ANNUAL REPORT

(April-2012-March 2013)

KVK KANDHAMAL, ODISHA

ORISSA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY, BHUBANESWAR

Contents

REPORTING PERIOD – April 2012 to March 2013

Summary of achievements during the reporting period

KVK Name	Activity	Target		Achievement		
		Number of activity	No. of farmers/ beneficiaries	Number of activity	No. of farmers/ beneficiaries	Total value of resource generated/Fund received from diff. sources (Rs.)
Kandhamal	OFTs	17	85	14	70	
Kandhamal	FLDs – Oilseeds (activity in ha)	10	29	10	29	
Kandhamal	FLDs – Pulses (activity in ha)	10	42	10	42	
Kandhamal	FLDs – Cotton (activity in ha)	-	-	-	-	
Kandhamal	FLDs – Other than Oilseed and pulse crops(activity in ha)	24	125	23	120	
Kandhamal	FLDs – Other than Crops (activity in no. of Unit/Enterprise)	6	35	6	35	
Kandhamal	Training-Farmers and farm women	45	1305	45	1305	
Kandhamal	Training-Rural youths	31	555	28	505	
Kandhamal	Training- Extension functionaries	11	165	8	120	
Kandhamal	Extension Activities	1087	5917	1087	5917	
Kandhamal	Seed Production (Number of activity as seeds in quintal)	75	65	75	65	412500
Kandhamal	Planting material ((Number of activity as quantity of planting material in quintal)	-	-	-	-	-
Kandhamal	Seedling Production (Number of activity as number of seedlings in numbers)	49600	74	49600	74	12400
Kandhamal	Sapling Production (Number of activity as number of sapling in numbers)	2574	38	2574	38	10296
Kandhamal	Other Bio- products, Vermicompost in kg	1550	23	1550	23	7750
Kandhamal	Live stock products ,poultry chicks	455	68	455	68	13695
Kandhamal	SAC Meeting (Date & no. of core/official members (dt 11.10.12)	1	30	1	30	
Kandhamal	Newsletters (no.)	4	2000	4	2000	
Kandhamal	Publication (Research papers, popular article)	13	mass	13	Mass	
Kandhamal	Convergence programmes / Sponsored programmes	1	25	1	25	
Kandhamal	KVK-ATMA Linkage programme (Number of activities)	1	25	1	25	
Kandhamal	Outreach of KVK in the District (No. of blocks, no. of villages)	7,200	5000	7,200	11336	
Kandhamal	Soil sample tested	1004	340	1004	340	9285
Kandhamal	Water sample tested	5	5	5	5	
Kandhamal	KMA (No. of messages & beneficiaries)	95	500	95	500	

1. GENERAL INFORMATION

1.1. Staff Position (31.03.2013)

Name of KVK.	Sanctioned post	Name of the incumbent	Discipline	Highest degree	Subject of Specialization	Pay Scale (Rs.)	Present basic (Rs.)	Date of joining	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
Kandhamal	Programme Coordinator	Shradhanjali Mohapatra	Home Sc.	M.Sc (Home Sc.)	Textile & clothing	15600-39100	26590	09.12.2009	Permanent	Other
Kandhamal	Subject Matter Specialist 1	Sujit Kumar Mukhi	Soil Science	M.Sc(Ag.)	Soil Fertility	15600-39100	23610	23.10.2009	Temporary	Other
Kandhamal	Subject Matter Specialist 2	Jayanta Kumar Mahalik	Plant Protection	M.Sc(Ag.)	Nematology	15600-39100	23610	08.03.2011	Temporary	Other
Kandhamal	Subject Matter Specialist 3	Gouri Sankar Singh	Agronomy	M.Sc(Ag.)	Crop production	15600-39100	22920	29.03.2011	Permanent	other
Kandhamal	Subject Matter Specialist 4	-	-	-	-	-	--	-	-	-
	Subject Matter Specialist 5	-	-	-	-	-	-	-	-	-
Kandhamal	Subject Matter Specialist6	-	-	-	-	-	--	-	-	-
Kandhamal	Programme Assistant	Satya Niranjan Mishra	Horticulture	M. Sc.	Flooriculture	9300-34800	13500	30.07.2012	Temporary	Other
Kandhamal	Farm Manager	-	-	-	-	-	-	-	-	-
Kandhamal	Computer Programmer	Bishnu Ranjan Padhi	Computer Sc.	B.E	Computer Sc.	9300-34800	17780	22.08.2005	Temporary	Other
Kandhamal	Accountant / superintendent	-	-	-	-	-	-	-	-	-
Kandhamal	Stenographer	-	-	-	-	-	-	-	-	-
Kandhamal	Driver	Gouri Shankar Choudhury	--	8th pass	-	5200-20200	7770	21.07.08	Temporary	Other
Kandhamal	Driver	Mamtaz Alli Khan	--	10+2 pass	-	5200-20200	7770	28.07.08	Temporary	Other
Kandhamal	Supporting staff	Aparti Chhatoi	--	7th pass	-	4440-7440	6290	28.07.08	Temporary	Other
Kandhamal	Supporting staff	Arjuni Ch. Swain	--	11th pass	-	4440-7440	6290	02.08.08	Temporary	Other

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

A. GEOGRAPHICAL AREA OF KANDHAMAL

Total Area : 802,000 ha

Longitude : 83° 30' to 84° 35' E

Latitude : 19° 34' to 20° 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

C.

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

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

Sl. No	Crop	A-Area in ('000ha)	P-Production in ('000 Mts)	Y-Yield rate in kg/ha
1	Paddy	53.16	71.32	2003
2	Maize	16.90	28.38	1676
3	Blackgram	4.9	1.82	371
4	Arhar	5.3	5.07	956
5	Field Pea	0.45	0.23	502
6	Groundnut	0.92	1.49	1620
7	Niger	11.22	3.57	318
8	Mustard	15.25	3.84	252
9	Turmeric	12.50	116.63	9330
10	Ginger	3.78	38.10	10079
11	Kulthi	14.36	3.95	275

1.3. DETAILS OF ADOPTED VILLAGE during 1.4.2012 to 31.3.2013 (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

1.5. PROBLEM IDENTIFIED by KVK (Approved by competent Authority in meetings/workshop)

KVK Name	Problem identified	Methods of problem identification	Location Name of Village & Block
Kandhamal	Sloppy and uneven topography	Socio resource Map ,Transact work & secondary statistical data	Village-Bandaguda,Baibali,Magarguda,Kalanaju 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	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

2. On Farm Testing

2.1 Information about OFT

KVK name	Year/ season	Problem diagnose	Category of technology (Assessment/ Refinement)	Thematic Area	Crop/ enterprise	Farming Situations	Title of OFT	No. of trials	Results (with parameter) (Yield q/ha)		Net Returns (Rs./ha)		Recommendations
									Farmer practice T1	Rec. Tech T2	T1	T2	
Kandhamal	Kharif 2012	Poor yield due to use of local degenerated cultivar	Assessment	Varietal evaluation	Crop	Rainfed -mid land	Assessment of HYV Paddy – Ranidhan	5	26.2	39.8	11773	22078	HYV paddy Ranidhan gave an yield of 39.8qt/ha, with 52% increase over Var Lalat
Kandhamal	Kharif 2012	Low yield due to use local variety	Assessment	Varietal evaluation	Crop	Rainfed -mid land	Assessment of Groundnut variety-TG-51	5	10.6	17.9	15370	34612	Groundnut HYV – TG 51 gave an yield of 17.9 qt/ha, with 69% increase over local variety
Kandhamal	Kharif 2012	Low yield due to blast diseases in Paddy	Assessment	IDM	Crop	Rainfed -mid land	Assessment of IDM for blast diseases management in Paddy	5	29.58	39.46	16267	25390	Seed tretment 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.
Kandhamal	Kharif 2012	Poor yield due to rhizome rot in Ginger	Assessment	IDM	Crop	Rainfed -Mid land	Assessment of IDM for Rhizome rot management in Ginger.	5	82.8	130.2	138200	246100	Treatment of seed rhizome with Mancozeb @0.3 % for 30 minutes before planting .Raised bed planting , soil application of *Trichoderma viridae* @ 2.5 kg/ha , need based application of Ridomil MZ @ 0.25 % .

Kandhamal	Kharif-2012	Poor yield due to imbalance fertilizer application and low soil fertility status	Assessment	INM	Maize	Red and yellow soil, rainfed medium land	Assessment of combined application of chemical fertilizer & organic manures in Maize .	5	28.7	43.9	17110	32620	50 % N through FYM + 50 % RDF (100% RDF of NPK :: 80:40:40 kg/ha) . 1/3rd of Nitrogen and full dose of P & K applied as basal .The remaining dose of N applied in two equal parts at 21 & 45 DAS, organic manures viz: FYM applied at 15 to 20 days before sowing lime @ 0.2 LR as PMS applied before sowing.
Kandhamal	Kharif 2012	Low yield due to soil acidity & imbalanced fertilizer application	Assessment	INM	Crop	Rainfed -Mid land	Assessment of lime & sulphur application in Maize	5	28.9	44.7	17270	33010	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.
Kandhamal	Kharif 2012	Poor yield due to suboptimal dose of fertilizer application.	Assessment	INM	Crop	Rainfed - Upland	Assessment of INM in Turmeric	5	81.2	127.8	38890	92200	The seed rhizome (20-30gm) of turmeric placed 3.5-5 cm deep .The bio fertilizers (Azospirillum +PSB ,1:1 ,10+10 = 20 kg /ha in 500 kg FYM) , FYM @ 15 tons per ha are spread evenly on beds & incorporate manually in to the soil & soil recommended dose of NPK as per soil test values.

Kandhamal	Kharif 2012	Non availability of seed & users preference.	Assessment	Plant production	Crop	Rainfed -Mid land	Assessment of culm propagation of bamboo.	5	Nodes sprouted-5%	Nodes sprouted-67.8%	-5915	2222	One year culm must be layered in 2nd week of june.The planting material should be planted with in 5 KM of Nursery.
Kandhamal	Rabi 12-13	Poor yield due to use of degenerated seed	Assessment	Varietal evaluation.	Crop	Rainfed	Assessment of HYV Sesamum - Amrit.	5	2.9	5.6	6050	15278	Sesamum HYV – Amrit gave an yield of 5.6 qt/ha, with 93% increase over local variety
Kandhamal	Rabi 12-13	Poor yield due DBM infestation in Cauli flower	Assessment	IPM	Crop	Rainfed -upland	Assessment of IPM for DBM management in Cauli flower	5	122.2	169.0	45760	71750	Foliar spraying of Spinosad 45 % S.C @ 75 m.l per acre three times at 15 days interval at ETL level of DBM population.
Kandhamal	Rabi 12-13	Low yield due to early blight of Potato	Assessment	IDM	Crop	Irrigated-Midland	Assessment of IDM for early blight management in Potato	5	94.2	149.8	24820	49670	Tuber treatment with T.viridae @ 5gm per kg & Two spraying of Mancozeb @ 3gm/litre at 30 & 40 DAP.
Kandhamal	Rabi 12-13	Productivity of vegetable pea is low due to continuous use of sub optimal use of nutrients applied in the imbalanced ratio.	Assessment	INM	Crop	Irrigated-Midium land	Assessment of INM in garden pea.	5	76.7	109.4	49440	82580	Seeds are inoculated with *Rhizobium* @ 20 gm per kg of seed before sowing .The half the dose of N & Full dose of FYM (10 tons/ha) ,P,K and micro nutrinets fertlizers (Boron @ 1 kg/ha , Zinc @ 15 kg/ha & Mo @ 0.5 kg/ha are applied at the time of sowing. The remaining N is top dressed in two equal splits. Nutrient NPK are applied as per soil test results

Kandhamal	Rabi 12-13	Poor yield due to soil acidity & erratic application of nutrients.	Assessment	INM	Crop	Irrigated-Midium land	Assessment of lime & bio fertilizer application in Runner bean	5	78.4	132.3	46850	85350	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.
Kandhamal	Rabi 12-13	Non availability of Paddy straw	Assessment	Income generating activity	Crop	Irrigated-Mid land	Assessment of Maize stalk as suitable substrate for oyster mushroom cultivation.	5	1kg/bed	0.9kg/bed	40	37	Maize stalk as suitable alternate substrate for Ouster mushroom cultivation,Var-*P.sajarcaju*

2.2 Economic Performance

KVK name	OFT Title	Parameters			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 Parameter	Demo	Check	FP (T_1)	RP (T_2)	Refined Practice, if any (T_3)	FP (T_1)	RP (T_2)	Refined Practice, if any (T_3)	FP (T_1)	RP (T_2)	Refined Practice, if any (T_3)	FP (T_1)	RP (T_2)	Refined Practice, if any (T_3)
Kandhamal	Assessment of HYV Paddy – Ranidhan	No. of tillers/hill	17.6	8.5	17047	21702	--	28820	43780	--	11773	22078	--	1.7	2.0	--
Kandhamal	Assessment of Groundnut variety-TG-51	No. pods/Plant	23.4	10.0	16430	19088	--	31800	53700	--	15370	34612	--	1.93	2.81	--
Kandhamal	Assessment of IDM for blast diseases management in Paddy	% of Leaf area affected	13.16	62.08	17750	19920	--	34017	45310	--	16267	25390	--	1.9	2.3	--
Kandhamal	Assessment of IDM for Rhizome rot management in Ginger.	% of Plant affected	11.4	44.6	110200	144500	--	248400	390600	--	138200	246100	--	2.2	2.7	--
Kandhamal	Assessment of combined application of chemical fertilizer & organic manures in Maize .	No. of grains/cob (gm)	381.4	256.1	20200	24450	-	37310	57070	-	17110	32620	-	1.8	2.3	-
Kandhamal	Assessment of lime & sulphur application in Maize	100 grain weight	22.3	18.8	20300	25100	-	37570	58110	-	17270	33010	-	1.8	2.3	-
Kandhamal	Assessment of INM in Turmeric	Rhizome weight (gm)/plant	436.7	243.8	69350	78200	-	108240	170400	-	38890	92200	-	1.5	2.2	-
Kandhamal	Assessment of	No of shoots/Nod	4.2	3.5	16655	8888	-	11110	11110	-	-5545	2222	-	0.67	1.25	

	culm propagation of bamboo.	e														
Kandhamal	Assessment of HYV Sesamum - Amrit.	No. of Capsule/ Plant	74	48	8250	12522	--	14300	27800	--	6050	15278	--	1.7	2.2	--
Kandhamal	Assessment of IPM for DBM managemenrt in Cauli flower	No of DBM/Plant	2.2	7.37	39780	46550	--	85540	118300	--	45760	71750	--	2.1	2.6	--
Kandhamal	Assessment of IDM for early blight management in Potato	% of Plant affected	8.0	29.4	31700	40210	--	56520	89880	--	24820	49670	--	1.7	2.3	--
Kandhamal	Assessment of INM in garden pea.	No. of pods/plant	21.7	13.3	42600	48700	-	92040	131280	-	49440	82580	-	2.1	2.7	-
Kandhamal	Assessment of lime & bio fertilizer application in Runner bean	Pod length (cm)	18.77	15.92	34600	40200	-	81450	125550	-	46850	85350	-	2.3	3.1	-
Kandhamal	Assessments of Maize stalk as suitable substrate for oyster mushroom cultivation.	--	--	--	20/bed	17/bed	-	60	54	--	40	37	--	3.0	3.17	-

2.3 Feedback from KVK to Research System

Name of KVK	Feedback
Kandhamal	

3. Achievements of Frontline Demonstrations

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

KVK Name	Crop/ Enterprise	Thematic Area	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
Kandhamal	Paddy	IPM	Seed treatment with tricyclazole @2gm/kg of Seed,, Application of Fipronil 0.3G @ 1.25 Kg in 1000m^2 nursery area & 7 days before transplanting release of Tricho cards ,spraying of multineem 300 PPM @5ml/liter of water, Pheromone trap @20nos./ha.	FLD, Training, Field days, group discussion, CD shows	112	525	335
Kandhamal	Paddy	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	45	178	158
Kandhamal	Paddy	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	52	185	212
Kandhamal	Brinjal	IDM	Soil treatment with Trichoderma viride @2.5 kg/ha ,seed & seedling treatment with T. viridae ,drenching of plant base with T. viridae @ 5gm/liter of water.	FLD, Training, Field days, group discussion, CD shows	92	309	96
Kandhamal	Brinjal	INM	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	83	310	84
Kandhamal	Tomato	INM	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	95	529	202
Kandhamal	Cabbage	IPM	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 alternatively at 15 days interval.	FLD, Training, Field days, group discussion, CD shows	155	612	252
Kandhamal	Vegetables	ICM	Planning, layout and management of nutritional garden	FLD, Training, Field days, group discussion, CD shows	48	205	26

Kandhamal	Potato	INM	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	45	346	272
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	75	450	178
Kandhamal	Blackgram	INM	Seed : 20kg/ha, Rhizobium innoculation @ 20g/kg seed,FYM 2.5t/ha during final land preparation, recommended fertilizer application @ 20:40:20kg N P K per ha	FLD, Training, Field days, group discussion, CD shows	87	515	204
Kandhamal	Field pea	INM	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	63	343	228
Kandhamal	Back yard poultry	Small Scale Income generating enterprises	Introduction of improved poultry breed Banaraj,	FLD, Training, CD shows	268	682	10678 Nos.
Kandhamal	Oyster mushroom	Mushroom cultivation	Cultivation of Oyster mushroom var-P.sajarcaju.	FLD, Training, Field days, group discussion, CD shows,	56	304	5056 Nos.
Kandhamal	Apiary	Small Scale Income generating enterprises	ISI Bee Box ,*Apis cerena indica* & improved management practices.	FLD, Training, Field days, group discussion, CD shows	168	403	1226 boxes
Kandhamal	Turmeric	Value addtion	Improved turmeric boiling drum with perforated grill. Capacity – 40kg/grill	FLD, Training, Field days, group discussion, CD shows	102	498	--
Kandhamal	Turmeric	INM	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	108	504	503
Kandhamal	Maize	Drudgery reduction	Use of Miaze Sheller for shelling	FLD, Training, Field days, group discussion, CD shows	27	54	--

3.2 Details of FLDs implemented

KVK Name	Thematic area	Name of Crop/ Enterprise	Season and year	Technology demonstrated	Crop- Area (ha) / Entrep - No.	Name of Variety/Technology/Enterprises	Results (q/ha)		% change	No. of farmers				
							Demons	Check		SC	ST	OBC	Others	Total
Kandhamal	Varietal evaluation	Paddy	Khrif 2012	Variety-CRHR-7 (Ajay) ,seed rate 20kg/ha, Duration 125-130 days,spacing 20X20 cm, long slender grains,average yield 6-6.5 ton/ha with RDF@ 120:60:80 NPK kg/ha.	1.0	Ajay	49.5	29.14	70	2	3	-	-	5
Kandhamal	Varietal evaluation	Paddy	Khrif 2012	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.	1.0	Nua Kalazeera	22.28	15.76	41	2	3	-	-	5
Kandhamal	Varietal evaluation	Paddy	Khrif 2012	Variety-Manaswini ,Maturity Medium(125-132 days),resistant to brown spot,Moderately resistant to blast ,resistant to stem borer,lodging & shattering Avg. yield 47.19q/ha with RDF@ 80:40:40 NPK kg/ha.	1.0	Manaswini	39.5	24.4	61	1	2	-	2	5
Kandhamal	Varietal evaluation	Maize	Khrif 2012	Sweet corn var – Madhuri , Plucking the green cobs at 60-65 days with RDF@ 80:40:40 NPK kg/ha.	1.0	Madhuri	52938 no. cobs	32457 no. cobs	63	1	4	-	-	5
Kandhamal	Varietal evaluation	Mustard	Rabi 12-13	Mustard variety – Anuradha,duration 85-90 days ,yield 10-12 q/ha ,oil content 33% ,suitable for rainfed condition with RDF@ 60:30:30 NPK kg/ha.	1.0	Anuradha	8.61	3.48	148	-	3	2	-	5

Kandhamal	IPM	Paddy	Kharif 2012	Seed treatment with tricyclazole @ 2gm per kg of seed ,application of Fipronil 0.3g @1.25 kg in 1000 m^2 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.	1.0	La lat	39.1	28.6	36	1	3	-	1	5
Kandhamal	IDM	Groundnut	Kharif 2012	Seed treatment with Carboxyn (37.5%) + Thiram (37.5%) DS @ 2.5 gm/kg of seed & need base application of Chlorothalonil @ 0.2 %.soil application of T.viridae.	1.0	Smruti	16.85	11.96	40	1	4	-	-	5
Kandhamal	Varietal Evaluation	Ginger	Kharif 2012	Variety-Suprava ,FYM 10 ton/ha ,Seed treatment with Trichoderma viridie @ 5 gm/kg & pseudomonas @ 10gm/kg of seed + Neem cake application @ 250kg/ha in raised bed with RDF @ 125:100:100 NPK kg/ha.	1.0	Suprava	112.7	78.2	44.11	-	3	--	-	3
Kandhamal	INM	Groundnut	Kharif 2012	Application of lime (PMS) 0.2 LR at the time of final ploghing with FYM @ 5 t/ha followed by RDF@ 20:40:40 NPK kg/ha with Sulphur @ 30kg/ha.	1.0	TAG-24	18.4	12.9	42.6	2	3	-	-	05
Kandhamal	INM	Paddy	Kharif 2012	Full dose of P and K along with 25 % N and Zinc sulphate @ 25kg/ha and Sulphur @ 30 Kg /ha at the time of transplanting , out of rest 75 % N , 50% applied at maximum tillering and balance 25 % at panicle initiation stage	1.0	Pratikhya	40.8	28.3	44.1	01	04	-	-	05

Kandhamal	House hold food security	Nutritional garden	Kharif 2012	Plot Size -10 cent , Developing crop schedule on rotation basis, lay out of nutritional garden with crop management.	0.4	Local & Hybrid	70	114	62.8	-	10	-	-	10
Kandhamal	Drudgery reduction	Groundnut	Kharif 2012	Groundnut stripper reduces drudgery of farm women & increases efficiency by 83 % of Groundnnut stripping	1.0	--	10.2kg/hr	5.3kg/hr	92	-	5	-	-	5
Kandhamal	Drudgery reduction	Paddy	Kharif 2012	Weeding in paddy using cono weeder is very effective & very economical.	1.0	--	125 $m^{2/}$/hr	60 $m^{2/}$/hr	108	-	5	-	-	5
Kandhamal	Income generating activity	Paddy straw Mushroom	Kharif 2012	Variety –Volvarilla volvacia	50 Nos.	Volvarilla volvacia	1 kg/bed	0.8kg/ bed	25	-	5	-	-	5
Kandhamal	Fodder management technology	Hybrid Napier	Kharif 2012	Hybrid Napier var –NB -21 , spacing 50cmx50 cm ,application of FYM as basal & urea as top dressing;	1.0	NB-21	1600	700	129	-	5	-	-	5
Kandhamal	Agro forestry	Teak	Kharif 2012	Elite stumps with spacing 2 m x2 m in pits(1x1x1.5)feet followed by basal dose (30 g DAP +20 g MOP per plant) & top dressing (50 g urea per plant) followed by tending operations.	1.0	Local	10m^3/year	8m^3/year	25	2	3	-	-	5
Kandhamal	Agro forestry	Eucalyptus	Kharif 2012	Clones planted with spacing (2mx2m) in pits (1x1x1.5) feet followed by basal dose (30 g DAP +20 g MOP per plant) & top dressing (50 g urea per plant) followed by tending operations & forate (10g) @ 50 gm/plant.	1.0	Hybrid	24m^3/year	16m^3/year	50	-	5	-	-	5
Kandhamal	Agro forestry	Bamboo	Kharif 2012	Seedlings planted with spacing 3mx3 m in pits (1x1x1.5) feet followed by basal dose (30 g DAP +20 g MOP per plant) & top dressing (50 g urea per plant) followed by tending operations	1.0	Salia	15m^3/year	9m^3/year	67	-	5	-	-	5

Kandhamal	INM & IPM	Blackgram	Kharif 2012	Seed 20kg/ha ,line sowing Rhizobium inoculation @ 20gm/kg seed ,soil test based fertilizer @ 20:40:20 NPK kg/ha & Lime application 5 qtl./ha with need based application of pesticides.	5.0	TU-94-2	5.9	3.8	55	7	10	1	-	18
Kandhamal	IWM	Niger	Kharif 2012	Improved variety, Deomali , pre emergence application of Basalin @ 1.0 kg a.i./ha and hand weeding at 30 DAS with soil test based fertilizer application.	5.0	Deomali	5.1	3.4	33	2	10	-	-	12
Kandhamal	IPM	Brinjal	Rabi 12-13	Spraying of Spinosad 45% SC @ 75 ml/acre ,3-4 times at 10 days interval ,hand clipping & destruction of infected shoots & fruits.	1.0	Blue star	239	166.9	43	1	4	-	-	5
Kandhamal	IPM	Cabbage	Rabi 12-13	Intercropping with mustard (One row mustard with 16 rows cabbage),installation of Ph trap,application of neem cake 250kg/ha ,spraying of Bt @ 2gm /lit & cartaphydrochloride @1.5 gm/lit alternatively at 15 days interval.	1.0	Disha	247.0	170.2	45.1	2	2	-	1	5
Kandhamal	IPM	Mustard	Rabi 12-13	Two spray of imidacloprid 3ml/10 lit at 10 days interval.alternating with spraying of meem oil@ 5ml/lit.	1.0	Parbati	8.06	5.54	45	2	2	-	1	5
Kandhama	Varietal evaluation	Tomato	Rabi 12-13	Var-Utkal raja,duration 95-100 days,tolerant to bacterial wilt,cluster bearing ,average yield 350-400 q/ha, seedling treatment with Thiophenate Methyl@ 1gm/lit , planting in ridges,staking at flowering with RDF@ 125:50:50 NPK kg/ha	1.0	Utkal Raja	305.0	185.0	64.86	4	1	-	-	5

Kandhamal	Varietal evaluation	Graden Pea	Rabi 12-13	Summer ploughing ,FYM 5qtl./ha ,seed treatment with Rhizobium 20g/kg of Seed,Spacing 30x5cm, Dwarf plant ,45-60 cm tall ,pod length 9 cm ,8-9 seeds/pod with RDF@ 50:75:50 NPK kg/ha	1.0	Azad P-3	112.7	91.1	25.08	2	3	-	-	5
Kandhamal	INM	Cauli flower	Rabi 12-13	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.	1.0	Madhuri	220.9	144.3	53.0	02	03	-	-	05
Kandhamal	INM	Cabbage	Rabi 12-13	Application of FYM 15 ton/ha at the time of final ploghing followed by foliar spray of Borax @ 3gm/lit. of water at 30 DAP & 45 DAP with soil test based fertilizer application.	1.0	Disha	236.6	159.4	48.4	01	04	-	-	05
Kandhamal	INM	Potato	Rabi 12-13	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.	1.0	Kufri Jyopti	177.6	113.4	56.6	-	05	-	-	05
Kandhamal	INM and IPM	Toria	Rabi 12-13	Introduction of improved variety Parvati with spraying of imidachlopid @ 3ml/10 liter alternate with Neem oil @ 5 ml per liter with soil test based fertilizer application	5.0	Parvati	8.2	5.1	60	3	14	-	-	17
Kandhamal	INM	Field pea	Rabi 12-13	Introduction of improved variety Aparna, seed treatment with Trichoderma viride, soil test based fertlizer application with sulphur dusting 2.5kg /ha	5.0	Aparna	22.4	15.1	48.3	2	22	-	-	24
Kandhamal	Income generating activity	Oyster Mushroom	Rabi 12-13	Cultivation of Oyster mushroom var P. sajarcaju.	50 nos.	*P.sajarcaju*	1.25 kg/bed	1 kg/bed	25	-	5	-	-	5

Kandhamal	Drudgery reduction	Turmeric	Rabi 12-13	Improved turmeric boiling drum with perforated grill. Capacity – 40kg/grill	5 nos.	Improved Turmeric boiling drum	40 kg/grill	10 kg/grill	300 %	-	5	-	-	5
Kandhamal	Income generating activity	Backyard poultry	Rabi 12-13	Rearing of improved poultry breed Banaraj	100 nos	Banaraj	0.9 kg/bird/year	3.8 kg/dird/ year	322.2	04	06	-	-	10

3.3 Economic Impact of FLD

KVK Name	Name of Crop/ Enterprise	Technology demonstrated	Parameters			Cost of cultivation (Rs/ha)		Gross Return (Rs/ha)		Average Net Return (Rs/ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)	
			Name and unit of Parameter	Demo	Check	Demo	Check	Demo	Check	Demo	Check	Demo	Local Check
Kandhamal	Paddy	Variety-CRHR-7 (Ajay) ,seed rate 20kg/ha, Duration 125-130 days,spacing 20X20 cm, long slender grains,average yield 6-6.5 ton/ha with RDF@ 120:60:80 NPK kg/ha.	No. of tillers/hill	18.6	9.6	24693	17930	54450	32054	29757	14124	2.2	1.5
Kandhamal	Paddy	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.	No. of tillers/hill	9.6	5.8	19340	15180	44560	31520	25220	16340	2.8	2.1
Kandhamal	Paddy	Variety-Manaswini ,Maturity Medium(125-132 days),resistant to brown spot,Moderately resistant to blast ,resistant to stem borer,lodging & shattering Avg. yield 47.19q/ha with RDF@ 80:40:40 NPK kg/ha.	No. of tillers/hill	16.7	9.2	22677	16323	43428	26796	20751	10473	1.9	1.6
Kandhamal	Maize	Sweet corn var – Madhuri , Plucking the green cobs at 60-65 days with RDF@ 80:40:40 NPK kg/ha.	Cob length in cm	20.2	15.4	24383	18371	79500	48686	55117	30315	3.2	2.6
Kandhamal	Mustard	Mustard variety –Anuradha,duration 85-90 days ,yield 10-12 q/ha ,oil content 33% ,suitable for rainfed condition with RDF@ 60:30:30 NPK kg/ha.	No. of Silipua/Plant	225	152	15383	8069	34440	13904	19057	5835	2.2	1.7
Kandhamal	Paddy	Application of Fipronil 0.3g @1.25 kg in 1000 m^2 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.	No. of dead heart (%)	2.36	19.9	20150	17450	46920	34320	23065	15955	2.3	1.9
Kandhamal	Groundnut	Seed treatment with Carboxyn (37.5%) + Thiram (37.5%) DS @ 2.5 gm/kg of seed ,need based spraying of Chlorothalonil @ 2gm per litre & soil tretment with trichoderma viridae 2.5 kg per ha .	% of Colar rot	5.8	16.3	16950	14200	42125	29900	25175	15700	2.5	2.1

Kandhamal	Ginger	Variety-Suprava ,FYM 10 ton/ha ,Seed treatment with Trichoderma viridie @ 5 gm/kg & pseudomonas @ 10gm/kg of seed + Neem cake application @ 250kg/ha in raised bed with RDF @ 125:100:100 NPK kg/ha.	Single cum weight in gm	115	75	124000	102000	338100	234600	214100	132600	2.72	2.3
Kandhamal	Groundnut	Application of lime (PMS) 0.2 LR at the time of final ploghing with FYM @ 5 t/ha followed by soil test based fertilizer application with Sulphur @ 30kg/ha.	No. of pods/plant	20.1	14.2	28700	24100	68080	47730	39380	23630	2.4	1.9
Kandhamal	Paddy	Full dose of P and K along with 25 % N and Zinc @ 25kg/ha and Sulphur @ 30 Kg /ha at the time of transplanting , out of rest 75 % N , 50% applied at maximum tillering and balance 25 % at panicle initiation stage	No. of tillers/hill	12	08	28300	23950	51000	35375	22700	11425	1.8	1.4
Kandhamal	Nutritional garden	Plot Size -10 cent , Developing crop schedule on rotation basis, lay out of nutritional garden with crop management.	--	--	--	5100	3650	11500	7000	6400	3350	2.25	1.9
Kandhamal	Groundnut	Groundnut stripper reduces drudgery of farm women & increases efficiency by 83 % of Groundnnut stripping	--	--	--	--	--	--	--	---	--	-	--
Kandhamal	Paddy	Weeding in paddy using cono weeder is very effective & very economical.	--	--	--	---	--	---	---	--	--	--	--
Kandhamal	Paddy straw Mushroom	Variety –Volvarilla volvacia	---	--	--	25/bed	25/bed	100/bed	80/bed	75/bed	55/bed	4	3.2
Kandhamal	Hybrid Napier	Hybrid Napier var –NB -21 , spacing 50cmx50 cm ,application of FYM as basal & urea as top dressing;	No of Shoot/clump	18	-	42000	20000	80000	35000	38000	15000	1.9	1.75
Kandhamal	Teak	Elite stumps with spacing 2 m x2 m in pits(1x1x1.5)feet followed by basal dose (30 g DAP +20 g MOP per plant) & top dressing (50 g urea per plant) followed by tending operations.	Plant height(cm)	120	60	84000	58000	220000	110000	136000	52000	2.62	1.89
Kandhamal	Eucalyptus	Clones planted with spacing (2mx2m) in pits (1x1x1.5) feet followed by basal dose (30 g DAP +20 g MOP per plant) & top dressing (50 g urea per plant) followed by tending operations & forate (10g) @ 50 gm/plant.	Plant height(cm)	210	114	70000	40000	128000	70000	58000	30000	1.82	1.75

Kandhamal	Bamboo	Seedlings planted with spacing 3mx3 m in pits (1x1x1.5) feet followed by basal dose (30 g DAP +20 g MOP per plant) & top dressing (50 g urea per plant) followed by tending operations	No of Shoot/clump	7.1	5.4	15200	32000	36000	21600	20200	(-) 10400	2.37	0.68
Kandhamal	INM & IPM	Seed 20kg/ha ,line sowing Rhizobium inoculation @ 20gm/kg seed ,soil test based fertilizer @ 20:40:20 NPK kg/ha & Lime application 5 qtl./ha with need based application of pesticides.	No of pods/plant	18.2	11.1	13200	9700	26550	17100	13250	7400	2.0	1.76
Kandhamal	IWM	Improved variety, Deomali , pre emergence application of Basalin @ 1.0 kg a.i./ha and hand weeding at 30 DAS with soil test based fertilizer application.	Weed infestation at 60DAS(No/$m^{2)}$	2.1	11.2	8200	5850	20400	13600	12200	7750	2.5	2.3
Kandhamal	Brinjal	Spraying of Spinosad 45% SC @ 75 ml/acre ,3-4 times at 10 days interval ,hand clipping & destruction of infected shoots & fruits.	% of infestation	9.8	42	42850	32300	143400	83450	100550	51150	3.3	2.6
Kandhamal	Cabbage	Intercropping with mustard (One row mustard with 16 rows cabbage),installation of Ph trap,application of neem cake 250kg/ha ,spraying of Bt @ 2gm /lit & cartaphydrochloride @1.5 gm/lit alternatively at 15 days interval.	No. of larve /10 plant	3.6	20.8	47800	39250	123500	85100	75700	45850	2.6	2.1
Kandhamal	Mustard	Two spray of imidacloprid 3ml/10 lit at 10 days interval.alternating with spraying of meem oil@ 5ml/lit.	No. of Aphids/Plant	16.8	97.2	10800	8450	28210	19250	17410	10800	2.6	2.2
Kandhamal	Tomato	Var-Utkal raja,duration 95-100 days,tolerant to bacterial wilt,cluster bearing ,average yield 350-400 q/ha, seedling treatment with Thiophenate Methyl@ 1gm/lit , planting in ridges,staking at flowering with RDF@ 125:50:50 NPK kg/ha	No. of fruits/plant	32	18	70700	51300	152500	92500	81800	41200	2.15	1.80
Kandhamal	Graden Pea	Summer ploughing ,FYM 5qtl./ha ,seed treatment with Rhizobium 20g/kg of Seed,Spacing 30x5cm, Dwarf plant ,45-60 cm tall ,pod length 9 cm ,8-9 seeds/pod with RDF@ 50:75:50 NPK kg/ha	No. of Pods/plant	20	13	51155	38720	129900	87300	78745	48580	2.5	2.25

Kandhamal	Cauli flower	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.	Single curd weight (gm)	847.1	560.3	43850	39780	132540	86580	88690	46800	3.0	2.2
Kandhamal	Cabbage	Application of FYM 15 ton/ha at the time of final ploghing followed by foliar spray of Borax @ 3gm/lit. of water at 30 DAP & 45 DAP with soil test based fertilizer application.	Head diameter (cm)	19.06	14.42	44350	37900	118300	79700	73950	41800	2.7	2.1
Kandhamal	Potato	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.	No. of tubers/plant	7.61	4.79	55700	44200	142080	90720	86380	46520	2.6	2.0
Kandhamal	INM and IPM	Introduction of improved variety Parvati with spraying of imidachlopid @ 3ml/10 liter alternate with Neem oil @ 5 ml per liter with soil test based fertilizer application	No of siliqua/Plant	208	143	11200	8250	28700	17850	17500	9600	2.6	2.1
Kandhamal	INM	Introduction of improved variety Aparna, seed treatment with Trichoderma viride, soil test based fertlizer application with sulphur dusting 2.5kg /ha	No of pods/Plant	14	10	26100	21250	78750	52850	52650	31600	3.0	2.5
Kandhamal	Oyster Mushroom	Cultivation of Oyster mushroom var P. sajarcaju.	--	--	--	20/bed	20/bed	75	60	55	40	3.75	3.0
Kandhamal	Turmeric	Improved turmeric boiling drum with perforated grill. Capacity – 40kg/grill	--	--	--	--	--	--	--	--	--	--	--
Kandhamal	Backyard poultry	Rearing of improved poultry breed Banaraj	No. of eggs/bird	80	30	2700	1100	31400	8280	28700	7180	11.6	7.5

3.4 Feedback of the Farmers

Name of KVK	Feedback
Kandhamal	Paddy- Variety Ajay gave an average yield of 49.5 q/ha with an increase of 70 % over local check & accepted by the farmers.
Kandhamal	Paddy- Variety Nuakalazeera gave an average yield of 22.2 q/ha with an increase of 41 % over local variety & accepted by the farmers
Kandhamal	Paddy- Variety Manaswini gave an average yield of 39.5 q/ha with an increase of 61 % over local variety & accepted by the farmers
Kandhamal	Maize- Variety Madhuri gave 61 % more yield over local variety & accepted by the farmers
Kandhamal	Mustard- Variety Anuradha gave an average yield of 8.6 q/ha with an increase of 128 % over local variety & accepted by the farmers
Kandhamal	Paddy- Application of Fipronil 0.3g @1.25 kg in 1000 m^2 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 increases the paddy yield 36% over the local practice and the technology is appreciated by the farmers.
Kandhamal	Groundnut- Seed treatment with Carboxyn (37.5%) + Thiram (37.5%) DS @ 2.5 gm/kg of seed ,need based spraying of Chlorothalonil @ 2gm per litre & soil tretment with trichoderma viridae 2.5 kg per ha increases the yield 40% over the local practice and the technology is appreciated by the farmers
Kandhamal	Ginger- The farmers appreciated the variety due to least incidence of rhizome rot & higher yield.
Kandhamal	Groundnut –Lime and sulphur application in groundnut increased the pod yield 42.6 % over local practice & accepted by the farmers.
Kandhamal	Paddy- Application of zinc and sulphur in rice increased the grain yield 44.1% over local practice and the technology is appreciated by the farmers.
Kandhamal	Nutritional garden- The farm women accepted the technology as they are getting fresh vegetables & also grtting some additional income
Kandhamal	Groundnut-Accepted by the farm woman due less drudgery & labour saving during stripping of Groundnut.
Kandhamal	Paddy-Accepted by the farm women due to less drudgery during paddy weeding.
Kandhamal	Hybrid Napier- Farmers accepted the high yielding Fodder grass as it is drought and termite resistant.
Kandhamal	Teak- Farmers appreciated the method of regeneration as the second year selected stumps easy to establish. and it is drought ,fire and browse resistant
Kandhamal	Eucalyptus-Farmers appreciated the clonal method of propagation as plants are very uniform and straight in growth and self shedding habbit.
Kandhamal	Bamboo- Farmers appreciated the method of regeneration due to easy availability of seed and easy establishment.
Kandhamal	Brinjal- Spraying of Spinosad 45% SC @ 75 ml/acre ,3-4 times at 10 days interval ,hand clipping & destruction of infected shoots & fruits increases the yield 43% over the local practice and the technology is appreciated by the farmers
Kandhamal	Cabbage- Intercropping with mustard (One row mustard with 16 rows cabbage),installation of Ph trap,application of neem cake 250kg/ha ,spraying of Bt @ 2gm /lit & cartaphydrochloride @1.5 gm/lit alternatively at 15 days interval increases the yield 45.1% over the local practice and the technology is appreciated by the farmers.
Kandhamal	Mustard- Two spray of imidacloprid 3ml/10 lit at 10 days interval.alternating with spraying of meem oil@ 5ml/lit. increases the yield 42% over the local practice and the technology is appreciated by the farmers
Kandhamal	Tomato-Variety Utkal Raja produced 305 q/ha with an increase of 64.8 % over local practice & accepted by the farmers.
Kandhamal	Graden Pea- Azad- P3 produced 112.7 q/ha with an increase of 25.8 % over local practice & accepted by the farmers.
Kandhamal	Cauliflower- Application of lime @0.2 LR with FYM @ 15ton/ha ,Soil test based fertilizer application with 2 kg Born/ha at the time of planting recorded the yield of cauliflower of 220.9 q/ha which was 53 % higher than local practice & is accepted by the farmers.
Kandhamal	Cabbage- The technology is accepted by the farmers
Kandhamal	Potato- The farmers accepted the technology
Kandhamal	Turmeric-Accepted by the farmers due to uniform boiling , more efficiency & consume less water ,time ,& fuel.

3.5 Training and Extension activities under FLD

KVK Name	Crop	Activity	No. of activities organized	Number of participants	Remarks
Kandhamal	Paddy	Field days	1	20	
Kandhamal		Farmers Training	7	195	
Kandhamal		Media coverage			
Kandhamal		Training for extension functionaries	2	30	
Kandhamal	Paddy	Field days			
Kandhamal		Farmers Training	1	30	
Kandhamal		Media coverage			
Kandhamal		Training for extension functionaries			
Kandhamal	Paddy	Field days			
Kandhamal		Farmers Training	1	30	
Kandhamal		Media coverage			
Kandhamal		Training for extension functionaries			
Kandhamal	Maize	Field days	1	20	
Kandhamal		Farmers Training	4	120	
Kandhamal		Media coverage			
Kandhamal		Training for extension functionaries			
Kandhamal	Mustard	Field days	1	20	
Kandhamal		Farmers Training	1	30	
Kandhamal		Media coverage			
Kandhamal		Training for extension functionaries			
Kandhamal	Paddy	Field days	1	20	
Kandhamal		Farmers Training	2	60	
Kandhamal		Media coverage			
Kandhamal		Training for extension functionaries			
Kandhamal	Groundnut	Field days			
Kandhamal		Farmers Training	3	90	
Kandhamal		Media coverage			
Kandhamal		Training for extension functionaries			
Kandhamal	Ginger	Field days	1	20	
Kandhamal		Farmers Training	2	60	
Kandhamal		Media coverage			
Kandhamal		Training for extension functionaries			
Kandhamal	Groundnut	Field days	1	20	-
Kandhamal		Farmers Training	2	60	
Kandhamal		Media coverage	-	-	-
Kandhamal		Training for extension functionaries	-	-	-

Kandhamal	Paddy	Field days	1	20	
Kandhamal		Farmers Training	1	30	
Kandhamal		Media coverage	-	-	
Kandhamal		Training for extension functionaries	-	-	
Kandhamal	Nutritional garden	Field days			
Kandhamal		Farmers Training	2	60	
Kandhamal		Media coverage			
Kandhamal		Training for extension functionaries			
Kandhamal	Groundnut	Field days			
Kandhamal		Farmers Training	1	30	
Kandhamal		Media coverage			
Kandhamal		Training for extension functionaries			
Kandhamal	Paddy	Field days			
Kandhamal		Farmers Training	1	30	
Kandhamal		Media coverage			
Kandhamal		Training for extension functionaries			
Kandhamal	Paddy Straw Mushroom	Field days			
Kandhamal		Farmers Training	1	15	
Kandhamal		Media coverage			
Kandhamal		Training for extension functionaries			
Kandhamal	Hybrid Napier	Field days			
Kandhamal		Farmers Training	1	30	
Kandhamal		Media coverage			
Kandhamal		Training for extension functionaries			
Kandhamal	Teak-	Field days			
Kandhamal		Farmers Training	2	60	
Kandhamal		Media coverage			
Kandhamal		Training for extension functionaries			
Kandhamal	Eucalyptus	Field days			
Kandhamal		Farmers Training	1	30	
Kandhamal		Media coverage			
Kandhamal		Training for extension functionaries			
Kandhamal	Bamboo	Field days			
Kandhamal		Farmers Training	1	30	
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	Cabbage	Field days			
Kandhamal		Farmers Training	1	30	
Kandhamal		Media coverage			
Kandhamal		Training for extension functionaries			
Kandhamal	Mustard	Field days	1	20	
Kandhamal		Farmers Training	1	30	
Kandhamal		Media coverage			
Kandhamal		Training for extension functionaries			
Kandhamal	Tomato	Field days	1	20	
Kandhamal		Farmers Training	1	15	
Kandhamal		Media coverage			
Kandhamal		Training for extension functionaries			
Kandhamal	Garden Pea	Field days	1	20	
Kandhamal		Farmers Training	1	30	
Kandhamal		Media coverage			
Kandhamal		Training for extension functionaries			
Kandhamal	Cauli Flower	Field days	1	20	--
Kandhamal		Farmers Training	1	30	--
Kandhamal		Media coverage			
Kandhamal		Training for extension functionaries	1	15	
Kandhamal	Cabbage	Field days	1	20	
Kandhamal		Farmers Training	1	30	
Kandhamal		Media coverage	-	-	
Kandhamal		Training for extension functionaries	-	-	
Kandhamal	Potato	Field days	1	20	-
Kandhamal		Farmers Training	1	30	-
Kandhamal		Media coverage			
Kandhamal		Training for extension functionaries			
Kandhamal	Oyster Mushroom	Field days			
Kandhamal		Farmers Training	3	45	
Kandhamal		Media coverage			
Kandhamal		Training for extension functionaries			
Kandhamal	Turmeric	Field days			
Kandhamal		Farmers Training	1	15	
Kandhamal		Media coverage			
Kandhamal		Training for extension functionaries			

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 & farm women	Focused group discussion ,Interaction & diagnostic visit	25.09.12 ,Burbinaju 08.01.13 ,Sakadi 04.03.13 ,Kalanaju	300
Kandhamal	Farm women	Interaction with farm women Diagnostic visit & PRA.	16.10.12 ,Magariguda 08.03.13,G.Udayagiri 04.12.12,KVK ,Campus	550
Kandhamal	Rural Youth	Personnel interview, PRA & group discussion	06.06.12 ,KVK Campus	500
Kandhamal	Extension functionaries	Group discussion & secondary information.	26.05.12 ,Phulbani 11.10.12 ,KVK Campus	50 30

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
M	Male
F	Female
Thematic 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

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 KVK	Cate-gory	Training Type	Thematic area	Training Title	No. of Courses	Duration (Days)	Participants							
							General		SC		ST		Others	
							M	F	M	F	M	F	M	F
1	2	3	4	5	7	8	9	10	11	12	13	14		
Kandhamal	FW	ONC	WOE	Paddy straw mushroom cultivation	1	2	--	-	-	2	-	13	-	-
Kandhamal	FW	ONC	WOE	Oyster Mushroom Cultivation	1	2	-	-	-	1	-	14	-	-
Kandhamal	FW	ONC	AGF	Selection of Elite teak stump	1	1	-	-	1	-	29	-	-	-
Kandhamal	FW	ONC	AGF	Preparation of liquid manure	1	1	-	-	-	-	22	8	-	-
Kandhamal	FW	ONC	AGF	Nursery management of tree species	1	1	-	-	2	1	24	3	-	-
Kandhamal	FW	ONC	AGF	Preparation of silage	1	1	-	-	2	1	24	3	-	-
Kandhamal	FW	ONC	SFM	Technology to maximize irrigation water use efficiency	1	2	-	-	1	1	11	1	1	-
Kandhamal	FW	OFC	CRP	Agro technique for sowing of Maize	1	1	-	-	4	2	19	5	-	-
Kandhamal	FW	OFC	CRP	Weed Management in transplanted Paddy	1	1	1	-	5	-	17	7	-	-
Kandhamal	FW	OFC	CRP	Package and practices of paddy cultivation	1	1	2	-	5	-	22	1	-	-
Kandhamal	FW	OFC	CRP	Integrated weed management in Maize	1	1	9	-	8	-	13	-	-	-
Kandhamal	FW	OFC	CRP	Integrated weed management in oilseed crops	1	1	1	-	7	-	19	3	-	-
Kandhamal	FW	OFC	CRP	Agro-techniques for oilseed crops	1	1	-	-	3	-	15	12	-	-
Kandhamal	FW	OFC	CRP	Increase Water use	1	1	-	-	4	-	11	-	12	3

Name of KVK	Cat e-gor y	Training Type	Thema tic area	Training Title	No. of Course s	Durati on (Days)	Participants							
							General		SC		ST		Others	
							M	F	M	F	M	F	M	F
1	2	3	4	5	7	8	9	10	11	12	13	14		
				efficiency in Paddy										
Kandhamal	FW	OFC	CRP	Maize based intercropping system	1	1	2	-	4	1	17	6	-	-
Kandhamal	FW	OFC	CRP	Rice Based Intercropping system in rainfed area	1	1	-	-	4	7	7	12	-	-
Kandhamal	FW	OFC	PLP	Integrated disease management in paddy	1	1	-	-	-	-	20	10	-	-
Kandhamal	FW	OFC	PLP	Integrated disease management in Turmeric	1	1	-	-	5	-	22	3	-	-
Kandhamal	FW	OFC	PLP	Integrated disease management in Groundnut	1	1	-	-	25	5	-	-	-	-
Kandhamal	FW	OFC	PLP	Integrated pest management in Cabbage	1	1	-	-	2	-	23	1	4	-
Kandhamal	FW	OFC	PLP	Integrated Pest management in Brinjal	1	1	-	-	4	-	20	6	-	-
Kandhamal	FW	OFC	PLP	Integrated Pest management in Paddy	1	1	-	-	1	-	17	12	-	-
Kandhamal	FW	OFC	PLP	Integrated disease management in Raikia Bean	1	1	-	-	-	-	15	15	-	-
Kandhamal	FW	OFC	PLP	Integrated pest management in Cauliflower	1	1	-	-	-	-	17	13	-	-
Kandhamal	FW	OFC	PLP	Integrated disease management in Potato	1	1	-	-	-	-	15	-	15	-
Kandhamal	FW	OFC	PLP	Integrated pest management in Mustard	1	1	-	-	-	-	26	4	-	-
Kandhamal	FW	OFC	WOE	Management and layout of Nutritional garden	1	1	-	-	-	6	-	20	-	4
Kandhamal	FW	OFC	WOE	Planning and layout of Nutritional garden	1	1	-	-	-	2	-	20	-	8
Kandhamal	FW	OFC	WOE	Use of Cono weeder in SRI Paddy cultivation	1	1	-	-	-	8	-	22	-	-

Name of KVK	Cat e-gor y	Training Type	Thema tic area	Training Title	No. of Course s	Durati on (Days)	Participants							
							General		SC		ST		Others	
							M	F	M	F	M	F	M	F
1	2	3	4	5	7	8	9	10	11	12	13	14		
Kandhamal	FW	OFC	WOE	Use of Paddy winnower and thresher	1	1	-	-	-	7	-	23	-	-
Kandhamal	FW	OFC	WOE	Post harvest management of Turmeric	1	1	-	-	-	4	-	26	-	-
Kandhamal	FW	OFC	AGF	Cultural practices in Eucalyptus plantation	1	1	-	-	5	2	9	13	1	-
Kandhamal	FW	OFC	AGF	Methods of propagation of Bamboo	1	1	-	-	4	4	15	7	-	-
Kandhamal	FW	OFC	HOO	Raised seed bed technique for turmeric and ginger planting	1	1	-	-	-	-	15	15	-	-
Kandhamal	FW	OFC	HOP	Organic Turmeric and Ginger Cultivation	1	1	-	-	2	2	20	6	-	-
Kandhamal	FW	OFC	HOP	Production technique of garden pea cultivation	1	1	1	-	11	-	11	-	7	-
Kandhamal	FW	OFC	HOV	Nursery raising technique of off-season vegetable	1	1	-	-	1	-	22	7	-	-
Kandhamal	FW	OFC	SFM	Need of Soil testing and soil test based fertilizer application	1	1	-	-	4	3	19	4	-	-
Kandhamal	FW	OFC	SFM	Nutrient Management in Groundnut	1	1	-	-	-	-	18	12	-	-
Kandhamal	FW	OFC	SFM	Enhancing productivity of Turmeric through nutrient management practices	1	1	-	-	-	1	21	8	-	-
Kandhamal	FW	OFC	SFM	Fertilizer management in transplanted rice	1	1	1	-	10	-	12	-	7	-
Kandhamal	FW	OFC	SFM	Micro and secondary nutrient management in vegetables	1	1	-	-	3	-	26	1	-	-
Kandhamal	FW	OFC	SFM	Nutrient management in cole crops	1	1	-	-	4	-	13	13	-	-
Kandhamal	FW	OFC	SFM	Fertilizer management in tuber crops	1	1	1	-	9	-	13	-	7	-

Name of KVK	Cat e-gor y	Training Type	Thema tic area	Training Title	No. of Course s	Durati on (Days)	Participants							
							General		SC		ST		Others	
							M	F	M	F	M	F	M	F
1	2	3	4	5	7	8	9	10	11	12	13	14		
Kandhamal	FW	OFC	SFM	Nutrient management in oilseed crops	1	1	-	-	10	1	18	-	1	-
Kandhamal	RY	ONC	RYH	Bio-fertilizer application in pulse crop	1	1	3	-	3	-	9	-	-	-
Kandhamal	RY	ONC	RYH	Weed Management in Pulse crop	1	2	-	-	6	-	9	-	-	-
Kandhamal	RY	ONC	RYH	Package and practices of sunflower cultivation	1	2	-	-	2	-	13	-	-	-
Kandhamal	RY	ONC	RYH	Use of herbicide in Maize and paddy	1	2	-	-	2	-	13	-	-	-
Kandhamal	RY	ONC	RYH	Bio control of pest and diseases of solanaceous vegetable.	1	2	-	-	-	-	12	3	-	-
Kandhamal	RY	ONC	RYH	Integrated pest management in Tuber crops	1	2	-	-	-	-	15	-	-	-
Kandhamal	RY	ONC	RYH	Processing, preservation and value addition of Mango and other fruits	2	4	-	-	-	5	-	25	-	-
Kandhamal	RY	ONC	RYH	Oyster Mushroom cultivation	2	4	-	-	-	7	-	22	-	1
Kandhamal	RY	ONC	RYH	Improved packages and practices of Tomato cultivation	1	2	-	-	1	-	14	-	-	-
Kandhamal	RY	ONC	RYH	Methodology for quality vermi compost production	3	3	-	-	5	-	37	3	-	-
Kandhamal	RY	ONC	RYH	Techniques for soil sample collection	1	2	-	-	2	-	13	-	-	-
Kandhamal	RY	OFC	RYH	Nursery Management in Hybrid rice	1	1	-	-	3	3	15	9	-	-
Kandhamal	RY	OFC	RYH	Integrated weed management in Kharif Groundnut	1	1	-	-	2	4	13	11	-	-
Kandhamal	RY	OFC	RYH	Method and application of	1	1	-	-	-	1	10	4	-	-

Name of KVK	Cat e-gor y	Training Type	Thema tic area	Training Title	No. of Course s	Durati on (Days)	Participants							
							General		SC		ST		Others	
							M	F	M	F	M	F	M	F
1	2	3	4	5	7	8	9	10	11	12	13	14		
				bio-pesticides										
Kandhamal	RY	OFC	RYH	Bio control of pest and diseases in Ginger	1	1	-	-	-	-	15	-	-	-
Kandhamal	RY	OFC	RYH	Use of Groundnut stripper for stripping of Groundnut	1	1	-	-	-	2	-	28	-	-
Kandhamal	RY	OFC	RYH	Preparation of leaf plates by stitching machine	1	1	-	-	-	5	-	25	-	-
Kandhamal	RY	OFC	RYH	Techniques of propagation of Tomato	1	1	-	-	-	1	-	14	-	-
Kandhamal	RY	OFC	RYH	Improved method of banana cultivation	1	1	-	-	3	-	22	5	-	-
Kandhamal	RY	OFC	RYH	Nutrient management through biofertilizer	1	1	-	-	2	-	18	-	-	-
Kandhamal	IS	ONC	EXP	Integrated Weed Management practices in Paddy	1	1	2	-	-	-	11	-	2	-
Kandhamal	IS	ONC	EXP	Productivity enhancement in field crops	1	1	2	-	-	-	7	-	6	-
Kandhamal	IS	ONC	EXP	Bio control pest and disease in cole crops	1	2	-	-	3	-	8	-	4	-
Kandhamal	IS	ONC	EXP	Preservation of Tomato and value addition of fruits	1	2	-	-	-	6	-	9	-	-
Kandhamal	IS	ONC	EXP	Nutrient management in vegetables	1	2	2	-	2	-	11	-	-	-
Kandhamal	IS	ONC	EXP	Nutrient management in fruit crops	1	2	2	-	1	-	12	-	-	-
Kandhamal	IS	ONC	EXP	INM in vegetable	1	2	5	-	1	-	9	-	-	-
Kandhamal	IS	ONC	EXP	Management of Acid soils for higher crop productivity	1	2	4	-	2	-	9	-	-	-

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

Name of KVK	Training title	Crop / Enterprise	Identified Thrust Area	Duration of training (days)	Number of Beneficiaries					
					SC		ST		Others	
					M	F	M	F	M	F
Kandhamal	Vermicomposting	Enterprise	Production & use of organic inputs	4	6	-	7	-	2	-
Kandhamal	Bee keeping	Enterprise	Small scale income generation activity	4	-	-	15	-	-	-
Kandhamal	Processing ,preservation & value addition of minor fruit crops & vegetables	Enterprise	Value addition	4	-	1	-	13	-	1

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

Name of KVK	Training title	Self employed after training			Number of persons employed else where
		Type of units	Number of units	Number of persons employed	
Kandhamal	Vermicomposting	Vermin	5	3	-
Kandhamal	Bee keeping	Bee Boxes	15	4	-
Kandhamal	Processing ,preservation & value addition of minor fruit crops & vegetables	Preservatives	--	5	1
Kandhamal	Mushroom cultivation	Mushroom unit	4	4	-

Table 5.4. Sponsored Training Programmes

Name of KVK	Title	Thematic area (as given in abbreviation table)	Sub-theme (as per column no 5 of Table T1)	Client (FW/ RY/ IS)	Dura-tion (days)	No. of courses	No. of Participants						Sponsoring Agency	Fund received for training (Rs.)
							Others		SC		ST			
							M	F	M	F	M	F		
Kandhamal	Skill Oriented training programme for entrepreneurship Development on Soil Testing and Soil Health Management	Soil testing and soil health management	Soil testing and soil health management	RY	45	01	03	-	04	-	18	-	State Employment Mission, Odisha	316750

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

Name of KVK	Title	Thematic area (as given in abbreviation table)	Sub-theme (as per column no 5 of Table T1)	Client (FW/ RY/ IS)	Dura-tion (days)	No. of courses	No. of Participants						Sponsoring Agency	Fund received for training (Rs.)
							Others		SC		ST			
							M	F	M	F	M	F		
Kandhamal														

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

Name of KVK	Title of the training	No. of trainees	Change in knowledge (Score)		Change in Production (q/ha)		Change in Income (Rs)		Impact on 1. Area expanded (ha) 2. No. of farmers adopted (no.) 3. % change in knowledge, production & Income
			Before	After	Before	After	Before	After	
Kandhamal	Agro technique for Maize cultivation	30	33	49	16	24	23000	34000	1. 42 ha 2. Out of 30 trainees, 24 farmers have accepted the new technology. 3. (i) Knowledge: 48.(After-Before)/Before *100 (ii) Production: 50 (ii) Income: 47
Kandhamal	Nursery Management in Hybrid rice	30	26	48	22	39	17000	29000	1. 61 ha 2. Out of 30 trainees, 23 farmers accepted the technology 3. (i) Knowledge: 84.(After-Before)/Before *100 (ii) Production: 77 (ii) Income: 70
Kandhamal	Integrated weed management in Kharif Groundnut	30	30	48	12	18	8000	15000	1. 60 ha 2. Out of 30 trainees, 20 farmers accepted the technology 3. (i) Knowledge: 60.(After-Before)/Before *100 (ii) Production: 50 (ii) Income: 87

Kandhamal	Weed Management in transplanted Paddy	30	28	42	22	39	12000	22000	1. 87 ha 2. Out of 30 trainees, 25 farmers accepted the technology 3. (i) Knowledge: 50.(After-Before)/Before *100 (ii) Production: 77 (ii) Income: 83
Kandhamal	Package and practices of paddy cultivation	30	31	55	23	38	15000	25000	1. 105 ha 2. Out of 30 trainees, 28 farmers accepted the technology 3. (i) Knowledge: 77.(After-Before)/Before *100 (ii) Production: 65 (ii) Income: 66
Kandhamal	Bio-fertilizer application in pulse crop	15	26	44	4	7	12000	18000	1. 27 ha 3. Out of 15 trainees, 11 farmers accepted the technology 2. (i) Knowledge: 69(After-Before)/Before *100 (ii) Production: 75 (ii) Income: 50
Kandhamal	Agro-techniques for oilseed crops	30	30	52	4	7	12000	19000	1. 32 ha 2. Out of 30 trainees, 18 farmers accepted the technology 3. (i) Knowledge: 73.(After-Before)/Before *100 (ii) Production:75 (ii) Income: 58
Kandhamal	Weed Management in Pulse crop	15	24	39	4	8	15000	22000	1. 83 ha 3. Out of 15 trainees, 09 farmers accepted the technology 2. (i) Knowledge: 62.(After-Before)/Before *100 (ii) Production: 50 (ii) Income: 47
Kandhamal	Use of herbicide in Maize & Paddy.	15	20	38	18	35	18000	34000	1. 56 ha 2. Out of 15 trainees, 11 farmers accepted the technology 3. (i) Knowledge: 90.(After-Before)/Before *100 (ii) Production: 94 (ii) Income: 89

Kandhamal	Productivity enhancement in field crops	15	24	43	-	-	-	-	1. 2. Out of 15 trainees, 14 have accepted the technology 3. (i) Knowledge: 77.(After-Before)/Before *100 (ii) Production: (ii) Income:
Kandhamal	Package and practices of sunflower cultivation	15	22	34	05	09	12000	17000	1. 24 ha 2. Out of 15 trainees, 10farmers accepted the technology 3. (i) Knowledge: 54.(After-Before)/Before *100 (ii) Production: 80 (ii) Income: 42
Kandhamal	Integrated weed management in Maize	30	25	46	17	30	17000	45000	1. 75 ha 2. Out of 30 trainees, 28 farmers accepted the technology 3. (i) Knowledge: 84.(After-Before)/Before *100 (ii) Production: 76 (ii) Income: 105
Kandhamal	Integrated weed management in oilseed crops.	30	28	38	3	05	7000	15000	1. 12 ha 2. Out of 30 trainees, 21 farmers accepted the technology 3. (i) Knowledge: 35.(After-Before)/Before *100 (ii) Production: 67 (ii) Income: 114
Kandhamal	Increase water use efficiency in Paddy	30	23	36	24	36	14000	18000	1. 96 ha 2. Out of 30 trainees, 24 farmers accepted the technology 3. (i) Knowledge: 56.(After-Before)/Before *100 (ii) Production: 50 (ii) Income: 28
Kandhamal	Maize based intercropping system	30	28	42	17	32	21000	38000	1. 48 ha 2. Out of 30 trainees, 23 farmers accepted the technology 3. (i) Knowledge: 50.(After-Before)/Before *100 (ii) Production: 88 (ii) Income: 81

Kandhamal	Rice based intercropping system	30	26	49	22	38	15000	25000	1. 89 ha 2. Out of 30 trainees, 26 farmers accepted the technology 3. (i) Knowledge: 88.(After-Before)/Before *100 (ii) Production: 72 (ii) Income: 67
Kandhamal	Integrated weed management practices in Paddy	15	55	79	--	--	--	--	1. 2. Out of 15 trainees, 14 Extension functionaries accepted the technology 3. (i) Knowledge: 43 (After-Before)/Before *100 (ii) Production: (iii) Income:
Kandhamal	Productivity enhancement in field crops	15	58	81	-	-	-	-	1. 2. Out of 15 trainees, 14 Extension functionaries accepted the technology 3. (i) Knowledge: 40 (After-Before)/Before *100 (ii) Production: (iii) Income:
Kandhamal	Integrated disease management in Turmeric	30	26	51	75.2	97.8	97500	127140	4. 87 ha 5. Out of 30 trainees, 11 farmers accepted the technology 6. (i) Knowledge: 96.2 (After-Before)/Before *100 (ii) Production: 30. % (iii) Income:30 %
Kandhamal	Integrated disease management in Paddy	30	23	47	27.2	37.8	32640	45360	1.155 Ha 2 .Out of 30 trainees, 13 farmers accepted the te hnology 3(i) Knowledge: 104 (After-Before)/Before *100 (ii) Production: 38.9 % (iii) Income:38.9 %
Kandhamal	Integrated pest management in Paddy	30	35	67	29.7	39.3	35640	47160	1.225 2.Out of 30 trainees, 18 farmers accepted the technology 3.(i) Knowledge: 91.4 (After-Before)/Before *100 (ii) Production: 32.3% (iii) Income:32.3%

Kandhamal	Integrated disease management in Groundnut	30	32	58	11.8	17.6	35400	52800	1. 62 ha 2. Out of 30 trainees, 14 farmers followed the fertilizer management practices. 3. (i) Knowledge: 81.2(After-Before)/Before *100 (ii) Production: 32.9 % (iii) Income: 32.9 %
Kandhamal	Integrated Pest management in Brinjal	30	31	64	170.6	225.8	85300	112900	1. 173ha 2. Out of 30 trainees, 18 farmers followed IPM practices. 3. (i) Knowledge: 106.4 (After-Before)/Before *100 (ii) Production: 32.3 % (iii) Income: 32.3%
Kandhamal	Integrated Pest management in Cabbage	30	37	78	174.2	231.6	87100	115800	1. 182 ha 2. Out of 30 trainees, 12 farmers accepted the technology 3. (i) Knowledge: 110.8 (After-Before)/Before *100 (ii) Production:32.9% (iii) Income: 32.9 %
Kandhamal	Integrated disease management in Potato	30	18	34	119.1	172.6	71460	103560	1.120 ha 2.Out of 30 trainees, 15 farmers accepted the technology 3.(i) Knowledge: 88.9% (After-Before)/Before *100 (ii) Production:44.9 % (ii) Income: 44.9 %
Kandhamal	Integrated Pest management in Cauliflower	30	37	62	170.1	232.8	136080	186240	1. 149 ha 2. Out of 30 trainees, 10 trainess adopted the technology. 3. (i) Knowledge: 67.6 (After-Before)/Before *100 (ii) Production:36.9 % (iii) Income: 36.9 %
Kandhamal	Integrated Pest management in Mustard	30	35	66	5.2	8.6	15600	25800	1.220ha 2.Out of 30 trainees, 19 trainees followed the technology. 3.(i) Knowledge: 88.6 (After-Before)/Before *100 (ii) Production: 65.4 % (iii Income: 65.4 %

Kandhamal	Integrated Disease management in Raikia bean	30	42	72	173.1	234.6	173100	234600	1. 163 ha 2. Out of 30 trainees, 13 trainees adopted the technology. 3. (i) Knowledge: 55 (After-Before)/Before *100 (ii) Production: 66.7 % (ii) Income: 66.7%
Kandhamal	Method and application of bio-pesticides	15	35	75	185	240	92500	120000	1. 190 ha 2. Out of 15 trainees, 11 trainees adopted the technology. 3. (i) Knowledge:114.2 (After-Before)/Before *100 (ii) Production: 29.7 % (ii) Income: 29.7 %
Kandhamal	Bio control of pest & disease in solanaceous vegetables	15	33	63	173	228	86500	11400	1.156 ha 2.Out of 15 trainees, 10 farmers accepted the technology. 3.(i) Knowledge: 90.9(After-Before)/Before *100 (ii) Production: % (iii) Income: 42.1 %
Kandhamal	Bio control of pest & disease in Ginger	15	30	69	90.3	128.4	270900	385200	1.180 2.Out of 15 trainees, 9 farmers accepted the technology. 3.(i) Knowledge: 130 (After-Before)/Before *100 (ii) Production: 42.1 % (iii) Income: 42.1 %
Kandhamal	Integrated pest management in Tuber crops	15	36	68	118	172	70800	103200	1. 176ha 2. Out of 15 trainees, 8 farmers accepted the technology 3. (i) Knowledge:88.8 (After-Before)/Before *100 (ii) Production: 45.7 % (ii) Income:45.7%
Kandhamal	Bee keeping	15	35	78	3kg/box	6kg/box	450/box	900/box	1. Out of 15 trainees, 10 farmers adopted the technology 2. (i) Knowledge: 122 (After-Before)/Before *100 (ii) Production: 100 % (ii) Income:100 %

Kandhamal	IPM in cole crops	15	64	88	-	-	-	-	1. Out of 15 trainees, 11 trainees aware about the technology. 2. (i) Knowledge: 37.5(After-Before)/Before *100 (ii) Production: (ii) Income
Kandhamal	Enhancing productivity of turmeric through nutrient management practices	30	23	58	81.2	127.8	108240	170400	1. 188 ha 2. Out of 30 trainees, 17 farmers accepted the technology 3. (i) Knowledge: 152.1 (After-Before)/Before *100 (ii) Production: 57.3 % (ii) Income:57.4 %
Kandhamal	Fertilizer management in transplanted rice	30	20	49	28.3	40.8	35375	51000	1. 175 ha 2. Out of 30 trainees, 18 farmers accepted the technology 3. (i) Knowledge: 145 (After-Before)/Before *100 (ii) Production: 44.1 % (ii) Income:44.1 %
Kandhamal	Need of soil testing and soil test based fertilizer application	30	29	71	127.8	213.7	35784	59836	1. 80 ha 2. Out of 30 trainees, 23 farmers understood the importance of soil testing. 3. (i) Knowledge: 144.8 (After-Before)/Before *100 (ii) Production: 67.2 % (ii) Income: 67.2 %
Kandhamal	Nutrient management in groundnut	30	30	62	12.9	18.4	47730	68080	1. 88 ha 2. Out of 30 trainees, 20 farmers followed the fertilizer management practices. 3. (i) Knowledge: 106.6 (After-Before)/Before *100 (ii) Production: 42.6 % (ii) Income: 42.6 %
Kandhamal	Micro and secondary nutrient management in vegetables.	30	35	79	159.4	236.6	79700	118300	1. 122ha 2. Out of 30 trainees, 24 farmers followed the micro and secondary nutrient management practices in vegetable crops. 3. (i) Knowledge: 125.7 (After-Before)/Before *100 (ii) Production: 48.4 % (ii) Income: 48.4 %

Kandhamal	Nutrient management in cole crops	30	33	67	144.3	220.9	86580	132540	1. 115 ha 2. Out of 30 trainees, 19 farmers accepted the technology 3. (i) Knowledge: 103 (After-Before)/Before *100 (ii) Production:53 % (ii) Income: 53 %
Kandhamal	Fertilizer management in tuber crops	30	38	63	113.4	177.6	90720	142080	1. 108 ha 2. Out of 30 trainees, 16 farmers accepted the technology 3. (i) Knowledge: 65% (After-Before)/Before *100 (ii) Production:56.6 % (ii) Income: 56.6 %
Kandhamal	Technology to maximize irrigation water use efficiency	15	32	56	156.3	227.8	70335	102510	1. 49 ha 2. Out of 15 trainees, 10 trainess adopted the technology. 3. (i) Knowledge: 75% (After-Before)/Before *100 (ii) Production: 45.7 % (ii) Income: 45.7 %
Kandhamal	Nutrient management in oil seed crops	30	29	66	10.6	17.7	24910	41595	1. 120ha 2. Out of 30 trainees, 23 trainees followed the fertilizer management practices in oilseed crops. 3. (i) Knowledge: 127.5 (After-Before)/Before *100 (ii) Production: 66.9 % (ii) Income: 66.9 %
Kandhamal	Methodology for quality vermin compost production	45	42	68	101.3	162.7	31910	51251	1. No. Of village- 97 2. Out of 45 trainees, 33 trainees adopted the technology of quality vermicompost production 3. (i) Knowledge: 55 (After-Before)/Before *100 (ii) Production: 60.6 % (ii) Income: 60.6 %

Kandhamal	Nutrient management through bio fertlizer	20	44	78	126	234	54180	100620	1. 95 ha 2. Out of 20 trainees, 13 trainees understood the importance of bio-fertlizer for soil productivity. 3. (i) Knowledge: 80.9 (After-Before)/Before *100 (ii) Production:85.7 % (ii) Income: 85.7 %
Kandhamal	Techniques for soil sample collection	15	30	66	-	-	-	-	1. Out of 15 trainees, 12 trainees learnt the method of soil sample collection 2. (i) Knowledge:120 (After-Before)/Before *100 (ii) Production: (ii) Income:
Kandhamal	Vermicomposting	15	35	68	109	167.2	34335	52668	1. No. Of village- 87 2. Out of 15 trainees, 12 trainees adopted the technology of quality vermicompost production 3. (i) Knowledge: 94.2% (After-Before)/Before *100 (ii) Production: 53.3 % (ii) Income: 53.3 %
Kandhamal	INM in vegetables	15	31	66	78.4	132.3	81450	12550	1. 90 ha 2. Out of 15 trainees, 14 trainees accepted the technology 3. (i) Knowledge: 112.9 (After-Before)/Before *100 (ii) Production: 68.7 % (ii) Income:68.7 %
Kandhamal	Management of acid soils for higher productivity.	15	34	68	144.3	220.9	86580	132540	1. 220 ha 2. Out of 15trainees, 13 trainees followed the management practices to correct soil acidity. 3. (i) Knowledge: 114.8 (After-Before)/Before *100 (ii) Production: 53 % (ii) Income: 53%

Kandhamal	Selection of Elite teak stump	30	36	64	-	-	1500	4000	1. 40 ha 2. Out of 30trainees, 18 trainees followed the management practices to correct soil acidity. 3. (i) Knowledge: 77(After-Before)/Before *100 (ii) Production: (ii) Income: 166%
Kandhamal	Preparation of liquid manure	30	18	52	40	60	40000	60000	1. 30 ha 2. Out of 30 trainees, 15 trainees followed the management practices to correct soil acidity. 3. (i) Knowledge: 188(After-Before)/Before *100 (ii) Production: 50 % (ii) Income: 50%
Kandhamal	Nursery management of tree species	30	25	55	-	-	20000	30000	1. 10ha 2. Out of 30trainees, 20 trainees followed the management practices to correct soil acidity. 3. (i) Knowledge: 120 (After-Before)/Before *100 (ii) Production: % (ii) Income: 50%
Kandhamal	Preparation of silage	30	12	30	-	-	-	-	1. 20 pit 2. Out of 30rainees, 20 trainees followed the management practices to correct soil acidity. 3. (i) Knowledge: 150 (After-Before)/Before *100 (ii) Production: (ii) Income:
Kandhamal	Cultural practices in Eucalyptus plantation	30	22	46	70	105	21000	31500	1. 60ha 2. Out of 30trainees, 14 trainees followed the management practices to correct soil acidity. 3. (i) Knowledge: 109 (After-Before)/Before *100 (ii) Production: 50 % (iii) Income: 50%

Kandhamal	Methods of propagation of Bamboo	30	22	48	-	-	15000	90000	1. 110ha 2. Out of 30trainees, 18 trainees followed the management practices to correct soil acidity. 3. (i) Knowledge: 118 (After-Before)/Before *100 (ii) Production: (iii) Income: 500%
Kandhamal	Community Forest management	20	32	62	-	-	15000	20000	1. 100ha 2. Out of 20trainees, 16 trainees followed the management practices to correct soil acidity. 3. (i) Knowledge: 93 (After-Before)/Before *100 (ii) Production: (iii) Income: 33%
Kandhamal	Organic Turmeric and Ginger Cultivation	30	45	68	90	105	90000	105000	1. 120 ha 2. Out of 30 trainees, 22 farmers accepted the technology 3. (i) Knowledge: 50(After-Before)/Before *100 (ii) Production: 10% (ii) Income: 10%
Kandhamal	Technique of propagation of Mango and Guava	15	28	42	-	-	45000	92000	1. 24 ha 2. Out of 15 trainees, 8 farmers understood the technology 3. (i) Knowledge: 50 (After-Before)/Before *100 (ii) Production: (ii) Income: 104.5%
Kandhamal	Improved packages and practices of tomato cultivation	15	30	43	93	141	46500	70500	1. 62 ha 2. Out of 15trainees, 11 farmers accepted the technology 3. (i) Knowledge: 43 (After-Before)/Before *100 (ii) Production: 52 % (ii) Income:52 %
Kandhamal	Improved method of banana cultivation	30	31	46	113	207	169500	310500	1. 26 ha 2. Out of 30 trainees, 21 farmers accepted the technology 3. (i) Knowledge: 48 (After-Before)/Before *100 (ii) Production: 83% (ii) Income:83%

Kandhamal	Production technique of garden pea cultivation	30	35	48	86	108	103200	129600	1. 29 ha 2. Out of 30 trainees, 21 farmers accepted the techology 3. (i) Knowledge: 37 (After-Before)/Before *100 (ii) Production: 26 % (ii) Income: 26 %
Kandhamal	Nutrient management in vegetable	15	55	78	-	-	-	-	1. ha 2. Out of 15 trainees, 10 trainees accepted the technology 3. (i) Knowledge: 42 (After-Before)/Before *100 (ii) Production: (ii) Income:
Kandhamal	Nursery raising technique of off season vegetable.	30	33	48	-	-	35000	57000	1. 25ha 2. Out of 30 trainees, 20 farmers accepted the technology of nursery raising. 3. (i) Knowledge: 45 (After-Before)/Before *100 (ii) Production: (ii) Income: 63%
Kandhamal	Nutrient management in fruit crop	15	57	79	-	-	-	-	1. 2. Out of 15 trainees, 9 trainees accepted the technology 3. (i) Knowledge: 39 (After-Before)/Before *100 (ii) Production: (ii) Income:
Kandhamal	Raised seed bed technique for turmeric and ginger planting	30	32	47	89	118	89000	118000	1.167 ha 2. Out of 30trainees, 18farmers adopted the recommended technology 3. i) Knowledge: 47 % (ii) Production:33 % (ii) Income-33 %
Kandhamal	Management & layout of nutritional garden	60	30	56	67	112	3250	6400	1. No of Villages 224 2. Out of 60 trainees 52 have knowledge of nutritional garden 3. (i) Knowledge: 86 (ii) Production: 67 (ii) Income:96

Kandhamal	Paddy straw mushroom cultivation	15	35	75	800gm	1.2 kg	48	72	1.No. of Villages 64 2.Out of 15 trainees11 have good knowledge about cultivation of paddy straw Mushroom 1. (i) Knowledge: 114 (ii) Production: 50 % (iii) Income:50 %
Kandhamal	Oyster Mushroom cultivation	45	36	70	1 kg	1.3 kg	60	78	1.No. of Villages 42 1. Out of 45 trainees 39 have good knowledge about cultivation of Oyster Mushroom 2. (i) Knowledge: 94 % (ii) Production: 30 (ii) Income:30 %
Kandhamal	Preparation of leaf plates by stitching machine.	30	28	54	-	-	1350	2000	1. No of SHG 14 2. Out of 30 trainees 18 have knowledge on leaf plate preparation using stitching machine. 3. (i) Knowledge: 92.8 % (ii) Production: (ii) Income:48.1 %
Kandhamal	Processing ,preservation & value addition of forest products & fruits & vegetables	45	35	62	--	--	2000	4600	1. No of villages 22 2. Out of 45 trainees 35 have knowledge on preservation of Tomato & Tamarind. 3. (i) Knowledge: 77 % (ii) Production: (ii) Income:130 %
Kandhamal	Knowledge on use of Paddy thresher & winnower	30	22	38	--	--	1950	3700	1. No of SHG 10 2. Out of 30 trainees 27 have knowledge on post harvest implements. 3. (i) Knowledge: 72 (ii) Production: (ii) Income:89.7 %
Kandhamal	Use of Cono weeder in SRI Paddy cultivation	30	25	42	--	-	-	-	1. 156 ha 2. Out of 30 trainees 24 have knowledge on cono weeder 3. (i) Knowledge: 68 (ii) Production: (ii) Income:
Kandhamal	Post harvest management of Turmeric	30	35	62	--	--	--	--	1. No of SHG 53 2. Out of 30 trainees 24 have knowledge on turmeric boiling drum 3. (i) Knowledge: 77 % (ii) Production: (ii) Income:

Kandhamal	Use of Groundnut stripper for stripping of Groundnut.	30	21	54	--	--	--	--	1. No of SHG 12 2. Out of 30 trainees 26 have knowledge on turmeric boiling drum 3. (i) Knowledge: 57 % (ii) Production: (ii) Income:
Kandhamal	Preservation of Tomatoes & value addition of fruits.	15	25	46	-	-	-	-	1. No of SHG 25 2. Out of 15 trainees 12 have knowledge on turmeric boiling drum 3. (i) Knowledge: 84 % (ii) Production: (ii) Income:

6. EXTENSION ACTIVITIES

Name of the KVK	Activity	No. of activities (Targeted)	No. of activities (Achieved)	Detail of Participants						Remarks		
				Farmers (Others)		SC/ST (Farmers)		Extension Officials		Purpose	Topic s	Crop Stages
				M	F	M	F	M	F			
Kandhamal	Field Day	18	18	-	-	284	76	20	3	Technology dissemination	1.Paddy 2.Paddy 3. Paddy 4. Groundnut 5. Ginger 6.Tomato 7.Brinjal 8. Toria 9.Mustard 10.Mustard 11..Blackgram 12.Field Pea 13.Garden Pea 14. Cabbage 15.Cauli flower 16.Niger 17.Potato 18.Sweetcorn	1 Harvest stage
Kandhamal	Kisan Mela	3	3	-	-	230	70	15	3	1.Awareness programmme and technology dissemination to the farmers	1.To aware the farmers about various govt. scheme like RKVY ,NFSM & NHM.	--
Kandhamal	Exhibition	4	4	Mass						Technology dissemination & Awareness programmme	1. Exhibition at OUAT ,BBSR	-
Kandhamal	Film Show	54	54	25	6	1451	558	4	1	Technology dissemination	Agricultural technologies & allied.	-
Kandhamal	Method Demonstrations	12	12	2	-	45	17	12	1	Technology dissemination	IPM INM	Flowering stage
Kandhamal	Group meetings	14	14	12	3	210	62	22	4	-	Plant protection measures Soil health Agronomy practices	-

Name of the KVK	Activity	No. of activities (Targeted)	No. of activities (Achieved)	Detail of Participants						Remarks		
				Farmers (Others)		SC/ST (Farmers)		Extension Officials		Purpose	Topic s	Crop Stages
				M	F	M	F	M	F			
											Farm implement	
Kandhamal	Lectures delivered as resource persons	21	21	12	4	428	195	68	12	Technology dissemination	1.Vermicomposting 2.Mushroom Cultivation 3.Acid Soil management 4.Agro forestry 5. IPM 6.IDM 7. Crop production	--
Kandhamal	Newspaper coverage	4	4	Mass	-	-	-	-	-	Technology dissemination	1.Parthenium Awareness week 2.Soil health campign	Technology dissemination
Kandhamal	Radio talks									-	-	-
Kandhamal	TV talks									-	-	-
Kandhamal	Popular articles	9	9	Mass						--	--	--
Kandhamal	Extension Literature	1	1	Mass	-	-	-	-	-	Technology dissemination	Pest & Disease management in Turmeric and Ginger	-
Kandhamal	Farm advisory Services	31	32	Mass	-	-	-	-	-	Identifies disease ,pest & its management	1. Spodoptera in Cabbage 2. Fruit & shoot borer in Brinjal	--
Kandhamal	Scientific visit to farmers field	244	244	32	10	528	158	-	-	To give time based technical advice	Diagnostic visit	
Kandhamal	Farmers visit to KVK	566	566	22	9	402	133	-	-	To get advice on various agricultural aspects.	Disease & pest incidence Fertilizer application.	
Kandhamal	Diagnostic visits	97	97	15	3	268	41	-	-	Identifies disease ,pest & its management	Stem borer in Paddy Wilting in Brinjal Aphid in Mustard	crop growth stage
Kandhamal	Exposure visits	3	3	-	-	75	-	5	-	To Enrich Knowledge	Integrated farming system	
Kandhamal	Ex-trainees	2	2	-	-	40	-	-	-	Collect feedback		Collect

Name of the KVK	Activity	No. of activities (Targeted)	No. of activities (Achieved)	Detail of Participants						Remarks		
				Farmers (Others)		SC/ST (Farmers)		Extension Officials		Purpose	Topic s	Crop Stages
				M	F	M	F	M	F			
	Sammelan									and suggestion		feedback
Kandhamal	Soil health Camp	3	3	8	4	56	7	-	-	Soil fertility status	Soil health campign	-
Kandhamal	Animal Health Camp									-	-	-
Kandhamal	Agri mobile clinic	2	2	-	-	48	12	-	-	To give time based advice on disease & pest management	1. IPM in Paddy 2. IPDM in Tomato 3. Fruit & shoot borer in Brinjal	
Kandhamal	Soil test campaigns									To create awreness on soil fertility management.	--	Pre sowing
Kandhamal	Farm Science Club conveners meet									--	--	--
Kandhamal	Self Help Group conveners meetings									--	To know about different government schemems	
Kandhamal	Mahila Mandals conveners meetings									Women Empowerment		
Kandhamal	Celebration of important days	7	7	25	11	321	176	14	1	Awareness programme	1.Banostav 2.Earth Day 3.Parthenium awareness week 4. University Foundation Day 5. Akshya Trutiya 6.World food day 7. Womens Day in Agriculture	-

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 2012	Quarter	500	500
Kandhamal	September 2012	Quarter	500	500
Kandhamal	December 2012	Quarter	500	500
Kandhamal	March 2013	Quarter	500	500

7.2 Literature developed/published

KVK Name	Type	Title	Author's name	Number of copies
Kandhamal	Research Paper	1. Assessment of quality of different organic manures used by the farmers of Khurda district in Orissa and their effect on microbial activity of an acid soil	K.K.Rour, S.Sahoo, S.K.Mukhi and G.P.Mohanty	
		2. Integrated effect of organic and inorganic source of nutrients on turmeric.	S.S.Nanda, S.Mohapatra and S.K.Mukhi	
		3. On farm assessment of lime and fertilizer application on yield and economics of groundnut in acid soils	S.Mohapatra, S.K.Mukhi and S.C.Sahoo	

7.3 Details of Electronic Media Produced

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

7. Production and supply of Technological products

8.1 SEED production

KVK Name	Major group/class	Crop	Variety	Type of produce (for Seed produced type hear SD; For Planting Material type here PM)	Quantity	Unit for quantity of produces (qtl for SD and Nos for PM)	Value (Rs.)	Provided to No. of Farmers
Kandhamal	Spices	Turmeric	Roma	SD	75	Qtl	412500	65

8.2 Planting Material production

KVK Name	Major group/class	Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
						Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Kandhamal	Fruits	Papaya	May 2nd week	--	--	Madhu	Sapling	141	300	564	Distributed to farmers
Kandhamal		Drumstick	May 2nd week	--	--	PKM-1	Sapling	153	380	612	Distributed to farmers
Kandhamal	Vegetable	Tomato	June 1st Week	--	--	BT-10	Seedling	17000	1500	4250	Distributed to farmers
Kandhamal	--	Brinjal	June 2nd Week	--	--	PPC	Seedling	18000	1200	4500	Distributed to farmers
Kandhamal	--	Cabbage	September last week	--	--	Disha	Seedling	6300	450	1575	Distributed to farmers
Kandhamal	--	Cauliflower	September last week	--	--	Madhuri	Seedling	3200	200	800	Distributed to farmers
Kandhamal	Vegetable	Chilli	June 1st Week	--	--	Suryamukhi	Seedling	5100	550	1275	Distributed to farmers
Kandhamal	Forest plants	Shisu	October 1st week	-	-	--	Sapling	50	120	200	Distributed to farmers
Kandhamal		Salia Bamoo	October 1st week	-	-	-	Sapling	1100	1200	4400	Distributed to farmers
Kandhamal		Teak	June 1st Week				Sapling	1100	1200	4400	Distributed to farmers
Kandhamal		Eucalyptus	June 1st Week				Sapling	30	50	120	Distributed to farmers

8.3 Production Units (bio-agents / bio pesticides/ bio fertilizers etc.,)

KVK Name	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
Kandhamal	**BIOAGENTS**				
Kandhamal	**BIOFERTILIZERS**	15.5 qntl.	3100	7750	Vermicompost
Kandhamal	**BIO PESTICIDES**				

8.4 Livestock and fisheries production

KVK Name	**Name of the animal / bird / aquatics**	**Details of production**			**Amount (Rs.)**		**Remarks**
		Breed	**Type of Produce**	**Qty.**	**Cost of inputs**	**Gross income**	
Kandhamal	**Cattle**						
Kandhamal	**Buffalo**						
Kandhamal	**Sheep and Goat**						
Kandhamal	**Poultry**	Banaraja	Chicks	455	10492	13695	**Distributed to farmers**
Kandhamal	**Fisheries**						
Kandhamal	**Others (Specify)Vermin**						

9. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab : YES/NO, If yes, then

Year of establishment : **-2004-05**

9.1 Details of soil & water samples analyzed so far :

KVK Name	Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Kandhamal	Soil Sample	1004	340	22	9285
Kandhamal	Water Sample	5	5	5	--

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 Courses**	**No. of Participants including SC/ST**			**No. of SC/ST Participants**		
					Male	**Female**	**Total**	**Male**	**Female**	**Total**
Kandhamal										

11. Utilization of Farmers Hostel facilities

Accommodation available (No. of beds) :

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)
Kandhamal	--	--	--	--	--	--	--

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	1995	1997	Nil	2	Both quarters are damaged completely

13. Details of SAC Meeting

KVK Name	Date of SAC meeting	No. of SAC members attended	Major recommendations
Kandhamal	11.10.12	30	1. Introduction of newly released drought resistance of Paddy .
Kandhamal			2. Introduction of newly released vegetable & short duration mustard.
Kandhamal			3. Popularisation of HYV Paddy like Manaswini
Kandhamal			3. Introduction of scented variety Paddy Nuakalazeera
Kandhamal			4. Conduct trials on vegetables & Turmeric cultivation..
Kandhamal			5.Study on weedicide trials
Kandhamal			6. Conduct training programmes on income generating activities & post harvest management of fruit crops.
Kandhamal			7. More number of publication should be done to popularize the technologies among the farmers.
Kandhamal			8. Popularisation of Farm machinery for drudgery reduction.
Kandhamal			9. Production of good quality of seeds & planting materials by KVK

14. **Status of Kisan Mobile Advisory (KVK-KMA)**

KVK Name	No. of messages sent	No. of beneficiary		Major recommendations
		Farmers	Ext. Pers.	
Kandhamal	95	500	25	1. Integrated Pest management in Vegetable 2. Nutrient management and cultural packages in field crops 3. Soil fertility management & market information 4. Value addition & post harvest technologies 5. Small scale income generating activities. 6. Weather based cultural practices. 7. Recommendation of suitable varieties of different crops. 8. Organic spice cultivation. 9. Mushroom cultivation 10. Use of low cost Agri . equipments.

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	Operational Area	Remarks
Kandhamal	ATMA	Central	80000	1	--	Farmer Scientist Interaction programme

16. **Status of Revolving Funds (Rs.) for the Year 2012-13**

KVK Name	Account No.	Opening balance (Rs.)	Closing balance (Rs.)	Current status (Rs.)
Kandhamal	11754367222	153595	132563	--

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. **Case study and Success Story –**

Success Story -1

Name of the KVK :- Kandhamal

Title:- Off season vegetable cultivation

Introduction:-The district Kandhamal is favourable for off-season vegetable cultivation due its agro climatic condition .In this district the area covered under cauliflower is 3550 ha with a productivity of 109 q/ha .The district is predominantly inhibited by tribal peoples .The tribal farmers are resource poor & marginal farmers. They are cultivating cauliflower in traditional method. The low productivity of cauliflower is due to heavy pest, disease incidence &imbalanced use of plant nutrients. The soils 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 Cauliflower due to Boron deficiency & pest incidence such as Diamond Back Moth & Spodoptera results in low productivity & marketability of cauliflower .Keeping in view the low productivity of cauliflower ,KVK has focused its efforts to maximize the productivity by providing training on integrated nutrient management practices & integrated disease & pest management in cauliflower. Also Training programmes were organized in the village level for imparting various technologies to the farmers about package & practices of Cauliflower cultivation .Demonstrations were conducted on INM and IPM in Cauliflower to increase productivity & marketability of cauliflower.

Outcome:- The KVK ,Kandhamal conducted demonstration on INM and IPM in Cauliflower in the field of Sri Sarat Sahu of village Bandaguda ,Block K-Nuagaon .Application of Neem cake @ 2.5 q/ha and lime @0.2 LR at the time of final ploughng with FYM @ 15ton/ha ,application of recommended dose of fertilizer application as per soil test results with Boron @ 2 kg /ha at the time of planting, spraying of Bt @ 2 gm/liter alternate with Cartap Hydrochloride @ 1.25 gm at 10 days interval gave an yield of 220 q/ha with an increase in productivity of 53 % over traditional practice. The bigger curd size and good quality of Cauliflower fetches good market value & Sri Sahu got an net profit of Rs.88690/- /ha with a B.C ratio 3.0.

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 cauliflower. 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.

19. Details of KVK Agro-technological 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	-

20. Important visitors to KVK

Name of KVK	Name of Visitor	Date of Visit	Remarks
Kandhamal	Dr. Krishna Srinatha, Director Directorate of Research and Women in Agriculture, Bhubaneswar	05.06.12	Appreciated the work of KVK in the field of agriculture
Kandhamal	Dr. Nirod Kumar Dhal Former Dean, college of Agriculture,Bhubaneswar,OUAT	05.06.12	Well acknowledged the arrangement made by the KVK for regional golden jubilee celebration of OUAT.
Kandhamal	Sri Ramesh Chandra Sai P.D ,DRDA ,Kandhamal	05.06.12	Appreciated the farmers-scientist interaction programme organized by KVK Kandhamal on the occasion of Golden Jubilee celebration of OUAT.
Kandhamal	Sri Rabindra Nath Mishra Addl. District Magistrate,Kandhamal	05.06.12	Appreciated the work done by KVK for the development of the farmers of Kandhamal district .
Kandhamal	Sri Bupendra Singh Poonia Collector-cum-District Magistrate ,Kandhamal	28.08.12	KVK has a huge potential to help farmers of the district & appreciated the Demonstration units of KVK.
Kandhamal	Sri S.L Dash ,AGM ,NABARD,Phulbani	05.09.12	Nicely maintained campus & interacted with the trainees of Skill oriented training programme
Kandhamal	Sri P.C Pandey,G.M ,DIC ,Phulbani	05.09.12	Acknowledged the role of KVK for imparting quality training programme for unemployed rural youth.
Kandhamal	Sri R.J Achary,LDM,Kandhamal	05.09.12	Appreciated the role of KVK in agricultural development of the district
Kandhamal	Sri D.C Das,District Employment Officer,Kandhamal	07.10.12	Visited the hebal garden & other demonstration unit of KVK & appreciated it.
Kandhamal	Sri E.Nandi,C.S.C.O ,OSSOPCA,Bhubaneswar	02.12.12	Appreciated the seed production programme of turmeric of KVK Kandhamal

21. Status of KVK Website: www.kvkkandhamalzpdvii.org

22. E-CONNECTIVITY

Name of KVK	Number and Date of Lecture delivered from KVK Hub				No of lectors organized by KVK	Brief achievements	Remarks
	Date	No of Staff attended	No of call received from Hub	No of Call mate to Hub by KVK			
Kandhamal	-	-	-	**5**	--	--	VAST system is not working & complaint has benn lodged.

23. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS

Name of KVK	Types of Activities	No. of Activities	Number of Participants	Related crop/livestock technology
Kandhamal	Film show	6	125	Off-season vegetable cultivation, Backyard poultry, Honeybee & water management
Kandhamal	Lectures organized	4	104	
Kandhamal	Exhibition of farm implement	1	25	Seed drill ,Turmeric boiling drum ,cono weeder ,M.B plough ,Rake weeder ,Groundnut decorticator ,Groundnut stripper ,Maize sheller
Kandhamal	Farmers Scientist inter action programme	1	25	SRI method of Paddy cultivation.
Kandhamal	Diagnostic Practical's	1	20	INM & IPM in Cauli flower
Kandhamal	Distribution of Literature (No.)	1	20	Organic turmeric cultivation ,Soil health management ,ITK , value addition ,Mushroom cultivation & KVK News letter
Kandhamal	Total number of farmers visited the technology week	15	319	

24. INTERVENTIONS ON DROUGHT MITIGATION

Introduction of alternate crops/varieties

Name of KVK	Crops/cultivars	Area (ha)	Number of beneficiaries
Kandhamal	Upland paddy Var-Khandagiri	300	1200
Kandhamal	Blackgram var TU 94-2,Field Pea-Aparna ,	450	820
Kandhamal	**Niger Var- ONS 150,GA-10**	**845**	**1370**
Kandhamal	**Toria var- Parvati ,Anuradha**	**1650**	**2030**

Major area coverage under alternate crops/varieties

Mane of KVK	Crops	Area (ha)	Number of beneficiaries
Kandhamal	--	--	--

Farmers-scientists interaction on livestock management

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

Animal health camps organised

Name of KVK	Number of camps	No.of animals	No.of farmers
Kandhamal	-	-	-

Seed distribution in drought hit states

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

Seedlings and Saplings distributed

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

Bio-control Agents

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

(e) Bio-Fertilizer

Name of KVK	Bio-Fertilizer	Quantity (kg)	Coverage of Area (ha)	No. of farmers
Kandhamal	**Vermicompost**	**15.5**	--	**25**

(f) Verms Produced

Name of KVK	Verms Produced	Quantity (q)	Coverage of Area (ha)	No. of Farmers
Kandhamal	E-foetida	-	--	5

(g) Large scale adoption of resource conservation technologies

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

(h) Awareness campaign

Name of KVK	Meetings		Gosthies		Field days		Farmers fair		Exhibition		Film show	
	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers
Kandhamal	14	287	--	--	18	360	3	Mass	4	Mass	54	2040

25. **Status of KVK Website:**

If available, please provide the address of website: **www.kvkkandhamalzpdvii.org.**

PROGRAMME CO-ORDINATOR
KVK,KANDHAMAL