### Major area coverage under alternate crops/varieties

Name of KVK	Crops	Area (ha)	Number of beneficiaries		

## Farmers-scientists interaction on livestock management

Name of KVK	Livestock components	Number of interactions	No. of participants

#### Animal health camps organized

Name of KVK	Number of camps	No.of animals	No.of farmers
Kandhamal	01	280	145

#### Seed distribution in drought hit states

Name of KVK	Crops	Quantity (qtl)	Coverage of area (ha)	Number of farmers

#### Seedlings and Saplings distributed

Name of KVK	Crops	Quantity (No.s)	Coverage of area (ha)	Number of farmers			
Seedlings							

#### **Bio-control Agents**

Name of KVK	Bio-control Agents	Quantity (q)	Coverage of Area (ha)	No. of farmers

## **Bio-Fertilizer**

Name of KVK	Bio-Fertilizer	Quantity (kg)	Coverage of Area (ha)	No. of farmers	

#### **Verms Produced**

Name of KVK	Verms Produced	Quantity (q)	Coverage of Area (ha)	No. of Farmers

# Large scale adoption of resource conservation technologies

Crops/cultivars and gist of resource conservation technologies introduced	Area (ha)	Number of
		farmers
	Crops/cultivars and gist of resource conservation technologies introduced	Crops/cultivars and gist of resource conservation technologies introduced  Area (ha)

### Awareness campaign

Name of KVK	Me	etings	Gos	thies	Fi	eld days	Farı	mers fair	F	Exhibition	Film	show
	No.	No. of	No.	No. of	No.	No. of	No.	No. of	No.	No. of farmers	No.	No. of
		farmers		farmers		farmers		farmers				farmers
Kandhamal												

# **35. Proposal of NICRA**

## 1. Technologies to be Demonstrated

Name of Technology	Name of Crop	Area (ha.)	Yield	% change in Yield	No. of farmers benefitted

#### 2. Proposed Extension Activities in NICRA Village

Name of Activity	Number of Participants/Beneficiaries to be Covered				
	Farmers	Farm Women	Official	Total	

# 3. Proposed Training Activities in NICRA Village

Name of Activity	Number of Participants/Beneficiaries to be Covered			
	Farmers	Farm Women	Official	Total

#### 4. Proposed Activities for Fodder Bank

Established (Years)	Capacity	Current Status

## 5. Proposed Activities for Seed Bank

Established (Years)	Capacity	Current Status	

# 6. Public Representative/District Administration Visited in NICRA Village

Name of Representative/Officer	Designation	Date of Visit	Any Special Remark by Visitors

# 7. Feedback of Farmers for future improvement, if any.

36. Proposed works under NAIP (in NAIP monitoring format)

37. Case study / Success Story to be developed – Two best only in the following format

# **Success Story -1**

Name of the KVK :- Kandhamal

Title:- Raikia Bean cultivation is profitable for tribal people.

**Introduction :-** Raikia bean is a local cultivar of Runner type of bean grown in Raikia, G.Udayagiri & Tikabali blocks of Kandhamal district. The Raikia Bean is cultivated in an area of 4200 ha in Kandhamal district with an average productivity of 36 q/ha. It is cultivated both in Kharif & Rabi season & used as a vegetable. The cultivar is native to Raikia block and it has wide market demand due to fleshy, less fiber content & sweet to eat.

Sri Rabindra Pradhan of village Sudhipada of G.Udayagiri block is a traditional cultivator of Raikia bean. Initially he cultivated one acre of Raikia bean with traditional practices. He got an yield of 30q from his one acre of land & selling it in the local market @ Rs.1500/q with a net profit of Rs./-26,700/acre. He was not well aware about scientific method of cultivation which debarred him from adopting new technologies as well as rain fed farming situation al so contributed to lower yield.

**KVK Intervention** :- K.V.K, Kandhamal has trained the farmers on the benefit of seed treatment, line sowing with application of FYM. Front Line Demonstrations were conducted on Plant protection measures to control bacterial leaf blight & use of bio fertilizers, bio pesticides & INM.

**Output:-** By adopting the improved package and practices of Raikia bean cultivation with need based plant protection measures he got an yield of 56 q/acre under the technical guidance of KVK. The increase in yield was 86 % higher over his traditional practice with a net profit of Rs.61200/- per acre.

**Outcome:-** Due to heavy demand of Raikia bean in the market, KVK has advised him to go for more area coverage under raikia bean cultivation & provide him technical guidance. In the year 2013-14, he has cultivated Raikia Bean in four acre of land for commercial purpose. He got a yield of 224q from his four acre land & selling it @ Rs.1500/q, he got a gross income of Rs.336000/- & a net profit of Rs.2,80000/-. Raikia bean production is

a remunerative enterprises for the resource poor farmers. Seed treatment, line sowing, use of staking materials, use of bio fertiliser and INM, IPM practices resulted in production of good quality of pod yield with Benefit –cost ratio of 3.4. Due to his achievement Sri Pradhan was awarded by Hon'ble Governor of Odisha in the OUAT foundation day as a progressive farmer.

**Impact:-** The intervention of the K.V.K on the cultivation of Raikia bean is widely accepted by the resource poor families and efforts have been concentrated for horizontal expansion of the enterprise. Support services like availability of staking materials, seed treatment chemicals, availability of vermi compost and bio fertilisers s have been strengthened. Sri Pradhan is now a successful farmer in the locality. Sri Pradhan is now a successful Raikia bean producer with secured future and also becomes an inspiration for many farmers.



Raikia bean at Vegetative stage

Raikia bean at harvesting stage

Farmer receiving the award from Hon'ble Governer of Odisha

# Success Story -2

#### Name of the KVK :- Kandhamal

#### Title:- Off season vegetable cultivation catches more profit.

**Introduction:-** The district Kandhamal is favourable for off-season vegetable cultivation due its agro climatic condition .In this district the area covered under cabbage is 2786 ha with a productivity of 180q/ha .The district is predominantly inhibited by tribal peoples .The tribal farmers are resource poor & marginal farmers. They are cultivating cabbage in traditional method. The low productivity of cabbage is due to heavy pest, disease incidence & imbalanced use of plant nutrients. The soil of Kandhamal district is deficient in boron (81%). The production of crop is being increased by adopting the integrated pest & nutrient management practices.

**KVK Intervention**: - Cracking of cabbage is due to Boron deficiency & pest incidence such as Diamond Back Moth & Spodoptera results in low productivity & marketability of cabbage .Keeping in view the low productivity of cabbage, KVK has focused its efforts to maximize the productivity by providing training on integrated nutrient management practices & integrated disease & pest management in cabbage under tribal sub plan 2013-14. Also Training programmes were organized in the village level for imparting various technologies to the farmers about package & practices of cabbage cultivation .Demonstrations were conducted on INM and IPM in cabbage to increase the productivity & marketability of cauliflower.

**Outcome:-** The KVK, Kandhamal conducted demonstration on INM in Cabbage in the field of Sri Ghanashyam Pradhan of village Gindapanga, Block K-Nuagaon under TSP programme 2013-14 . FYM 15 t/ha ,Seed rate 500 g/ha, spacing 45x30 cm,seed treatment with vitavax power @ 2 gm /kg seed, application of recommended dose of N:P<sub>2</sub>O<sub>5</sub>:K<sub>2</sub>O as per soil test results, full P and K and Boron @ 1 kg/ha as basal, half dose of N at 15 days after planting and the remaining half of N after 45 days of planting , application of biofertilizers like Azotobacter, Azospirillum and PSB @ 4 kg each/heactare at the time of planting of seedlings, installation of pheromen trap @ 20 nos./ha and lure @ 40 nos./ ha, spraying of neem oil @ 5 ml/lit of water alternate with Bt @ 2 g/lit. of water, spraying of catap hydrochloride @ 1.25 g/ lit. of water at ETL with need based application of ridomil MZ @ 2.5 g/ lit. of water for root rot management gave an yield of 332.7q/ha with an increase in productivity of 68.3 % over traditional practice. The bigger head size and good quality of cabbage fetches good market value & Sri Pradhan got an net profit of Rs.1,06,900/- /ha with a B.C ratio 2.8.

**Impact:-** The out come of the demonstration has motivated the farmers to apply Boron, soil test based fertilizer application with pest & disease management to enhance the productivity of cabbage. Inspiring the result of the demonstration most of the farmers of K-Nuagaon ,Raikia and Tikabali blocks are now giving much importance on IPM and INM practices for more yield & better marketability of cabbage.



Scientists advising farmers on nursery management

Crop at vegetative growth stage

Bumper crop growth

## Name of the KVK, **TITLE, Introduction,** KVK intervention, Output, Outcome, Impact

Sr. no.	Name of KVK	No. of success stories	No. of case studies

38. Well labeled Photographs for each activity of the KVK (Soft copies as well as hard copy- specially for all OFT along with the problem) –



OFT on Assessment of herbicide Oxadiargyl in Rice

OFT on Assessment of biofertilizers in brinjal

OFT on Assessment of sulphur application in mustard



OFT on Assessment of Integrated nutrient management in potato OFT on Assessment of Tissue culture banana cv. bantala